

Mr. Model Aviation, Carl Goldberg, with his original Sailplane, as restored by Lou Levine. You can see it, among other treasures, in the Russ Barrera National Model Museum, Morgan Hill, California.



# PLUG SPARKS

By JOHN POND

• After all the O/T R/C chatter in the last issue, we're going to concentrate mostly on free flight this issue. So with that in mind, here goes...

What a difference a field makes! In paraphrasing that old tune, does it ever! Since the SAM Champs (and the Nationals) were held at Wright-Patterson Air Force Base in Dayton, Ohio, the field has been made available to various free flight clubs in the Ohio-Indiana area.

Clubs like the COFFC (Central Ohio Free Flight Club), NOFFA (Northern Ohio Free Flight Association), and the CIA (Central Indiana Association), have been benefiting from this field where free flight can be flown regardless of what the crop condition is locally.

Among some of the clubs undergoing dramatic changes is the CIA. Under the dynamic leadership of Bob Larsh, President, and Harry Murphy, Newsletter Editor, a real renaissance of free flight is occurring in this area. No less than five contests were held last year!

Of course, Wright-Patterson is not a complete cure-all, as windy days limit flying to two-minute flights. But, the best part of flying at Wright-Pat is that the model will land in the field, making retrieving easy. This is something that free flight has needed for a long time in the central states. Driving up to Bong AFB can get to be a drag.

Murphy (Murf to his friends, and "Dirty Harry" to others) writes a most entertaining newsletter, as long as you are not his present target. One thing about Murf is his democratic approach; everyone (including the columnist) gets his share. In retrospect, the writer thinks something like this is not too bad for the membership, as everyone needs to be cut down to size occasionally. Murphy can also do it to himself, by just getting in hot water over some paragraph he wrote in fun (join the club, bub!).

## ENGINE PROBLEMS

It is taking a little time for the SAM membership (including a few die-hards) to accept the converted-to-ignition glow motors, but all one has

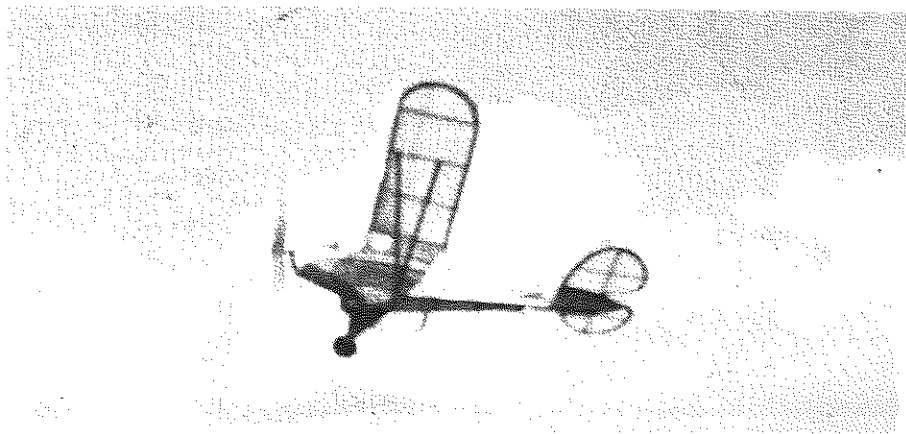
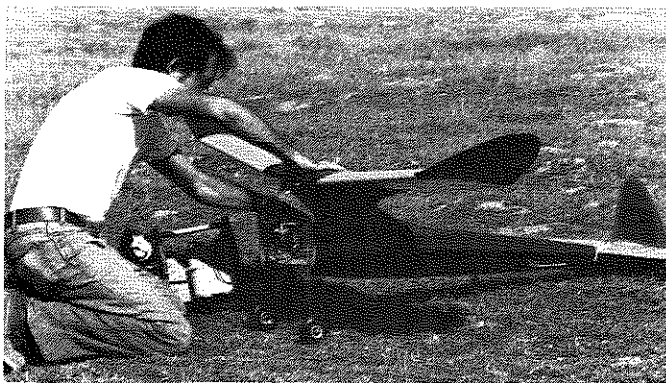


Photo from 1943. It is WW II, and Vic Dubery flies his Taylor Cub at Machrihanish NAS, while serving aboard HMS Biter.



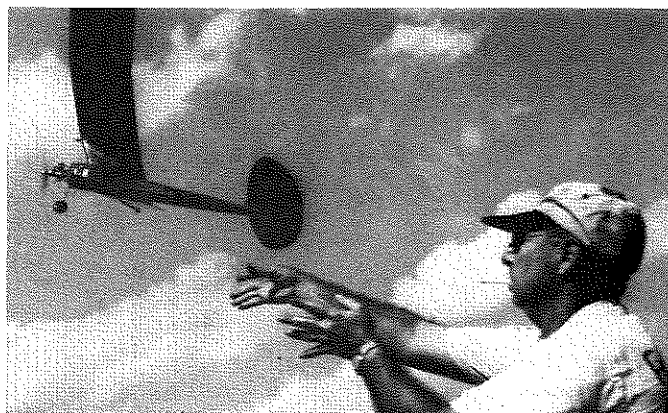
Spiro Nicholaw carefully avoids the Super Cyke prop on his Sailplane. Photo by Al Hellman.



The 3rd part of a triumvirate (Murphy, Larsen, and Burgess). Bill Burgess with his faithful Cyke powered Foote Westerner.



NOFFA Rudy "Butch" Kluiber, always in the winners' circle, with his version of the Laurie Twin Cyclone.



Jerry Persh can make Comet Interceptors fly! He's been doing it for twenty years! Seen at Brainbuster's Annual.

to do these days is go to the latest MECA Collectogether in your area and get acquainted with the facts of life on old ignition engines.

Prices are high! I don't care what the collectors say; supply and demand, and all that. There are just so many engines available and that's all there is to it. The writer was assured at Fresno that the Spitfire he purchased for \$75 was a bargain, but later discovered he still had to find some small items for it. Compare this with the purchase of a brand new (or like new) Merco 60 for \$25. For \$40 more you can have a fellow

such as Otto Bernhardt, Mark Fehner, et al, convert the engine. You now have a reliable *new* engine with parts readily available in case of a catastrophic crash. Gives one a rather comfortable feeling to know your prize jewel is not beyond repair.

