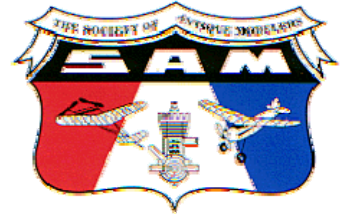


THE NEWSLETTER OF SAM 26, THE CENTRAL  
COAST CHAPTER OF THE SOCIETY OF ANTIQUE  
MODELERS. **LATE APR-EARLY MAY 2012 #265**



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**NEXT CHAPTER MEETING** should occur June 20, the first day of summer at Bob Angels'. However, Treasurer Bierbauer had a good suggestion of holding the next meeting after a Saturday flying session at our Drum Canyon site. If we work that out we'll try for Saturday June 16, to allow a cushion just in case flying weather isn't good that Saturday. Stay tuned.

**JUNE CONTEST** at Schmidt Ranch June 8, 9, &10: Due to a computer hiccup, I didn't receive the flyer until recently. And due to other computer peculiarities I couldn't copy the flyer in PDF format into the word format I use to assemble this newsletter before converting it in whole to PDF. So I printed it, scanned and inserted the scan. The original flyer was quite colorful, but black and white comes out more readable after this process. Notice how much time computers waste? Consider my time in doing and explaining all that, and your time in reading this paragraph. Flyer is probably inside (with any luck at all).

**MOST OF THE DETAILS** are included in the flyer mentioned above, but here's a clarification about dates. The contest is Saturday and Sunday only, but early arrivals may put up test and/or fun flying on Friday while being covered by AMA insurance.

**SAMS' 30 AND 51** are planning some **fun flys** in the Sacramento area in place of contests. SAM 51 starts with **Friday, May 25, 2012**, at the Woodland Club: "We would be using the north UC circles and not the runway, so OT type stuff only. We also agreed on **Friday, June 22, 2012**, for a fun fly at Schmidt Ranch if that is OK with Miriam and clan. A late July fun fly is pending, depending on interest and on SAM 30 contest schedule."

"We opted out of a contest last year. Age and infirmities got the best of us. We'll try the fun fly and see how it goes. Not are really contests anymore with one or two entries in a lot of events." When: **Saturday, July 21, 2012**. Where: Schmidt Ranch. Contact Information: Warren Pickering 530.846.2541.

SAM 30 invites you to bring your favorite Old Time Models and enjoy a relaxed day of noncompetitive fun. A Hi-Start will be available, test fly a new model or just enjoy an oldie. Miriam's pancakes and coffee will be waiting in the morning and lunch will be available for \$5.00. A great raffle will be held and maybe an oddball trophy or two will be awarded. See you there!

**FROM THE INTERNET:** Roy Bourke describes his happy relationship with new technology Li-Po batteries for transmitter use. Cont'd next page.

**LI-POS:** “Two years ago, I converted my JR and Airtronics transmitters to LIPO packs. HobbyKing sells a 3 cell LiPo transmitter pack that fits JR and Airtronics, (and probably Futaba and HiTec) with a huge 2500mAh capacity. The LiPo battery packs seem to hold their charge forever, have no memory effect, and can be topped up at any time. And the packs are only about \$13.

The voltage is higher than with NiCds and NiMHy packs, about 12.6V when fully charged, but my transmitters handle the higher voltage OK. I modify the battery cover on the transmitter to bring the balancing cable and plug out for accessibility while charging. You have to watch that you don't let the overall voltage get below about 11 volts for safety. (If you left the transmitter on until the pack was completely discharged, you would have to replace the pack.)

With LiPo's, you can get a pretty good idea about the remaining capacity of a pack by taking an accurate voltage measurement after the pack has been resting for a while (no recent charge or discharge). The cells have a voltage of 4.2V per cell at full charge, about 3.86V at half (50%) charge, and at 3.7V per cell, they are at about 10% capacity and getting close to the point of rapid voltage fall-off.

On a transmitter with lights to indicate state of charge, the full-charge light would probably be always on even when the LiPo pack nears discharge, so you have to monitor the pack voltage regularly with a good digital meter. Personally I am very satisfied with these LiPo transmitter packs, and wouldn't want to return to NiCd or NiMH.” Roy Bourke

**DIFFERENT STROKES** for different folks. Your editor will wait awhile before joining Roy with Li-Pos. I get about ten years out of the newer Ni-Cd packs, because each set doesn't get a lot of use. And unless the ones from China change the picture, I've never had the newer batteries go bad catastrophically. They just gradually lose capacity as you can notice when cycling them. But about once every two years, I do manage to leave at least one transmitter on and run the batteries all the way down. That would kill a Li-Po pack. If a Ni-Cd battery recharges with a wall wart overnight, it's usually still good. But if it's very old and needs a short high voltage “hit” to get all cells up to speed, it's suspect, and shouldn't be used in anything critical.

