

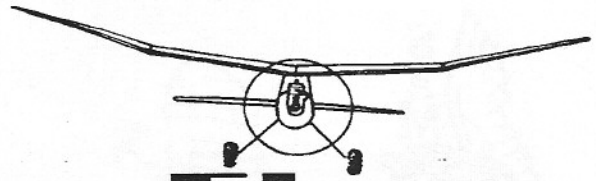


# Antique Flyer

AMA Chapter #108

February 1998

Issue 186



## January Chapter Meeting

by John Carlson

This first meeting of 1998 had fourteen in attendance including Members: Ed Hamler, Bert Flack, Steve Remington, John Hlebcar, Rod Persons, Joe Meere, John Dammuller, Buzz Passarino, Jerry Rocha, Ray McGowan, Dick Irwin, Bob Wakerley, John Carlson and Visitor **Bill Dempsey**. Bill saw our Newsletter at Hangar One and his phone call to John Carlson resulted in his attendance. Bill is a Sonoma Dentist and, like many of us, is resuming modeling after a long hiatus. His main interest at this time is rubber scale and he is looking into small electrics. He has been attending recent indoor sessions at St. Vincent's with the Marin Aero Club. The "Santa Rosa" flu kept Ron Keil and Park Abbott away but Joe Meere survived it and all were happy to see him at the meeting. Let's get a good turnout for the Feb. meeting.



Don Bekins prepares his Rambler at the Las Vegas SAM Champs.

❑ The New Zealand 1/2A Texaco Postal Meet has been rescheduled from 2-5 April to 9-13 April. Interested members may mark the changes on the Schedule which was published in the Jan. 1998 A-F.

Membership renewals for 1998, as of 1/28 are about 67%. It was agreed that the February A-F would be the last issue sent to those who have not renewed. Those still in arrears at the time of issue will have their copy of the A-F marked to alert them (see below).

A few of the button timers are still available at \$16 ea. Also we have plenty of SAMSPAN. See John Carlson if you need either of these. Rocco still has not returned

the Polyspan Video. If not returned by the next meeting, his \$20 will go into the Club treasury and Rocco will own the video. Prez John H advised that he had bought a copy of a video produced by HI Line Motors titled "Small Electric Flying Models" John recommends it for those interested in getting into this aspect of modeling. The video is advertised in FM magazine.

## ANNOUNCEMENTS

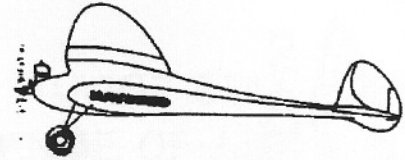
Ed Hamler passed around updated copies of the 1998 SAM Western R/C Contest Schedule, Additions were:

- ❑ 21-22 February, SAM 8 Misery Meet, Hart's Lake Prairie, WA. Ken Youngman 206.232.2958.
- ❑ 19-20 September, NW Old Timer Championship, Parker's Field, Tangent, OR. Bob Stalick 541.928.8101

Prez John also advised he had recently learned that, subject to certain restrictions, the AMA offers a free membership to those who qualify and serve as a Contest Director. Jerry Rocha, Ray McGowan and Ed Hamler were aware of this. Jerry has the required pa-

1998 Dues are now payable. A red check in this box means your dues haven't been received and this will be your last Antique Flyer.





February 1998

# Antique Flyer

perwork forms. In connection with this, Jerry hopes to have an AMA Contest Sanction for the 1998 Small Rubber Meet so that he can offer a 50 cent/day membership to juniors who wish to participate.

Mystery Photos are still wanted for inclusion in the A-F. Send them to Editor Steve Remington. *Please!*

## TOFFF GUY REPORT

TOFFF activity is at a low level due to the holidays and the rainy weather. John H advised that several of the "REALLY" TOFFF GUYS flew on New Years Day. Things will get better when the weather improves.

## OLD BUSINESS

**Newsletter:** Members were unanimous in their praise of Steve Remington's first issue of the Antique Flyer, especially the quality of the photos. Steve advised that he has done considerable research into costs. The costs of repro at Office Depot and that of postage cannot be reduced. The big variable is the cost of producing photo half-tones which will print acceptably. Steve is ganging photos for processing and then doing a cut and paste job to include them with text. Rod Persons volunteered to contact his son to see if he has access to equipment producing good quality at low cost.

**Lawn Mower:** Dick O'Brien, the present custodian of the lawn mower was not present at the meeting but will be happy to learn that **John Dammuller** has volunteered to take over this job.

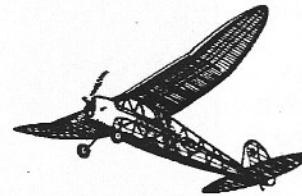
**O&R Decals:** For some time no decal orders have been received. Ron Keil will be contacted to see if he will reinstate the notice in the MECA publication.