Anyway, that's enough on engines. We promise not to get this column involved again in another controversy. You simply can't please everyone!  
BEEP, BEEP!

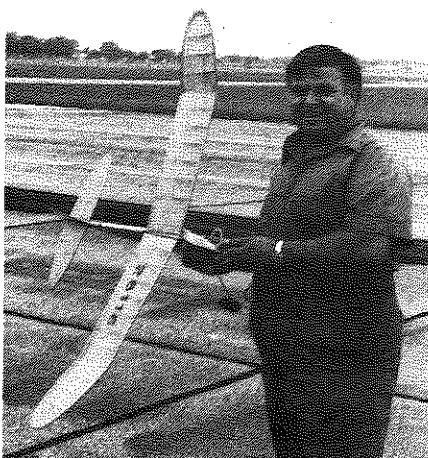
This is a direct steal from Harry Murphy's column in the CIA Informer, but it was too good to pass up. It all came about when Keith Fulmer, a Hooser free flighter who flies quite a bit at contests, claims to have not lost a model for three years in all that corn and soybeans. Murphy was intrigued by this statement.

Scarcely believing what he heard, he watched Fulmer disappear into a sea of corn and emerge from it in about 15 minutes. From the depth the model flew into the field, Murphy estimated it would take a week of Sundays to find it. When Murf questioned Fulmer on how he could accomplish this feat so easily, Fulmer replied, "Beep, beep!"

Now Murphy is no dummy, and figured he had seen enough early morning TV comics featuring the Roadrunner. So he did not think the

remark was very humorous, to say the least. Murphy then discovered Keith was dead serious. "Beep, beep" was exactly how he found his model, in other words, a small transmitter in the model!

Keith, to build a transmitter, uses the circuit board and components from an Estes Transroc kit, and powers same with four Mallory R400 hearing aid batteries in series. The whole apparatus weighs only 5/8 ounce! Mounted at the center of gravity of the model, the circuit



COFFC member, Bob Lyle, has a lavender silkspan covered So Long. Wright Patterson AFB in the background.



Bob Larsh, outgoing CIA president, with Arden powered Twin Cyclone (Tom Laurie design).

board only takes up a 1 x 2 inch space.

Battery life is good for 24 hours continuous operation, with a range of a quarter-mile. Of course, this will vary depending on atmospheric conditions, local CB interference, and the transmitter battery condition. You can depend on it to last the entire meet, as Fulmer has yet to lose a model. He is even installing this transmitter in a 1/2A model!

Fulmer monitors Channel 5 on a small, inexpensive, standard walkie-talkie, and walks (not runs like a roadrunner!) until he picks up the signal. As the signal gets stronger, he keeps shortening the antenna until he practically steps on the model.

Now for some do's and don'ts. Fulmer sez to allow plenty of time when ordering from the Estes people. Speed is not their middle name. Mount the completed circuit board in foam, sponge, anything that will resist the high vibrations emanating from your hot engine. If you don't, the components will come off the board, being rigidly mounted. Use flexible hookup wire rather than solid types. Use good fresh batteries in your walkie-talkie to assure good reception.

Murphy is to be commended for publishing Fulmer's excellent retrieval systems. Of course, Fulmer is the greatest for sharing this idea. Should work great as long as there are not too many transmitting sources in the corn.

If you are interested, Estes gets around \$18.00 for the kit. If you don't like soldering electronic components you can get pre-assembled units at advanced costs. Write to Estes Industries, Dept. TX, Penrose, Colorado 81240, for the Transroc kit (*Tell 'em where you read about it! wcn*). Better yet, send a quarter for their catalog to get all the details. Sounds great to us out here in the West, as we do have problems with cotton fields. Thanks!

#### ENGINE OF THE MONTH

This month's engine is another small West Coast engine, manufactured primarily to take advantage of the tremendous interest in small models. In the early days of gas modeling, all the big designs were to be found on the East Coast. Out in California, a six-foot model was considered large; hence, the tremendous sales field for small engines. Numerous engines were produced on the West Coast, among those being; Trojan, Brat, Madewell, Husky, Ohlsson, and many others.

Strangely enough, after World War II, California manufacturers produced a tremendous number of ".60" size engines, such as Ohlsson,

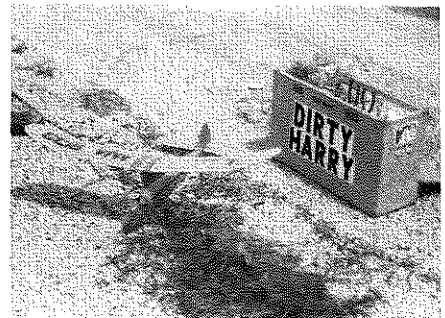


Caldwell (Slick Stick) Johnson flies gas too! A Roeser/Parmenter "Swoose" from the Chicago area. See .020 Replica version, OT Model of the Month.

Super Cyclone, Atwood, Orwick, Hassad, Hornet, McCoy, Contestor, and many other smaller producers. Big designs were the vogue in California!

The M&M arrived on the scene shortly after the gas allowance type events were abandoned in favor of the limited engine run rule. In 1939, the first M&M engine made its appearance in its first advertisements in the August 1938 issue of Model Airplane News. The M&M Company, based on the tremendous acceptance of their wheels, had gotten into the market with a .23 size motor. Initial price was \$17.50, ready-to-fly.