The Li-Po charging procedure gets more complicated since most experts recommend balancing the cells. That requires extra balance connectors squeezed into the battery compartment, or hanging outside through a new hole in the case. I agree with Ralph Cooke, who expressed his opinion below.

**ENELOOP NI-MH:** “For the past three years I have been using Eneloop battery packs from "No BS Batteries" for my transmitters. They hold a charge, and do not have the Fire Danger associated with LIPO. battery packs.

I have cycled a pack, charged it then let it stand for 30 days and re cycled the battery pack and found 98%+ charge remaining. I have two spare battery packs, and can go to a SAM Champs with everything fully charged and never worry about the charge condition of a transmitter that has set unused and not topped off for a week before the event.

It's too bad the cells are not vibration resistant, as use in an airborne pack, in a glow or gas engine powered plane, is NOT recommended by most experts, though "Batteries America" will sell you airborne packs, they won't comment or even discuss the potential for vibration problems with the packs. Until someone comes up with test results showing vibration resistance, I won't use them for airborne packs. I would like to use A-123 Batteries for airborne packs, but the hassle of setting up the charging and balancing system has kept me from it for now. I really hate having to put my airborne battery packs on charge every night before an event, especially when I'm at a week long contest.       Ralph

**SPRAY CANS.** Here's another tip from SAM Talk on the internet. It's also a reminder that I'll borrow stuff from anywhere if it sounds like a good idea: But oops, I lost track of which Hank sent it, although I believe it was Hank Nystrom. Not everyone puts their full name on messages.

"Hey guys I've found a "tool" that make using rattle cans, like Design Master, spray jobs a piece of cake. It's called a "Spray can tool". It snaps onto the spray can and you use it like a spray gun. ACE Hardware has them and @ \$4 bucks you can't beat it." Hank

**TANDY WALKER** in Arlington Texas was nearly in the path of one of the recent tornados. "Fellow Sammers,

It was a terrible afternoon yesterday, but we are all OK. This morning's report indicate 15 tornadoes in the Dallas/Fort Worth metroplex yesterday and Arlington was hit hard. It was black as night here during the storm. There were 150 homes destroyed in southwest Arlington not far from us. We spent most of the time during the storm inside one of our bathrooms with pillows and blankets to cover us up, but the good Lord spared us. We did get quite a bit of large hail. Our specific tornado on the ground was moving north east and lifted as it got to our neighborhood. It came right back down again north of us. It stayed on the ground, moving northeast right into the DFW airport. The morning's news show all kinds of law enforcement, utility crews, and clean up crews moving into the area to start the clean up. Electric power and gas leaks are the two biggest problems being addressed first. We were sooo fortunate to have been spared this time." Tandy

**ANOTHER INTERNET Q&A:** A few electric fliers are running out of "juice" during a long glide, when the electric motor also powers the receiver.

**Question:** Can someone tell me where I can get a wiring diagram for adding a separate RX battery to this system?

**Answer:** On the 3-wire cable that connects the ESC to the receiver, simply disconnect the red wire (leaving the other two connected). Then connect your separate receiver battery to any spare servo connection on the receiver.

You can add a switch to the red (positive) lead from the receiver battery, and that will shut down the system for short periods of time between flights, etc. But don't leave the main motor battery connected to the ESC for long periods of time as the ESC will continue to draw some current and will eventually flatten and destroy the main battery. Roy



**YOU WANT OLD?** Here's old! It's a 1913 TW Clarke. It looks like a four stroke. And that prop says it's possibly used in pusher configuration. Although an early engine might be designed to turn either way, the prop in this case appears to be slightly concave on the near side, which could mean the prop turns "normally" or counter clockwise as we view it.



# 36th ANNUAL SAM 21 R/C OLD TIMER CONTEST

(AMA Sanction No. 12-0904)

**June 8,9,10 2012**

*At the finest RC Old Timer Flying Venue West Of The Mississippi!*

**11948 Franklin Blvd. Elk Grove, CA 95758 (916-684-2265)**

Start with a traditional SCHMIDT RANCH "fix your own" pancake breakfast each day, cruise through the Pilots meeting, fire up your favorite "Old Timer" or just relax, conversing with your contemporaries on the lawn, under the friendly shade trees...