## NEW BUSINESS

**1998 Club Project:** Suggestions included the Sal Taibi Pacer and the Ernie Linn 1939 Kansas Wakefield, both of which will be featured in Special Events at the 1998 SAM Champs to be held in Muncie, IN. Prez John displayed Wakefield plans. Ed Hamler had described his Pacer project at the December meeting. It was pointed out that because these models are

quite complex and only a few members will be going to Muncie, participation in these as Project subjects would be minimal. In the interest of increasing participation, Steve Remington suggested repeating the 1997 Scale rubber with possible rule modifications. It was further suggested that possibly the Jimmie Allen models could be included with the scale models subject to possible further tinkering with the wing span/max formula. It was agreed that this subject will be further pursued at the February meeting. (John Carlson advised George Benson of this discussion during the 1/25 MAC session at St. Vincent's. George was urged to try to make the February meeting).

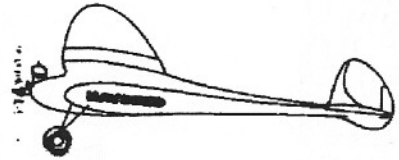
**Crash & Bash Prizes:** Ed Hamler is looking for fresh ideas regarding C&B prizes. He has had comments from some of the hard core competitors that they are running out of room to display trophies and some who say they have enough balsa to last a couple of lifetimes. Ed suggested consideration of cash prizes with a portion of the entry fees set aside for prizes. Possibly first place would get half of the prize money with second and third receiving smaller amounts. Ribbons would still be awarded. Ed would appreciate additional suggestions and discussion at the next meeting.



## TECHNICAL REPORT

(Bob Wakerley's name was drawn as the Technical Presenter for February). **John Carlson** advised that his subject would be **batteries**, NiCads for Tx's and Rx's, but first he wished to impart a little humor before going to the dry technical details. John spent X-Mas with his Denver son and in the bathroom was a book titled "Bathroom Trivia." An item believed to be of interest to SAM 27 concerned Lindbergh's grandfather who had, for some reason, changed the family name to Lindbergh. Had he not, the first solo Atlantic flight would have been made by Charles Manson.

All R/C modelers use batteries of several types. Most of us have 12 volt lead-acid batteries in our field boxes for powering starters, chargers, fuel pumps,



February 1998

## Antique Flyer

etc. Dry cells of the carbon-zinc or alkaline type are often used as glow starters. NiCads are the most common type for radio Tx's and Rx's as well as for powering electric flight motors. Although this discussion will primarily concern Tx and Rx NiCads, an important difference with lead acid types is worthwhile mentioning. NiCads may be left in a charged or discharged or partially discharged state with no apparent effect on their life. On the other hand, lead-acid batteries should never be left in a state of complete discharge or a process called sulfating will occur resulting in permanent damage.

NiCad batteries are composed of two or more individual cells connected in series, usually 4 cells for Rx service and 8 cells for Tx's. There are a couple of important differences relative to the charging and discharging of individual cells and batteries. These differences will be discussed later. NiCads are particularly suited for R/C service. They may be discharged and recharged many times over a normal life of several years. Voltage during discharge remains essentially constant at approximately 1.2 volts per cell (vpc) until nearly complete discharge occurs. Cells have a capacity rating designated as C which is usually stated in milliampere hours (mah). This means that a completely charged cell may be discharged at a milliamp (ma) rate equal to C for one hour before its voltage drops much below 1.2 vpc. Discharge at higher rates will result in earlier discharge and at lower rates, service beyond one hour. Cell voltage will drop off rapidly as discharge proceeds beyond about 1.1 vpc. Cell voltage over the flat portion of the discharge curve will be slightly higher than 1.2 vpc at rates lower than C, and somewhat less at higher discharge rates. The mah capacity "C" is the same as that of a single cell, no matter how many cells are connected in series. Increasing the number of cells only increases the nominal battery pack voltage by 1.2 volts for each cell added.

Charging of NiCad cells is done by applying a voltage somewhat higher than 1.2 vpc. As the charge proceeds the cell voltage gradually rises until it is nearly completely charged at which time the voltage will rise more rapidly until it reaches a peak and then starts to drop. At this point the cell is completely charged and further charging will only result in cell heating to the point where permanent damage can occur if the charge rate is excessive. Until that point is reached

most of the input goes into charging and very little into heat. Charging of an individual cell at rates as high as say, 4C will not overheat the cell unless the charging continues beyond the peak. Charging at a rate of C/10 beyond peak will not damage a cell or a multicell battery because the rate of heating is low enough to be easily dissipated without appreciably raising the temperature. Charging a multicell battery to peak at rates much higher than C/10 of can be risky for the reason that all cells, although of the same nominal rating, are not of identical characteristics. Some cells will reach peak sooner than others while the pack as a whole keeps increasing in voltage. When the pack finally reaches peak one or more of the cells may be seriously overheated and damaged.