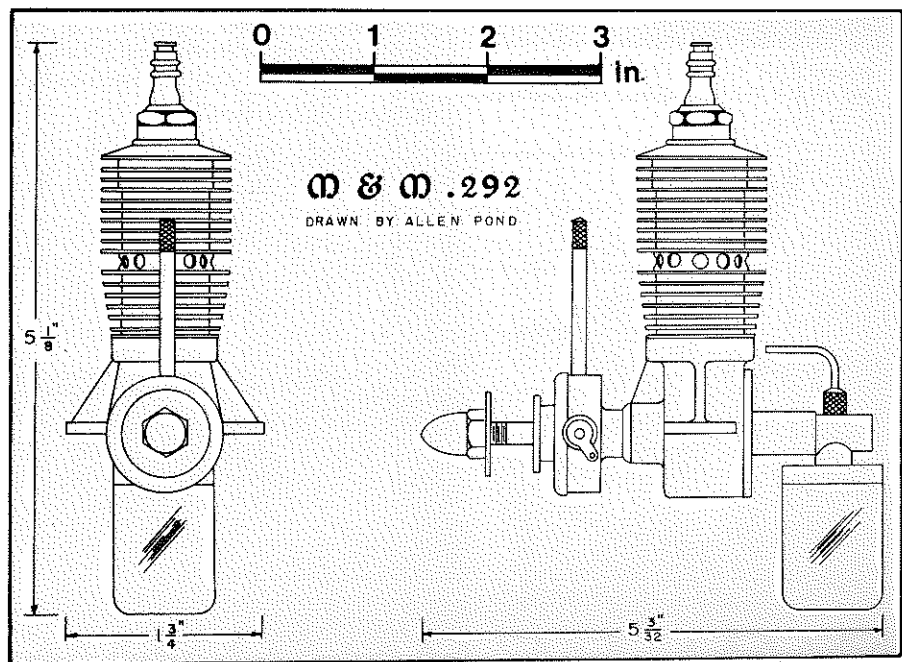
With the new rules now extending Class B to include .29 size engines, M&M promptly brought out their newest effort, the .292 engine. Surprisingly, this was priced a dollar cheaper at \$16.50, as noted in the



Didn't have a picture of Harry Murphy. His field box eloquently tells the story!

initial opening advertisement in the July 1939 issue of Model Airplane News. However, sales weren't that great, as the engine advertisements ceased in the January 1940 issue of MAN.

Basically the M&M 29 was a piston-valve type engine, which the





manufacturers claimed was the first major improvement in model engines. Another claim was made that the piston and cylinder being symmetrical would allow the piston to rotate, making for uniform wear and maintaining good compression. In theory, this sounds great, but as the man said, "tain't so". The most successful two-cycle engines are those with the least amount of moving parts.

For those interested in the manufacturing specifications, the M&M engine featured cast iron cylinder and piston. The circumferential exhaust, later exploited in the Arden engines, was advertised as contributing to more power with quicker disposal of gases.

Points were fully enclosed to keep oil from fouling the points. For this reason, the motor operated equally well inverted or upright. Inverting the engine was quite simple, requiring only the intake tube and gas tank to be rotated 180 degrees. Probably took all of two or three seconds' work.

The engine also featured a transparent gas tank, which could be easily removed for cleaning. The so-called pull-tube carburetor needle valve (with micro-gas adjustment) featured no threads or pin holes to get clogged. The whole assembly could be easily taken apart for cleaning.

The motor displacement was .292, with bore of 23/32 and stroke of 32/32 (one inch to you). Base weight was 4-1/2 ounces. The engine was sold complete, ready-to-run, with spark coil. Recommended propeller size was 11-1/2 x 8 pitch. M&M claimed that it was not necessary to run the engine at high speed to develop full power (and naturally induce more wear).

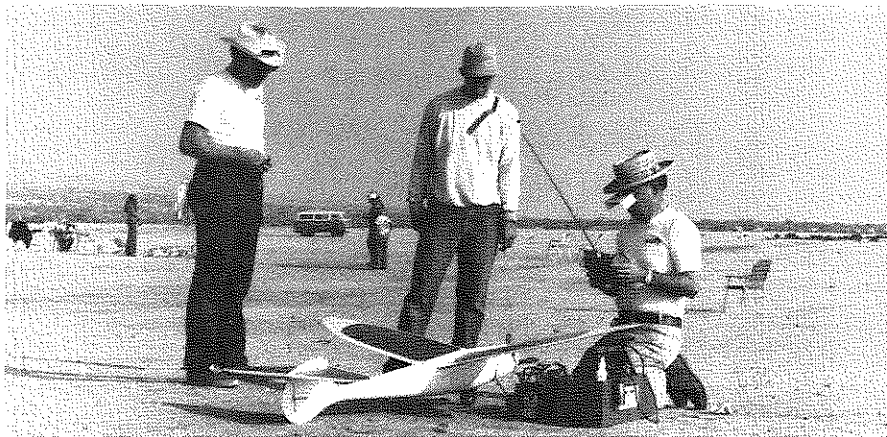
30 YEARS AGO I WAS. . .

Got a nice follow-on letter from Vic Dubery with further experiences aboard the MHS Biter and the trials and tribulations of building models at sea.

You will remember several issues back, Vic was salvaging the balsa from the Fairy Swordfish landing gear. This odd shaped piece of balsa had to be cut into strip and sheet sections. The only tool available aboard ship was a massive bandsaw in the carpenter shop. Located forward in the bow, the shop was incredibly cramped.

It was in this "shop" that Vic discovered how to saw balsa with a rough blade that took better than one-eighth of an inch each cut. As he said, stripping was done very carefully, like handling an alligator in the back seat of your car.

About this time, Vic acquired



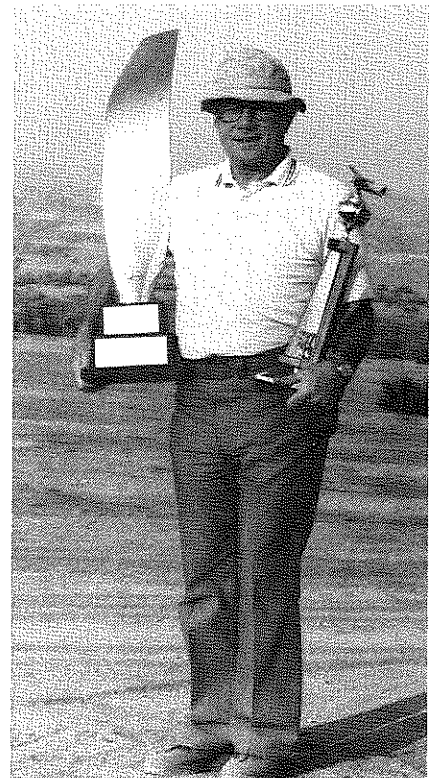
Jim Adams, with improvised blinders, checks the radio action on his Tom Laurie Experimental as Bob Oslan (left) and Mike Bernhardt look on. Bob and Jim are OT F/F to R/C converts.

more useful shapes of birch and spruce while visiting aircraft repair shops ashore. One must understand that there was plenty of wood in a cracked-up Swordfish, but the Swordfish being produced by Blackburn was a metal-framed version unlike the original. As Dubery put it, more work went into preparing the wood to size than the actual construction time.