**Many 'famous' SAM competitors will be there to share the secrets of their success**

*Great Drawing Prizes, great BBQ lunch each day for \$5.00*

*- your choice of a juicy hamburger, or a spicy hot dog, Cooked to order by '21 head Chef, Brian Sargent*

## CONTEST EVENTS - FLY EITHER DAY!

TEXACO	LER CLASS A GLOW
1/2 A TEXACO	LER CLASS B IGN.
LER CLASS A IGN.	LER CLASS C GLOW
LER CLASS B GLOW	1/2A SCALE
LER CLASS C IGN.	OHLSSON SIDEPORT
ELECTRIC TEXACO	BROWN JR. LER
BROWN JR LER	ELECTRIC LMR
ANTIQUE (combined)	SPEED 400
SPIRIT OF SAM CONCOURS	OLD TIME RC GLIDER

## **C.D. - JAKE CHICHILITTI**

650-595-8105

E-mail: [jake\\_chichilitti@yahoo.com](mailto:jake_chichilitti@yahoo.com)

Assistant CD - Steve Roselle 650-969-1721

**Pilots meeting:** 8:00 AM both days.

Contest closes Saturday at 4 pm,  
and ends Sunday at 3 pm.

**Entry fees:** \$10.00 First event + \$7.00 each additional event. (includes \$2 per event to our hostess for putting up with our shenanigans)

## GREAT DRAWING PRIZES

**Grand Prize: ARF Std, Quaker Flash W/ Brown Jr.**

***Thanks to Jake Chichilitti!  
Several Engines***

**TICKETS: \$1.00 EACH or 6 FOR \$5.00**

**RAFFLE TO BE HELD AT HIGH NOON—SUNDAY.**

## EVENT NOTES



**Participant Trophies! - Certificates!**

**Other Prizes T.B.D.**

**GRAND CHAMPION Perpetual Trophy!**

**Saturday Evening Banquet Will Feature BBQ'd Rib Eye Steak!**

**\$18 per plate must RSVP to: Brian Sargent @;**

**Tele: 408-466-4899 or E-mail [bhsargent@gmail.com](mailto:bhsargent@gmail.com)**

## **LOGISTICS**

**FREE Pancake Breakfast both days (you fix 'em and wash up)**

BBQ Lunch Saturday & Sunday around Noon- \$5.00

BBQ STEAK Banquet Saturday evening 6:00 pm-ish - \$18.00

If you plan to attend the Banquet see Event notes, at left

SUPER 8 Motel	FLORIN Rd	916-427-7925
MOTEL 6 (2 locations)	MACK Rd	916-689-6555
MOTEL 6	MACK Rd	916-689-9141
GOLD RUSH Inn	MACK Rd	916-423-2003
JOHN JAY Inn	MASSIE Ct	916-689-4425