### SAMSPAN

Is again available  
to SAM 27 Members

1 meter wide (39.37 in.) - Packaged Folded  
**10 foot lengths - \$10**

Packages will be available at meetings or by mail.  
Add \$3 for Mail (USPS Priority). Other quantities or  
special packaging by prior arrangement.

Mail Orders to:

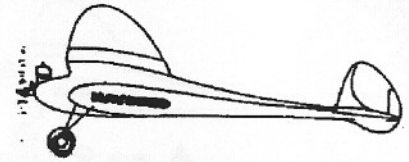
Steve Remington, CollectAir  
2555 Robert Fowler Way #A  
San Jose, CA 95148  
FAX (408) 259-4223  
e-mail 72245.747@CompuServe.com

or

John Carlson  
353 Las Casitas Ct.  
Sonoma, CA 95476  
Phone (707) 996-8820  
e-mail JohnC914@aol.com

Because failure of an Rx or Tx battery while flying can result in total loss of an expensive model, SR Batteries, Inc. recommends that normal charging be done at the C/10 rate and if higher rates are used when field charging, care be taken to terminate the charge at something like 80% of full charge.

Batteries supplied with R/C radio equipment are usually rated 500 mah, with 4 cell (4.8 v) Rx packs and 8



February 1998


## Antique Flyer

cell (9.6 v) Tx packs. The plug-in chargers supplied have 50 ma outputs which is C/10. The use of these chargers for 14 to 16 hours is recommended. Charging for 10 hours will not fully charge a pack because efficiency is less than 100%. The longer charging time will bring all cells up to full charge without damaging those which reach peak sooner. The packs can be left on the C/10 charge for a full day or two without damage. Charged NiCads will self-discharge at a rate of about 1% per day and for this reason should be topped off for a few hours at C/10 before flying if more than a week or so has elapsed since charging.

To ensure that a pack is capable of accepting a full (rated) charge it is recommended that periodically packs be given a charge at the C/10 rate for 14 to 16 hours and then discharged to slightly less than 1.2 vpc through a load which approximates that of an Rx and servos, or the load of a Tx as applicable. This is called cycling. An Rx typically draws about 35 ma and individual servos, when operating, as much as 200 or 300 ma. An appropriate average draw of an Rx with servos might be 200 or 300 ma. Tx's typically draw from 150 to 300 ma. Check the manufacturer's data for more exact amounts. An expanded scale voltmeter (ESV) can be used to facilitate proper discharging of the pack. An ESV is a voltmeter which, by using zener diodes in the circuit, reads a voltage from about 1.0 to 1.4 vpc over the full scale, thus providing a more precise reading of the voltage range of interest. Separate ranges for Rx and Tx packs are provided. Most ESV's also have built in load resistors which approximate typical Rx and Tx loads. The manufacturer's data provided with the instrument should give this information. The fully charged pack should be discharged to about 1.1 vpc while monitoring the time of discharge. The pack capacity is the time in hours multiplied by the ma load to give mah. This method is tedious and not precise, but if applied consistently and periodically from the time a pack is new, will give a good indication of whether the pack is deteriorating. It is important to keep records of individual packs. This method of cycling is also useful in determining if a pack has been damaged in a crash or if a pack which has been in long time disuse can still hold a charge. A C/10, 14 or 16 hour charge is applied and then the discharge is timed. The pack is again given the C/10 charge and allowed to sit for 3 or 4 days and then given the timed discharge. The second discharge of a good pack will

be within 10% of the first. A bad pack will be down by 40% or more.

A word of caution about the use of ESV's. One can take a nearly discharged pack, place it on a C/10 charger for 15 minutes and get a quick "good" (in the Green) reading on an ESV. If flight is attempted in this situation a crash is likely. The ESV should remain connected for a minute or two and observed to see if there is any appreciable voltage drop. Completely discharging an individual cell down to zero will not damage it, but a battery pack should never be completely discharged. As mentioned before, all cells are not identical. One cell will reach zero before the



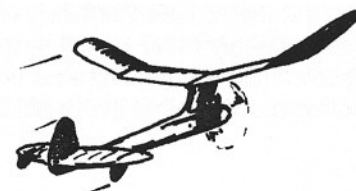
**DON'T BE LEFT OUT!  
BE A PART OF**

# TOFFF

**Come join us, SAM 27 flying  
field each Thursday  
morning**

Steve Roselle

The Feb. 1998 issue of Flying Models magazine has a Bob Aberle product review article on ACE Hobby Distr. latest charger, discharger and ESV. The charger (SMART CHARGE) is said to be a field type fast charger with a circuit to anticipate the peak and thus provide essentially complete charge without the possibility of cell damage. The discharger (SMARTTEST) automatically terminates discharge at about 1.05 vpc. and give a readout of the mah supplied. Useful references for those who wish to look further into this subject are several of the SR R/C Techniques published by SR Batteries, Inc. and the "Enercell Battery Guidebook" published by Radio Shack.