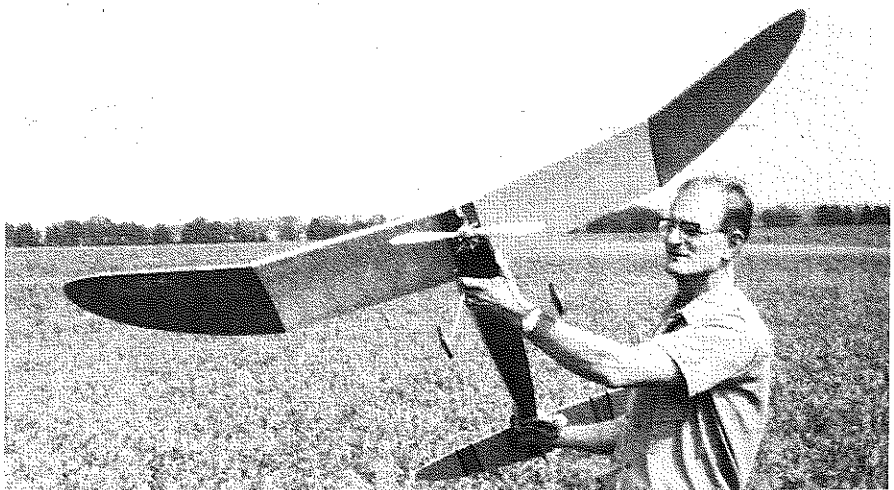
Covering posed another problem, as like balsa, it had completely disappeared in the U.K. In Argentina, Newfoundland (one of the U.S. Land-Lease Bases), Dubery canvassed the local shop for tissue . . . any sort of tissue, whether it be wrapping or what have you. Seems like Dubery's ports-of-call were never in the right place for model supplies.

The wrapping tissue turned out to be a surprise, as it did not shrink very appreciably nor did it take colored inks very well. To help modify and heighten the colored tissue used for Peanut building, inks and suede shoe dye diluted with alcohol (called methylated spirits in England) were tried. More surprises!

*Continued on page 89*

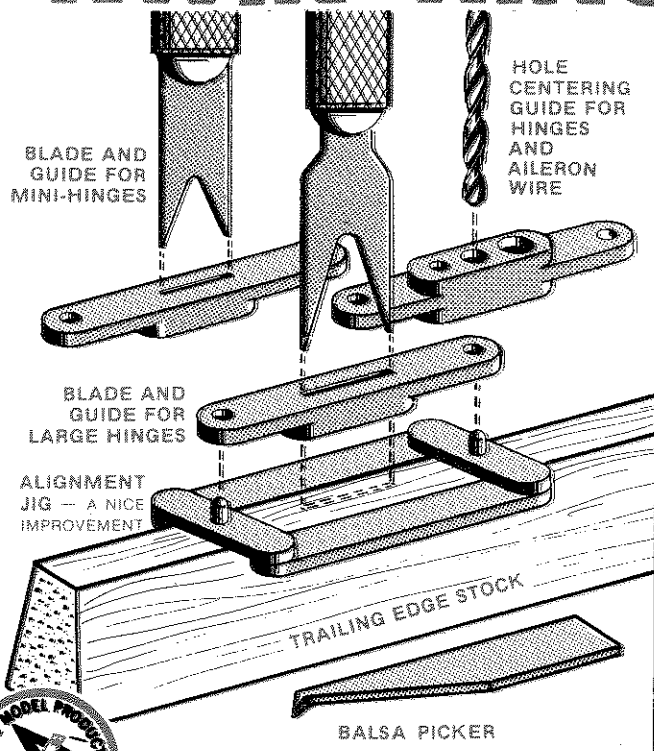


Karl Tulp, winner of the SCIF R/C Texaco Perpetual, used Dallaire and OS 4-cycle ign.



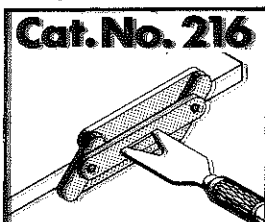
Ohlsson 60 in a Playbor Senior makes a good combination, says Gene Hartmangruder, at the Brainbuster Annual.

# KWIK-HINGE SLOTTER



FOR LARGE AND SMALL HINGES. THE ONLY UNIVERSAL SLOTTING TOOL THAT NOT ONLY CENTERS, BUT GUIDES YOUR BLADE FOR PERFECTLY ALIGNED HINGE SLOTS EVERY TIME!

The black oxidized, hardened steel blades fit neatly in a no. 2 x-acto knife handle and work in conjunction with our handy alignment jig that features 3 interchangeable snap-on guides. Two for large and small leaf hinges, and one for drilling 3 standard size holes to match any type of hinge you choose to use.



**Cat. No. 216**

**Only \$1.95**

**DU-BRO PRODUCTS INCORPORATED**  
480 Bonner Road Wauconda, Illinois 60084 U.S.A.

to produce drag). Sure they can maneuver, but their "penetration" is strictly limited. The Parawing is an outgrowth of the early work on flexible kites, performed by Frances Rogallo at NASA. The Army studied the Parawing to assist the airdrop of cargo. The first premeditated jumps with a Parawing were made in 1966 by members of the Golden Knights, the U.S. Army demonstration team, at Fort Bragg, North Carolina. Now this device has become the mainstay of hang gliding. Maximum lift to drag ratio on such craft is in the order of 3.5, occurring at the minimum stable angle of attack.