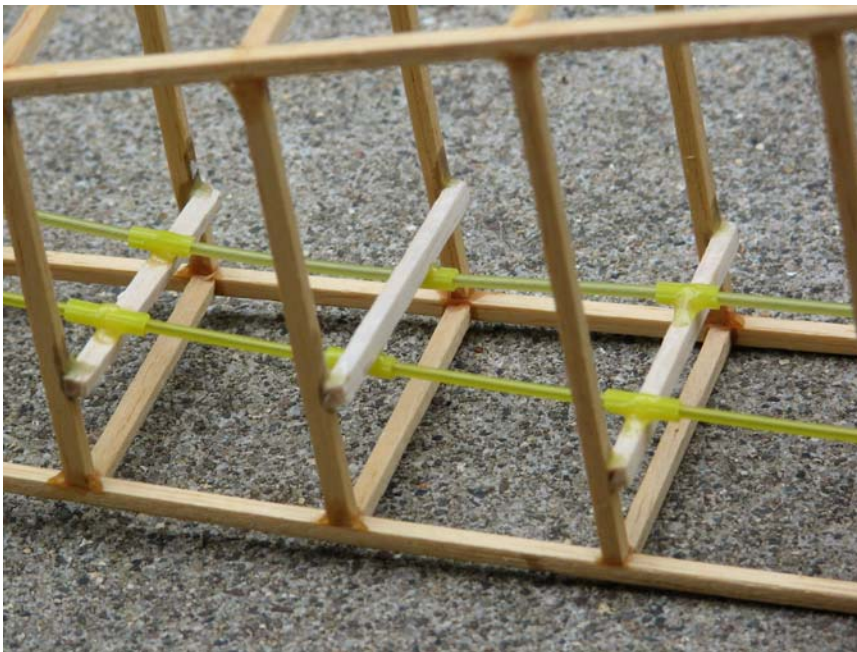


**PLAYBOY JR:** Steve Remington is building a standard size Playboy Junior for 1/2A Texaco at the same time I'm building a new fuselage for mine. Mine is over 15 years old, with probably around a thousand flights on it, so it's a little battle scarred and oil soaked. About the only advice I was able to offer Steve is to build the tail section as light as possible, because that little Cox 049 isn't as heavy as the original O&R 23. I'm not sure what he's going to do for controls, but he's going to use a 2.4 radio which will at least eliminate the weight of an antenna wire streaming aft.

**PULL-PULL CONTROLS** allow the lightest tail section, but I've never warmed up to them. While holding others' planes for launch, I've noticed it's easy to clamp a hand around the exposed lines at the back and put strain on them. Pull pulls also are harder to get set up properly. You usually need to cut off 2 of the four arms on the servo fitting for clearance, which means that you've lost that fine adjustment of the missing arms. So you'll sometimes end up having to cut two sets of arms if you want things exactly right. You could use ball and socket servo connectors on a rotary wheel fitting for fine adjustment. But that raises the attachment point higher putting more strain on the servo bearings. Store bought pull-pull sets usually come with plain clevises.

It's more critical with pull-pulls to align the control horn holes exactly in line with the hinge pivot point. Otherwise, you'll get one line going slack and the other tightening up each time the servo rotates. This could put extra strain on servo bearings, which are already under extra strain unless you've left a little slop in the system. With pushrods, if you get the horn holes a little off that right angle from the pivot point, you can compensate by using a matching offset at the servo fitting. And it may be a bad habit, but a computer radio allows an even sloppier pushrod installation by allowing an electronic correction with travel adjustments.

I've never heard of it happening, but it seems possible that those tough pull lines could eventually saw through their hollow plastic routing tubes at one end, especially if there's not a straight shot out the end. This could cause controls to bind. This comes to mind because I once had something similar cause a crash on a control line ship. I'd used soft aluminum tubes for the lead-out exits in the wing. The lead-out lines themselves were braided steel. After a few years of flying one of the wires had sawed a slot in the aluminum and bound up the control. With hindsight, it would be much better to find that on close inspection beforehand, rather than after the crash.



I don't know what Steve plans to use, but here's the second lightest control setup going into my Playboy Jr. It's the lightweight **Sullivan #507 pushrod** material.

But it has problems too in that it's so flexible that it needs to be supported along its entire length. Those short plastic sleeves are the inner rods from heavier pushrod material. Some (not all) are of those are just large enough to allow the Sullivan assembly to slip freely inside.

With steel wire inside, you should anchor the plastic outside material from freely moving fore and aft in only one place. I anchor

it at the rear exits only. That prevents temperature changes from moving your control centering.



**HI-START?** I don't need no stinkin hi-start!

At our spring annual Bill Watson flew his Jasco Trooper for a win with three perfect 10 minute flights.

He did use the hi-start but that may have been just to keep the rest of us from feeling bad.

Bills friend Rip took a series of shots of Bill hand launching, then flying for who knows how long and concluding with hand catches.

**HERE'S AN OPPORTUNITY:** Bigger flies better, right? The Editor has in his possession this nice larger version of the Trooper and it's for sale. The chapter took on the task of selling Hardy Robinson's estate for his widow. The well built SAM legal Trooper shown below has a span of 104". It needs a little work in and around the radio compartment up front, mostly to restore the radio installation. The receiver is an older Cannon on channel 56. There's no battery, but there are three standard size servos (as in Futaba 5101). There's also on hand a couple of AM transmitters on channel 56, one of which might work with the Cannon RX.

Why three servos? Along with a pair of regular winch/hi-start tow hooks, there's a hook on the nose for aerial tow by a power ship. That third servo is up front for towline release. Right now if you're close enough Santa Maria to pick it up, it's for sale at \$100. That price would probably cover the covering material, but certainly not the wood. If you wait until the radio is refitted or changed out the price will go up, or it may be sold.