# Antique Flyer

## THE SAGA OF THE ONE FLIGHT STA

*Have you ever built one of those models that looked great but was a dog in flight? Here's a tale about one of those flying slugs. SAM 27 members Bob Rooman, Don Bekins and Remo Galeazzi contributed the following correspondence about the Ryan STA which should be of interest to all.*

*It started with an e-mail message to Don Bekins from Bob Rooman, Springfield, MO:*

"Hi Don, I didn't think there would be anything like an album big enough to hold all your modeling pictures! Lois and I just got back from the Caribbean with 12 rolls....My year has not been too good, but hopefully '98 will see better times. Sure have enjoyed the building and flying I have been able to do. I have a little trivia for you. Remember my Ryan STA and the research I did on it? Out in Burgaw NC, a Glen Moore is building an STA full scale, scratch! Not a Ryan part on it. Did the whole thing piece by piece. Seven years now. When I told him about NC14910 and it's demise and the story about that first plane, the FAA reissued that number for his plane. It was the first STA but carried the s/n 103. He must still turn a spinner and do most of the cowl and he'll have the only brand new STA in the world. He even complied with all the AD's as he went along. He had the factory blueprints. We'll drive to Burgaw when it's done..."

*Don Bekins then sent your editor this note:*

"A short while ago I wrote to Remo Galeazzi about the enclosed e-mail received from Bob Rooman, a non-resident member of SAM 27. Bob used to live in the

Bay Area, a member of SAM 21 then, and moved to Ohio. He has been in regular e-mail correspondence with me over the years. He is a good builder and loves the 1/2 scale event.

"Bob built a beautiful replica of the Ryan STA for 1/2 A and brought it down to the SAM Champs the last time they were held in Taft. The model ended up being quite heavy and Bob was very unsure of himself being on the stick for the model's first flight. He asked me to fly the model so it would qualify for the Concourse (beauty) event. He started up the engine, which proved to have marginal power for the model since it was so heavy. Bob launched the model and it flew!....straight and level, almost no climb, max altitude about 10 feet.

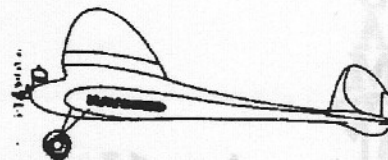


Boy, I was nervous, being the pilot of this gorgeous scale model on it's first flight. The engine ran well and consistently, but I knew if I let the fuel run out that the model would glide like a rock and break up.

"So I decided to try a power-on wheels landing, something I learned in my old Piper Cub flight training days for high wind conditions. As you know, there are

scattered clumps of grass on Condor Field at Taft. If I could just bring the model down to the ground slowly, keeping the tail up, I could steer it with rudder toward one of those grassy spots to stop the engine without damaging the model.

"Well, now for the end of the story....the wheels landing succeeded and Bob was able to enter it in the Concourse, placing 3rd or 4th. The whole event made him so nervous that he decided to hang the model up from his ceiling, never to fly it again. I sent a copy of this story along to Remo along with the e-mail from Bob. Here is Remo's reply...."



# Antique Flyer

February 1998

Remo sent this letter to Don:

"Thanks for your letter re: Robert Rooman telling you about Glen Moore who is building a Ryan STA from scratch. Some people have the fortitude to try almost anything! The Ryan is especially tough as the main structural members are two steel rings the shape of the oval fuselage that are situated approximately over the fore and aft portion of the wing. These rings (bulkheads) take all of the big loads imposed by the wing and landing gear and are a real bear to make as they are flanged, and when welded, tend to warp. Of course, if they aren't aligned perfectly, then the whole structure will be askew. My hat is off to anyone who would attempt this.

"As incredible as this project is, believe it or not, it's been done before - Tom Dewey, whom I met some years back, and John Gotchoff built three of them. I tried to get Tom Dewey to make a new set of clamshells (the fairing on the rudder) but when he saw the ones that we had he talked me into repairing them, which I eventually did. It was one helluva job as they are only about .020 thick and heat treated. Gotchoff made his living rebuilding PT-22s to look like STAs. He made new landing gears for them, installed Ranger engines, and to the uninitiated they looked just like an STA sitting there on the flight line! Both of these gentlemen are gone now and their expertise went with them - that's why it really is good to see that there are others willing to take up the gauntlet.