The Parafoil was originated by Domina Jalbert. Since 1964, the Air Force has shown interest in this device. In 1965, during tether tests at the University of Notre Dame, two students were inadvertently lifted from the ground, thus beginning live parafoil flights. It soon became routine to tow students to several hundred feet altitude, release the tow rope, and let them glide back to earth. Later work demonstrated the reliable deployment and inflation of the parafoil. It seems to have good flight performance and easy flareout on landing. In essence, this craft is rectangular in planform with a double-surfaced airfoil. The wing is divided into cells, which are

pressurized by the ram air. Once inflated, the air within the wing remains stagnant. Here again, the maximum L/D is low compared to that of modern rigid wing sailplanes. (See Feb. '78 "Over the Counter").

But new configurations appear from time to time and significant advances are bound to take place in soft wing technology. Let's give some thought to soft wing radio controlled sailplanes. Here's a challenge for those who enjoy being creative.

A new launch system is now available from Hi-Flight Model Products, 43225 Whittier Ave., Hemet, California 92343. This electric winch has a heavy welded steel frame, a 12-volt motor, and a finely matched aluminum drum (as well as a roller-bearing turnaround). It weighs 40 lbs. without the battery, and provides three different speeds for launch. It can be driven from your car battery or a similar battery mounted on a base plate at your flying site. I expect to see quite a few of these at coming contests.

If you haven't already done so, now's the time to become a member of the National Soaring Society. Here's your way to support RC soaring. The National Soaring Society represents your interest within the Academy of Model Aeronautics. It provides valuable communication and a monthly

journal covering detailed activities for design and flying. All you need do is send your name, \$10, and your AMA number, to the NSS Secretary, Dave Cook, Star Route, Granby, Colorado, 80445.

**Plug Sparks . . . Continued from page 23**

The black ink, when thinned, turned out to be brown. Dubery found out that inks are not just a dye, but have a content (in the old days, shellac) that makes the dye stick to the paper. This (naturally!) shrinks and hardens certain tissues. So back to raw shellac crystals dissolved with alcohol. This provided a thin, light, clear dope (or sanding sealer). However, the Fairey Swordfish aircraft were fabric covered, so plenty of clear dope and thinner were available. Adding talcum powder made up a suitable sanding-sealer, although heavier than the shellac substitute.

Dubery's girl friend was certainly puzzled, when upon receiving a pair of fabulous new nylon stockings for the second time (from PX at Argentia), she was requested to send back the first worn-out pair! This also formed part of the covering.

Quick-drying cement (such as

Write For **FREE BROCHURE**  
On Our Complete Line Of  
**R/C PROPORTIONAL EQUIPMENT**

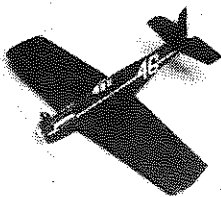
including  
**WORLD'S SMALLEST SUPERLIGHT  
DIGITAL CONTROL SYSTEMS**

**SMALLEST SIZES** (PLEASE SEND AIRMAIL POSTAGE) **LOWEST PRICES**



13400-26 Saticoy Street  
North Hollywood, Calif. 91605  
Phone (213) 764-1488

**BENDIX WINNER  
PAUL MANTZ P51**



MACHINE CUT Balsa .049  
SCALE-LIKE PROFILE STUNT  
AT YOUR DEALER \$5.50  
OR ORDER FROM:  
HOBBY HIDEAWAY, DELAVAN, IL.  
309-244 7389 61734

**NEW  
PLANS**



**CURTIS  
PLOGHLING**  
80" WING SPAN 2 1/2" SCALE  
PLANS (2 SHTS, 3 X 5")... \$10.00  
PATTSEE PATTERNS... \$5.00

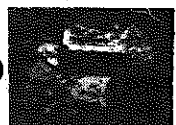
**BELLANCA  
AIRCRUISER**  
65" WING SPAN  
1 1/2" SCALE  
PLANS (2 SHTS, 3 X 5")... \$10.00  
PATTSEE PATTERNS... \$5.00

**PRICE CUT**

**CRASH  
GUARD SWITCH**  
FOR O.T.F.F. AND ALL ELECTRIC  
MODELS - \$5.00 SEND FOR INFO.

MAKE CHECKS OR MONEY ORDERS PAYABLE  
TO:

**PAS-A-CO**  
26260 - 153RD S.E.  
KENT, WASHINGTON 98031



DUCO) was unavailable. So, nothing to do but beg the old tooth brushes from his shipmates. In those days, they were made of cellulose acetate, so when dissolved in acetone (thanks to the ship's doctor), they made a passable cement of various hues.

Finally; rubber for power. The first source was recovering the elastic from his young lady's discarded under-garments. But a more useful source was discovered in the cockpit back seat, consisting of cotton-covered bungee cord normally used for holding down the parachutes in stowed position. A real labor of love was involved in picking the cotton covering off the bungee cord!

With the aforementioned materials and "second-hand rubber", it was surprising what duration could be obtained from the small models. Experiments with propeller design paid off. Starting with four-inch diameter props, very accurate design and meticulous execution in hard wood (or balsa) made a tremendous difference in duration. Dubery also developed a non-helical-pitch design that has appeared in recent Wakefields as an innovation credited to a German enthusiast. A generation late by Dubery's

standards!

Briefly stated, the theory is that at the tips there is an acceleration due to air inflow beyond the propeller tip and at the hub, and acceleration due to air parting over the fuselage. This leads to an increase in geometric pitch required at these points. Experiments aboard the HMS Biter, in the hangar, proved the greater efficiency even with a small four-inch airscrew.

None of the experiments were very scientific as the hangar leaked badly, giving numerous drafts. Vic did find duration increased with careful trimming. Rise-off-Wildcat-tailplane (how about that!) of 30 seconds were commonplace. (Heck, we'd like to do that nowadays!)