This Jasco Trooper is Big!

But the wing is two piece and the flying stab halves are removable for transportation.

Apparently it was flown both from a winch or hi-start, and/ or by aero tow.

It's almost ready to fly pending restoration of the radio compartment.

**TACTIC “ANY LINK”:** By now most of us have seen the ads and a review or two. The pitch is that you can get into 2.4 GHz quickly and cheaply by attaching this gadget to almost any old transmitter and plugging it into the trainer socket. The first limitation is that the advertised system is short range (1,000’), so it would only be good for small old timers, indoor, or park fliers. But curiosity got the better of me and I wasted most of an hour at their web site at Tx-Ready.com. I found one 6 channel receiver that was advertised as full range for giant scale ships, etc. This was priced at just 30 bucks versus Futabas #617 RX’s at nearly three times that. Aha perhaps there’s something here!

At first the site looked well organized until you tried to find information you might actually use. That would include things like what one might order to go with what else, what it would do and what the combination would finally cost, etc;. When I opened the specifications for that 6 channel receiver, there was no range listed to verify that it was anything other than a short range RX. The stuff is sold by Tower Hobbies, but their web info is just as confusing.

The new sales pitch seems intended to get you to buy little ready to fly ships rather than just the receivers and the TX gadget. I’m not sure I ever saw the RX that goes with the “toy” ships and plays with the gadget. I tried looking at “sets” thinking that they might pair up the TX strap-on with the short range RX, which I might use on a short range ship. What I found was a cheap transmitter and a cheap receiver. I thought the idea was not to have to collect another TX! Both units use just 4 dry cells, with ability to “adapt” Ni-Cd on Ni-MX. I suspect their new transmitter gadget may be the item limiting range. If anyone reading this can do a better job of navigating the Tactic web maze and come up with anything useful, please share with us.

**MICAFILM – A QUICK RE-VISIT:** This may have been passed along earlier, but several guys like MicaFilm and are disappointed at the lack of easy availability. Ralph Cook says he thinks FibraFilm from Balsa USA is the same material.

**TRACK LOST MODELS!** New radio technology is being introduced that will include down links from ships to transmitters. Most of it will probably be rejected for SAM RC use as it reduces the skill factor to much and would increase the “arms race” making other equipment obsolete for competition. But Dick Fischer describes a possible good use for one of the features, even if it’s banned from competition since it could be a thermal finding device. Anyway it’s interesting. Here’s Dick:

“I attended the hobby show and saw something that could be a game changer for locating your lost model. This is pretty high end right now, but is already cheaper than a Walston system and in some ways is superior. The newer Hitec radios have downlink built into them. The receiver and transmitter have a continuous two-way dialog. Down coming information is then displayed on the transmitter display screen or read out on a voice device. You have to buy sensor modules to read such things as fuel quantity, battery voltage, RPM, engine temperature, etc

. One of the available modules is a GPS. Hitec is touting the GPS as a means of reading out speed and altitude. But in its simplest form you can read latitude and longitude. That means that if your plane goes down somewhere you can read the lat/long on your transmitter display. You can also read out the height of the model. So when the height stops changing and the coordinates stop, you know you're on the ground. And if somebody picks your plane up and moves it, you can read that also, knowing which way he's going and how fast. The range wouldn't be any more than normal radio range, but as long as you get close and the airborne battery is up, it will tell you where it is. If you see that your plane is heading west on Hwy. 246 at zero altitude, you might even be able to follow it to Lompoc and call the cops when you find the right house.

I can see a new label on my plane in addition to name and "reward". How about, "WARNING - THIS MODEL AIRPLANE IS EQUIPPED WITH A TRACKING DEVICE. IF YOU TAKE THE MODEL HOME, A POLICE OFFICER WILL KNOCK ON YOUR FRONT DOOR WITH A SEARCH WARRANT.” (Continued next pg.)



“I talked to the Hitec reps and they said guys in the Midwest are already using this capability to find their planes in cornfields. They said the readout will get you within about 30 feet of the model. I don't think Hitec planned for this use, but it is an unexpected side benefit.

If you already have a newer Hitec radio, the additional cost of the GPS is around \$180. That's about a third of the cost of a Walston system. I don't know how much the radio costs, but for now it appeared that the telemetry capability was in the mid level and high end radios. But the way things keep changing; this may become common in many radios.” DF



Here's the **Drone** diesel, one of the relatively few early US made diesels. Most Drones were sold in this configuration with a fixed compression head. But an accessory variable compression heads, as well as a glow heads were also available.