"When Glen Moore has completed his project I'm sure it'll make the press such as *Sport Aviation*, and I'm looking forward to seeing it.

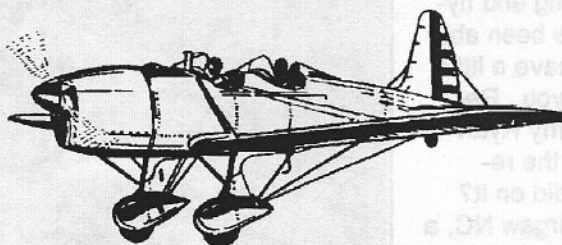
"My second operation (on the knee) is working out well - while recuperating I've been fooling around with rubber models and I have a Udet Flamingo just about finished which I'll bring to the meeting - 26" wingspan. I doubled up a peanut plan and made my own structure...."

*Note: Remo restored a 1936 STA, NC16039, for its owner, Ted Babbini. This airplane was used by Tex Rankin for aerobatics in 1937. NC16039 is pictured on the dust jacket of the great 1996 book, Vintage Flyers, by Sonoma photographer Eric Presten. A 1937, one-hole STA, NC17357, was also at Schellville according to this book. Another STA, N17346, s/n*

149, used to be based at the Sonoma County Airport in the 70's; FAA registration shows this airplane to now be based in Illinois. STA NC14987 is based at Santa Paula - how many more in California out of the total of 71 built?

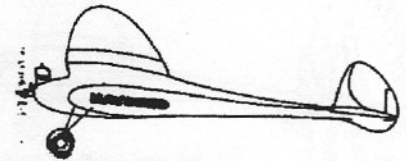
I contacted Bob Rooman to get pics of his model and he replied, in part:

"I feel badly about it (the STA). I spent a year at building it from a rubber plan, but it ended up too heavy for anything in SAM. I tried to adapt a more powerful Cox but the cramped space just wouldn't allow it. It ended up a hangar queen. You would not believe how complex the cowling was. Even the air inlets on the cowl were ducted in back through the cowl to the air inlet on the rear of the engine. The cowling was double walled and the engine cooling was through the same ducts as the full scale one. I



Ryan PT-20

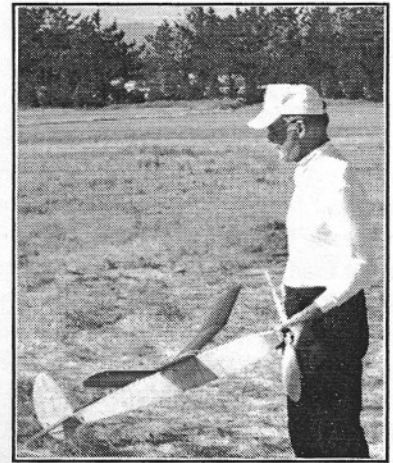
used straws to get the air to the intake via a plenum chamber behind the firewall. The stub wings for the gear were part of the fuselage and the flying wires for wings and gear were functional with turnbuckles. All the rivets were in the right places and I had around 500. My pitiful lack of master builder skills however left my ST-A less than perfect and I never could go back and make it fly. It took me over a year to build it and it was my dream airplane when I first saw it as a kid of 12. I did get a ride in a PT-22, but I never even sat in an ST-A. I researched for a year and a half and finally came up with the disposition of the first ST-A and supplied the Ryan Club with the documentation. ...NC14910 is history and a guy in NC is hand building a new ST-A and was able, through my efforts, to obtain NC14910 from the FAA for his Ryan..."



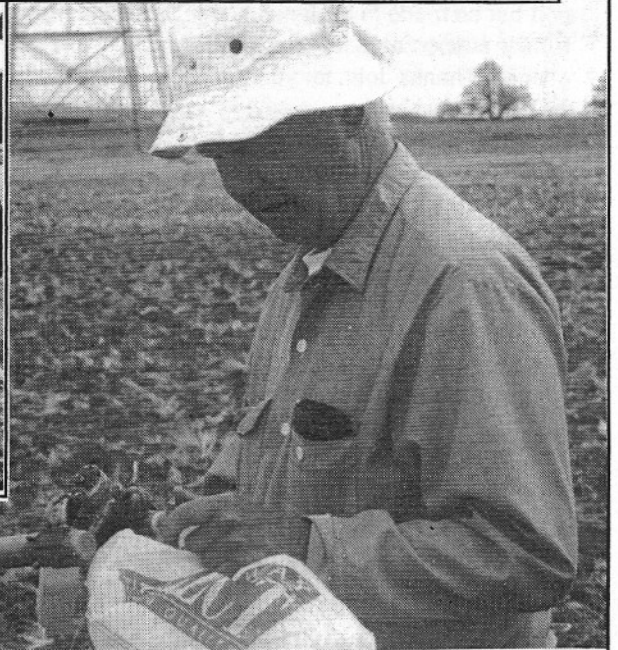
# Antique Flyer



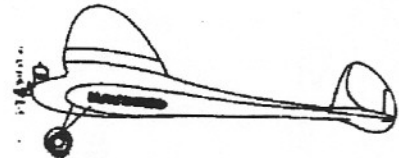
S  
A  
M  
2  
7



(Above) John Hlebcar holds Ray McGowan's "So Long." (Above R) Bill Langenberg's "Lamb Climber" (?). (R) John Carlson's Jimmie Allen.