Some of the models that survived the rigors of shipboard travels, were

**Schedule of West Coast R/C Old Timer activity for 1978**

February 19	SAM 27
March 12	SAM 30
April 9	SAM 21 Texaco
May 7	SAM 21 .020 Annual
May 27-28-29	W/C SAM R/C Champs
June	SAM 49
July 23	SAM 27
Sept. 10	SAM 21
Oct. 14-15	SAM 26 Pond Comm.
Nov. 12	SAM 30
Dec. 4	SAM 49 Texaco

flown at Machrichanish R.N. Air Station, in Western Scotland. Imagine working on a 1/24 size Taylor Cub while on standby or in the briefing room of the HMS Biter; building a fuselage, going on a night strike after a U-boat detected by destroyer screen and then coming back (after debriefing) and making the wing! Dubery said this was probably the best occupational therapy of all, as his enthusiasm for modeling was so absorbing he had no trouble staying alert after an operational flight. Probably the biggest thrill of all was the first "glide over grass" with his precious Taylor Cub. The accompanying photo is a genuine ROG flying shot against a background of blast-proof living quarters. Those were the days . . . 35 years ago!!

**ROUND ROBIN FIRMED UP**

This portion of the column is directed to the Old Timer Radio Control flyers. As stated in the previous issue, here is the complete flying schedule for all Western O/Ters who like their "black box" operated airplanes. (Unless noted otherwise, all contests will feature Texaco, Limited Engine Run, and .020 Replica Events.)

About the only contest that is up in the air as far as dates go, the SAM 49 Texaco, may be moved up to August, the only other open month.

A quick review of the upcoming contests is in order. The SAM 27 people have announced that the kick-off contest for 1978 will feature loads of merchandise instead of the usual hardware. The Kimes Ranch located on the Old Sebastopol Road will be the site.

SAM 30 will be putting on its meet, known as the "Brown Valley International". This meet will feature trophies, merchandise, and a first-rate cookout. Those who attended last year had nothing but the highest praise for this meet.

The SAM 21 Texaco at Taft will be held on the same day as the SCAMPS Texaco, featuring free flight up to 9 a.m. This annual (the fourth) features only Texaco model flying in a site perfect for this type of event. SAM 49 will also feature a similar meet in June.

Of course, the Pond Commemo-

Kimes Ranch, Santa Rosa
Browns Valley "International"
Taft
Hill Country, Morgan Hill
Fresno
Taft
Kimes Ranch, Santa Rosa
Santa Teresa Park, San Jose
Santa Maria
Schmidt Ranch, Elk Grove
Taft

# JOHN POND Old Time Plan Service

The largest selection of plans in the world at the most reasonable prices. Each list 75c

- No. 9 OLD TIMER F/F GAS
- No. 9 OLD TIMER RUBBER/TOWLINE
- No. 8 OLD TIMER FLYING SCALE A through K
- No. 8 OLD TIMER FLYING SCALE L through Z

P.O. Box 3215  
San Jose, Calif. 95156  
Phone (408) 292-3382

**FREE FLIGHT HARDWARE**  
TOOLS, ACCESSORIES & PRECISION CASTINGS

<b>WINDING HOOKS</b> UNLIMITED TO PEANUT	<b>BALSA STRIPPERS</b> 18" AND 36" LENGTHS
<b>JETEX</b> 150 MOUNT HOT-WIRE	<b>CIRCLE-TOW</b>
<b>COUPE HUB</b> RADIAL ENGINE MOUNT FOR D/T	<b>D-T KIT</b> PLATE HOOKS FITS TORSTER 20, K&B TORPEDO, O&R 19 AND 23 CATALOG \$1.00

**JIM CROCKET REPLICAS**  
1442 N. FRUIT AVE.  
FRESNO, CA. 93728

## GOOF PROOF TRIM SHEETS!

5' x 36" sheets in red, white, blue, yellow, orange, aluminum, olive, dayglow orange, dayglow yellow, black



It's an iron-on, so if you goof, re-heat, lift, re-position

## COVERITE

2779 Philmont Ave., Huntington Valley, Pa. 19006

rative in October is the biggie, put on by SAM 26 and the Tri-Valley Club. This one you don't want to miss!

### BRAINBUSTERS ANNUAL

While recounting some of the contests of last year, the columnist received the nicest writeup (and good photos!) from Ed Sullivan, secretary, handyman, you name it!

Interestingly enough, the Brainbusters field is a dairy ranch just outside of Richmond, Virginia. The farm keeps an alfalfa field, about one mile long by 3/4 mile wide, which the farmer allows the club to use. Planes going off the field get in real trouble in a hurry, as the James River is just on the other side of a wooded area (another obstacle!). To help things out, several corn fields are on the opposite end of the field, also separated by a line of trees. They fly strictly Category III rules, which keeps engine runs down to 15 seconds for old-timer flying.

Wouldn't you know it! On the day of the contest, rain was forecast, and rain it did... everywhere but where the contest was held. Despite an intensive publicity program, the

attendance (compared to last year) was terrible. Ideal conditions prevailed until the wind came up later in the day. The corn fields claimed many a model!

Everyone thinks C.C. Caldwell flies only rubber, based on his wins in this phase of modeling. No such thing! "Caldwell" flies the Swoose (Parmenter design) and knows how to make this fine machine go. Incidentally, Johnson came all the way from Houston Space Center for this meet. That's real dedication to his friends at NASA Langley Field! Best part of it all is that he didn't go home empty-handed, winning one first and two seconds.

Reporter Ed Sullivan snuck off with the .020 event, despite heavy competition from Mike Poorman. Mike also grabbed a second in the Class A-B Event with his Zipper.

Prizes were pretty well spread around, as there were no real big winners. Despite the weather, everyone enjoyed a good contest and a chance to renew old acquaintances. Everyone had fun, and as Ed Sullivan put it, "That's what it's all about".

S O S MEET

That's what Jimmy Dean, Newsletter Editor of the SCAMPS "Hot Leads" called the recent old-timer meet put on by the San Diego Orbiters. Seems like only a trickle of information and publicity was available on this meet; hence, the title, "Secret Orbiters Seance".

Well, it's fun once in awhile to let the other fellow know you are interested in their meets. Perhaps Jim will stir up enough notice in the San Diego club that they will indeed put out notices to all interested modelers.