Most of us felt that the fixed compression head was a real drawback to optimum performance. Adjusting compression on a diesel is comparable to adjusting the timer on a sparker. It's best done with the engine running – at least for the first time. But it also needs fine tweaking for temperature and humidity changes.

The instructions called for varying the fuel ether content for daily conditions to achieve best performance. Not an ideal way to go.

The Drone was a .29 displacement engine. Other variations, besides the heads were plain bearing and ball bearings on the crankshaft. Obviously the Drone wouldn't be a screamer with a glow head due to its' restricted breathing and apparent long stroke.

There were actually a number of US diesels, but we say *relatively* few because Europe produced so many more. That had a lot to do with availability of fuel ingredients overseas. Many US manufacturers offered diesel heads for their engines, but those not designed for diesel operation often suffered mechanical failures because the bottom end just wasn't beefy enough. Ardens were among those noted for such failures. The Air-o- Diesel, and some small McCoys were among the more popular engines that were pretty much re-designed for such operation. Today we have a much harder time getting

**SPEAKING OF LONG STROKES**, I've seen engines described as long stroke when they were simply taller looking engines. Usually, a rough dividing line is that an “over square” engine is considered short stroke. *Over square* refers to an engine with a bore diameter greater than the stroke, usually giving the outer appearance a squat husky look. But an engine can simply look taller if the piston and/or con rod is designed a little longer, also if the cooling fins are relatively smaller diameter and/ or the cylinder is thin steel and not enclosed in an aluminum “muff”. A long rod doesn't in itself make a long stroke; the crankshaft throw determines stroke. But most of you knew that didn't you?





What we have here is a **Zomby**. (The Zomby is on the ground. That's Kevin Sherman standing.) It's a 1940 OT design by Leon Schulman.

Many of us who only fly RC may never have seen this aircraft, because it tends to be more popular with free fliers.

But overall it looks like a fairly clean design that could be competitive.

Kevin is a Southern California guy, and the photo may have been taken at the Perris flying site.

Maybe it's just seen as a little harder to build since it has a few curves here and there. John Riese took the picture.

*Miss Science*

A GAS-POWERED MODEL AIRPLANE  
DESIGNED FOR CONTEST FLYING,  
BUT UNUSUALLY EASY TO BUILD

By FRANK ZAIC  
Editor of "Model Aeronautics Year Book"

Specifications  
WING AREA 4.3 SQ. FT.  
WING SPREAD 6 FT.  
PROPELLER 14" DIA.  
WEIGHT 2 3/4 LB.  
POWER 1/8 HP GAS ENG.  
MODEL COVERED WITH BANDO PAPER

1/2" x 1/4" TAPERED INCIDENCE BLOCKS

RYBBS SPACED 2 1/2"

RUBBER LOOPS

TIMER

BLUE OUTLINE

PLYWOOD OR METAL PLATES

Top view of assembled model and sketch of fuselage at the point where the wing is placed to show the incidence blocks

CLARK-Y

CELLULOID

SOFT SALSA COWLING CUT TO SHAPE

BATTERY BOX

CONDENSER

SPARK COIL

NOTE: C.G. SHOULD BE AS SHOWN

3/4" DIA. AIR WHEELS

142

POPULAR SCIENCE

Here's a ship I don't recall ever seeing. It also looks like a competitive design with a fairly clean overall appearance.

And the high aspect ratio should make it a good soarer.

But it has a Clark Y airfoil, which I've always wondered about, since most OT ships use under cambered foils. I think I've questioned several aerodynamicist types about that, but I can't remember ever getting a simple "one is better" answer. I'm still waiting for that definitive answer if anyone wants to chime in.

This Zaic design has a 70" wingspan and is listed as a Fuselage design from 1939, putting it into the Old Timer category.

SAM 26 is getting our first overseas international member. We'd like to welcome Peter Scott from the United Kingdom, who writes:

"Thanks too for some superb shots and just the kind of models I love. I also fly F/F diesel-powered models just for fun, and many of our flying sites (even the famous Old Warden airfield) are actually quite small. The best is the quaintly-named Middle Wallop airfield, which is an army flight-training site and Europe's best grass model-flying site, but that City Slicker of mine needs most of the airfield!"

Best regards,  
Peter

Robert L. Angel  
1001 Patterson Rd.  
Santa Maria, Ca 93455