(Above) Don Bekins adjusts prop for Bill Langenberg. This one holds enough rubber for a set of 8.00x15s. (R) Gunnar Anderson contemplates the aftermath of his Buzzard Bombshell's demise. Outside loops!!



# Antique Flyer

## SHOW AND TELL

Steve Remington showed his recently completed Walnut Scale (17-1/2") Ford Tri-Motor built from a Dumas kit. Steve expressed some disappointments with the kit. The laser cut wood was OK but the stick wood was too light and the tissue felt to be of inferior quality and gray in color rather than scale aluminum. The vacuum formed parts were ok but needed considerable work to produce a good fit. The instructions provided were felt to be inadequate for a relatively inexperienced builder (with regard to vacuum formed assembly techniques). Steve substituted some of his own materials (kit wheels, wire etc. were too heavy) to produce this beautifully finished and detailed model which is in the markings of American Airlines as restored and flown in '62-'64. The aircraft is now in the Smithsonian NASM, suspended from the ceiling.

Jerry Rocha displayed a Hornet 60 cylinder which had severely damaged fins when he obtained it. Jerry had machined off the fins and made a new finned sleeve to slide over the cylinder. Just like NEW ! Jerry also showed another Hornet 60 with a new carburetor and rotor he had machined. **Nice work Jerry !**

John Dammuller remarked that recent model magazines have advertised a \$109 device consisting of a camera tripod supporting a pair of ratchet type clamps for holding a model or model parts while painting or performing other operations. John displayed his \$20 version made from a garage sale tripod, a couple of purchased clamps and a support bar he made in his lunch hour. John offered to make similar support bars for anyone wishing to make their own gadget. Thanks John for your generous offer.

## RAFFLE

(Members are urged to donate items to the monthly Raffle).

### RAFFLE PRIZE/DONOR

HLG Kit /Bob Holman  
 Kit - Old Timer Convertible/Bob Munn  
 Glow Fuel 1 gal./15%/SAM27  
 Kit - Parlor Mite/ John Hlebcar  
 Kit - Peanut - Spirit St. Louis/Jenny/John Dammuller

Balsa Stripper/Dick Irwin  
 OK Engines Book/John Dammuller  
 Small Parts, Inc. Catalog/Jerry Rocha  
 Bring your surplus items to the February meeting!

### WINNER

JohnDammuller  
 Bert Flack  
 Ed Hamler  
 Rod Persons  
 John Hlebcar  
 BuzzPassarino  
 John Hlebcar  
 Dick Irwin

## JACK'S BASEMENT

One of the several choices we had for the club project this year was Ernie Linn's Kansas Wake. It was not selected but before we get off the subject, if you do want to build one, Jim O'Reilly responded to my inquiry and would consider quantity discounts for 10 or more plans. Contact me for details if you want to build one of these for the SAM Champs or one of the local contests. Now as I understand it, the consensus at the meeting was to compete last year's criteria Scale and Jimmie Allen birds in the same event this year for the novelty of it and to get more participation in the club project. I have given this a little thought and suggest the following rules:

- 1- Retain the 4 x wingspan "Target Time" in seconds rule from last year's scale contest, but eliminate scale judging.
- 2 - Target Time x 3 flights will equal the "Goal" for each aircraft. 6 flights allowed for the three each coming closest (over or under) to the Target Time.
- 3 - Total of the "best" 3 will be figured as a percentage of that aircraft's Goal. Closest to Goal, over or under, will determine places. Examples:

### Wingspan = 13"

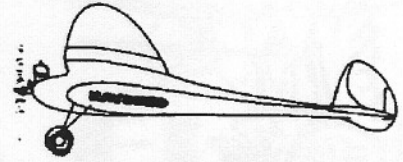
Wingspan x 4 = 52 seconds target time  
 Target time x 3 = 156 seconds goal  
 Total for best 3 of 6 flights = 55 seconds  
 % of goal (Total of best 3/Goal) = (55/156x%) = 5.3%  
 Difference from 100% = 64.7 final score