Held at Elsinore on October 29/31, the Old Timer events were dominated by Sal Taibi, who took a first, second, and third. In the thirty-second antique, it was Larry Boyer with his trusty old Comet Clipper. Maybe we should adopt a handicap system similar to what was used by the Western Associated Modelers several years ago. The first win on a particular model would call for a 5% handicap, the next win 10%, and so on until the modeler built an entirely new model. Might be one way to get some new stuff in the air.

### SAD NEWS

Well, the grim reaper made off with another couple of nice guys. First off, Woody Petersen, a SAM 21 member and new prospect for the new SAM 49 Club, suddenly died of a heart attack on November 24, 1977. All the fellows are going to miss his easy-going manner, as a better winner you couldn't find; unassuming, friendly, and a real down-to-earth guy.

In the Midwest, via the CIA gang and Harry Murphy, comes the report that Dutch Hess, a real stalwart of the Chicago Aeronuts, passed away. As Muri sez, it just seems like yesterday he donated a real nice old-timer engine to help raise money in a raffle. At the last Chicago O/T meet in the fall, there was Dutch sitting out enjoying the fun and helping whenever he could. They are going to miss that boy!

### FUN NEWS

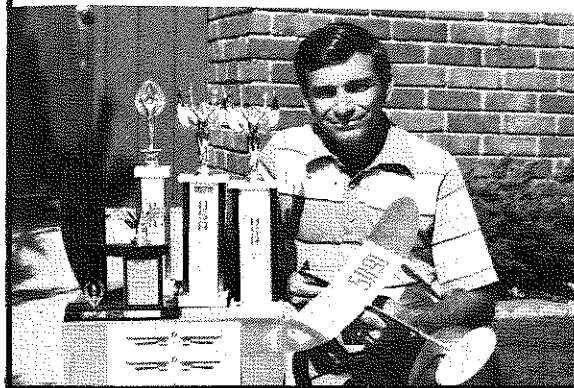
According to the headlines of the Willamette Modelers Club (NWC) in Portland, Earle "Foggy" Moorhead finally built a model after much talk and loss of bets. Although it was only a Square Eagle P-30, that's real progress. When do we finish the Lanzo Record Breaker?

### SCIF TEXACO

It truly was a shame that the SCIF Texaco meet at Taft conflicted with the Pond Commemorative at Santa Maria on October 16. Worst part about it all was that only about 60 miles separated the two meets. Well, it isn't the first time, and probably won't be the last time there is a conflict of dates. (Actually,



# POLLY WINS & WINS & WINS...



WINS BY DESIGNER BILL BLANCHARD:

- 1977 Nats 1974 thru 1977 USFFC
- 1971 NFFS Model of the Year
- 9 AMA Records in Open HLG since 1970

\* Kits available: \$3.98 DT, \$2.49 Std. \*  
See your local dealer first!!

DIRECT ORDERS ADD 50¢ PER KIT POSTAGE  
CALIFORNIA RESIDENTS ADD 6% SALES TAX

AERO MODELING ENT., Box 11, Cerritos, Ca. 90701

## CUSTOM TUNED ENGINES AND COMPETITION ACCESSORIES

Specialists in standard  
or throttled Cox .049/.051  
and Rossi .15 engines,  
parts & quality racing products.

For detailed information,  
send 13¢ stamp to:

**Kustom Kraftsmanship**  
P.O. Box 2699  
Laguna Hills, CA 92653  
(714) 830-5162

a Stahl design

see your local hobby dealer

a WINNER almost  
40 years ago

**Howard** DGA #109  
24 1/2" WINGSPAN — \$6.95

WATCH FOR THESE  
BEAUTIES!

**RUBBER & CO<sub>2</sub>**

— and —

A WINNER AT THE 50th NATS —

#108  
Earl Stahl's famous  
**Rearwin Speedster**  
28" WINGSPAN —  
\$6.95

The **Monocoupe** #101  
22 1/2" WINGSPAN —  
\$6.95

Send for free brochure.

**FLYLINE MODELS**  
10643 ASHBY PL. FAIRFAX, VA. 22030

10% FOR PACKING AND POSTAGE.  
VA. RESIDENTS ADD 4% TAX.

in his capacity as SAM Vice-President, the columnist has been trying to get a yearly schedule of non-conflicting O/T meets.)

Although the weather wasn't that great for thermals, Terry O'Meara managed a flight of 55:36 with a Cannon powered Heit "Scram". Jim Adams, who has won so many times before, was again second with his old reliable Bunch-powered Ehling Contest Winner.

A new trophy for the "Most Spectacular Flight", made up of a gold turkey on a marble base, was easily won by Chris Christensen, of Bakersfield. His model broke the dethermalizer string on takeoff, and the most spectacular series of snap-loops then ensued. Fortunately, the model wasn't badly damaged at the end of the power run.

**RED KNIGHT IGNITION ENGINES**  
Maybe the columnist is a little backward on the latest things, but it was quite a surprise to him at the latest Region II MECA Collectogether held at Fremont, when he discovered that Bruce Chandler was offering an R/C ignition version of his Black Knight series.

Actually, these engines are basic O.S. engines that have been fitted with Super Cyclone (or Spitfire) type

points. The exterior is completely finished in red crackle enamel that effectively changes the appearance of the entire engine.

Chandler Engineering, 7858 Faralalone Avenue, Canoga Park, CA 91304, is offering a complete line of Black Knight engines ranging from .15 to .36 cu. in. displacement. In the Red Knight series, only two engines are being offered at present: .29 and .36 size.

For those R/C oriented modelers, it may be of interest to you to learn that R/C ignition events are going to be held at the 1978 SAM Champs, with similar rules to those ignition events staged at the 1977 Las Vegas SAM Champs.

### FREE PLUG DEPARTMENT

Just received a list of partial kits made by Schmidt Custom Kits of 11948 Franklin Blvd., Elk Grove, CA 95624. If I thought Gene Wallock of P&W had a few O/T partial kits, then Schmidt would be the colossus of partial kit.

On his list were no less than 70 different old-timers for which he will cut ribs and formers. Unlike P&W, Schmidt provides, as his name implies, custom made kits. He stocks no kits, makes only to order, and will make new ones if the demand war-

rants it. In short, if you don't like to cut out parts for any particular plane, contact Schmidt. He will probably make you up a custom kit.