### Wingspan = 15"

Wingspan x 4 = 60 seconds target time  
 Target time x 3 = 180 seconds goal  
 Total for best 3 of 6 flights = 139 seconds  
 % of goal (Total of best 3/Goal) =(139/180x%)=77.2%  
 Difference from 100% = 22.8 final score

Second example wins out over the first because it came closer to it'sgoal. Now I need all of you mathematicians to stare at this and give me your comments at the next meeting. The idea is to get each of your flights to come as close to your target time as you can. In some cases really good flyers will have to settle for less winds or shorter than normal max dethermalizer settings to get those wheels to touch ground at the target time. Seems fair to me, besides - you won't have to chase those Skokies quite as far this way. In addition, a random score will be pulled from a hat after all the flying is done; closest score to win an additional prize. Prizes will be discussed at the next meeting.





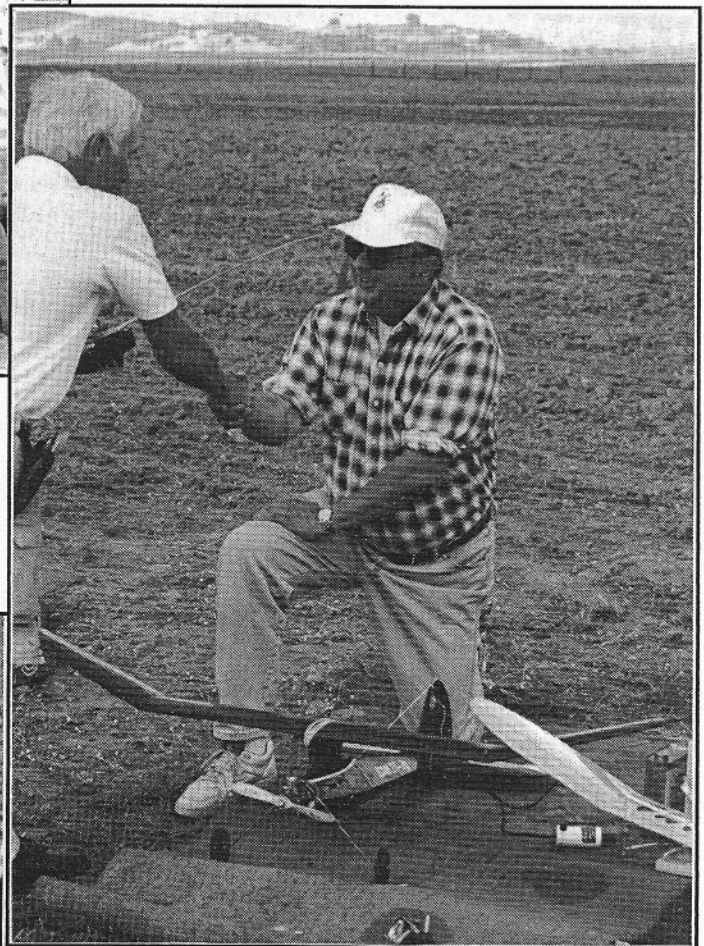
# Antique Flyer



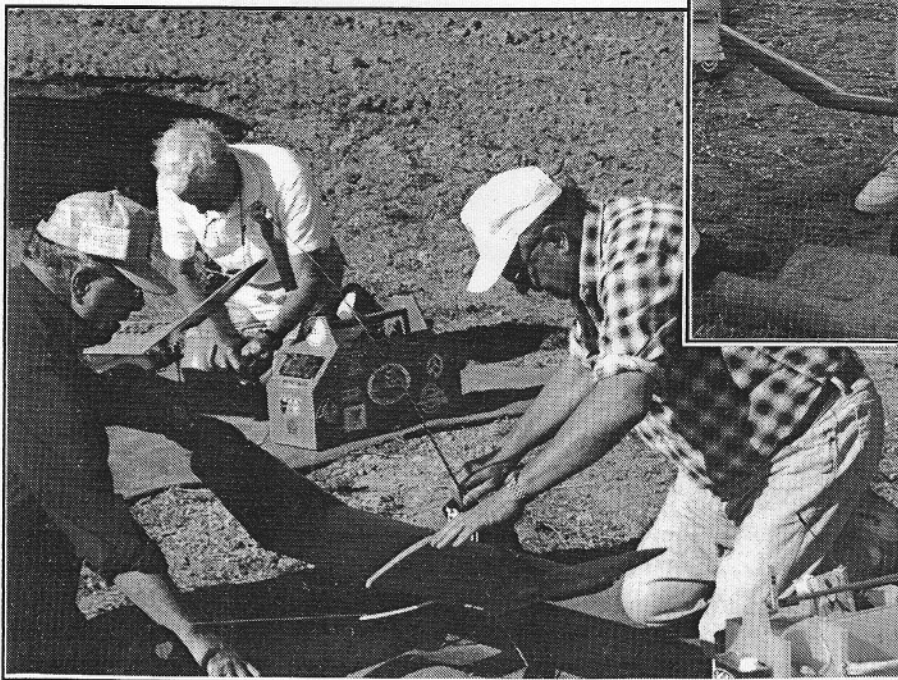
## ON THE FLIGHT LINE

*(L) Tom Wernholm and John Hlebcar give moral support to Don Bekins.*

*(Below) Ron Kiel accepts induction into the exalted TOFFF group from Don Bekins.*



*(Below) John Hlebcar assists Ron Keil as Don Bekins prepares his aircraft, sans assistant.*



*Tom Wernholm's nice  
Powerhouse*



## AMA Chapter #108

### OFFICERS

**President**

John Hlebcar (707) 252-8482  
201 Foster Road  
Napa, CA 94558

**Vice President**

Pete Samuelsen (707) 224-1023  
1023 Roundhill Court  
Napa, CA 94558

**Secretary/Treasurer**

John Carlson (707) 996-8820  
353 Las Casitas Court  
Sonoma, CA 95476

**Contest Director**

Ed Hamler (707) 255-3547  
3379 Crystal Court  
Napa, CA 94558

**Official Photographer**

Dick O'Brien (707) 938-5210  
16954 Schiller Court  
Sonoma, CA 95476

**Editor**

Steve Remington (510) 523-3618  
1034 Melrose Ave.  
Alameda, CA 94502

PLEASE ADVISE EDITOR OF ANY CHANGE OF ADDRESS

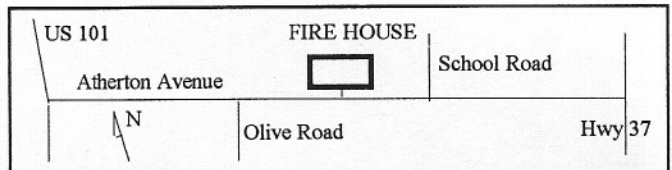
### MEMBERSHIP

Membership is \$15 for the calendar year for both full and associate members. After February, the dues for a new member will be prorated.

Full membership requires proof of current AMA membership to be presented at the time of joining or renewal by means of photocopy or presentation to the treasurer.

Associate members will receive the newsletter and may attend meetings, but may not fly at the Club's Lakeville Field or in Club contests.

Send dues to John Carlson, Treasurer. Make checks payable to SAM 27.

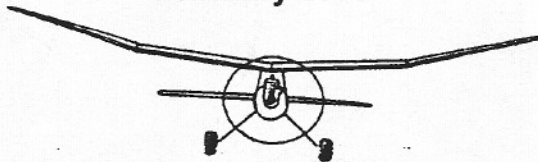


**Next Meeting: Wednesday, Feb. 18, 1998  
7:30 P.M. at the Novato Fire Department  
Training Room**

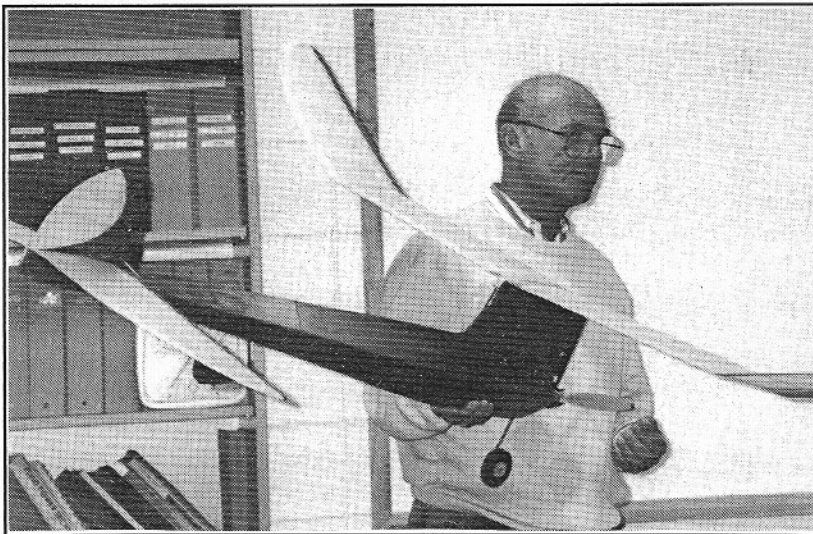
## Antique Flyer

353 Las Casitas Court, Sonoma, CA 95476

February 1998



# FIRST CLASS MAIL



One Year Ago: Bud Romak shows off his NorCal FF designed in 1940 by Stu Bennett. Model is powered by an Elfin diesel. Dick O'Brien photo.