Schmidt is also handling the Y&O propellers presently being manufactured by Bill Schwagerman of Bills Mail Order Hobby. The 16-inch props are quite reasonable, costing only \$2.00 each. He is also providing five-foot lengths of spruce in any size up to one-inch square. Four-foot lengths will have sizes ranging from 3/16 to 1/2 inch square.

### GOOF TROPHY

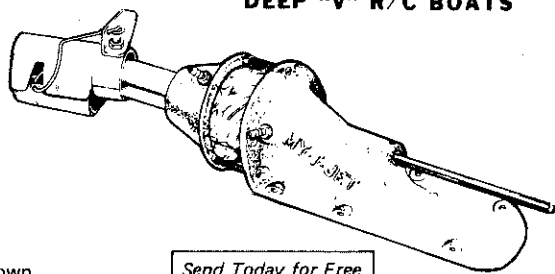
We're gonna wrap up this month's column by talking about some real club fun; namely, a goof trophy. These awards, which are never known for their aesthetic beauty, are not the most highly coveted trophies.

As the name implies, the award is given for the best goof of the day. However, the best fun is to have a perpetual trophy which is awarded every month. In the San Francisco Vultures, this popular pastime of passing the trophy around worked like this:

Once a fellow becomes the recipient of the trophy (in this case of the S.F. Vultures, it was a fur-lined

## Mark 1A MY-T-JET

- Complete precision engineered assembly
- Cast aluminum housings with stainless steel hardware
- For engines of .30 to .60 displacement
- Fits most Deep "V" hulls
- Thrust reverser for backing down
- "Closed Loop" cooling system for engine



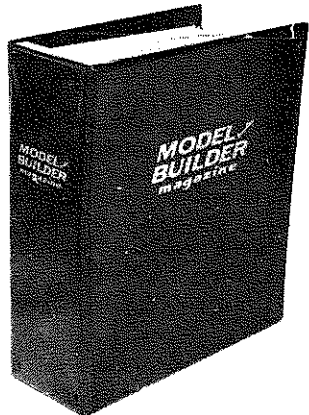
Send Today for Free  
Brochure & Pricing

HILBIG INDUSTRIES, P.O. BOX 245, BONITA, CALIFORNIA 92002

## WATER JET PROPULSION for DEEP "V" R/C BOATS

## COVERUP!

Sturdy, dark green vinyl covered binders for your valued copies of **MODEL BUILDER**. Gold logo.



Only \$4.95 each, two for \$8.95, three for \$12.95, four for \$16.95, or five for \$20.50, postpaid in the US. Canada and Mexico add 30 cents per binder. Overseas add 50 cents per binder. California residents add 6% sales tax.

NOTE: One binder holds 1971 and 1972. Use one binder per year for 1973 to present.

(For UPS delivery, add \$1.00 per binder)

# MODEL BUILDER

621 W. 19th St., Costa Mesa, Ca. 92627

OVER 280  
SCALE DRAWINGS!  
1978 CATALOGS  
\$1.00

MORRISON  
REPLA-TECH  
48500 MCKENZIE HWY.  
VIDA, OR. 97488

ing the model he thought he had lost. As he exclaimed, "Now I can get in my last flight", he promptly run over someone's tail. The trophy was immediately awarded.

Directly after this, Bill Wild went to a radio control contest and left his transmitters home. While he was standing around, wondering what to do, he observed this columnist packing his car. With a sigh of relief at the completion of the task, J.P. slammed the trunk shut, neatly severing the Buzzard Bombshell tail which was still sticking out. That trophy really made the rounds that day!

So, men, get yourselves a goof trophy. The laughs generated at each meeting are well worth the effort of making one up. You'd be surprised, once you are the owner, how hard it is to get rid of the darn thing!

### Power Boats . . . Continued from page 43

Angeles, California 90045. J.G. props are packaged very clean and well polished. In fact, they only required minimal shaping and balancing treatment. Jim Gale points out that blade area is an important factor, just as diameter and pitch. Taking the same diameter and pitch and cutting down the blade area, will result in more RPM. Nothing magic,

just common sense. When using the prop selection chart, remember to consider the factors outlined at the beginning of this section.

### REWORKING PROPELLERS

When reworking b.c. props, you must prepare the prop by heating it in excess of 650°. A propane utility torch works nicely for this step. Have a metal bowl or can filled with water nearby. Once the prop has reached the desired temperature noted by the dull orange color, drop the prop carefully into the water. The sudden change in temperature will soften the b.c. and allow the prop to be reshaped, filed, or sharpened. Caution is advised throughout this process, and also, be sure to leave the prop in the water so that it cools sufficiently. Don't rush.

A necessary procedure with all props will be sharpening the leading edge of the blades and squaring off the trailing edge. The leading edge of the concave side of the blade must remain sharp and should not be rounded with emory paper. This area is very critical to the performance of the prop. If it is not clean and sharp, the prop will not cut through the water properly. Thus the leading edge should be thinned, primarily on the convex side of each blade. By placing the prop on a stub 3/16 driveshaft locked in place with a collar and drive dog, you will be able to file the leading edge with the assembly secured in a vise. File the b.c. carefully and, of course, sharpen blades equally.

Most props require the trailing edge to be squared off at 90° to the inside and outside blade surfaces. The casting usually leaves the corners rounded. Turn the prop over on the stub shaft and lock it in place. File in back-and-forth motions at a right angle to the trailing edge. Move from the tip of the trailing edge to the hub area. Be sure not to curve the trailing edge in anyway.

To reduce lift, try one of these proven methods. Carefully remove material from the trailing edge of each blade near the hub. File from the tip to the hub, removing very little from the tip and proportionally greater amounts of the trailing edge towards the hub. Another suggestion is to cup the leading edge so that prop entry is softened.

Dial-a-Prop, 840 E. 64th Street, Indianapolis, Indiana 46220, produces mandrels in two sizes. As shown in the photo, these mandrels are very helpful to the boater in cupping blades . . . Or how about straightening out those bent props for the unplanned assault of the shoreline? Also, if you want to build your own hot props, then Dee Hughey has everything you'll need;