THE NEWSLETTER OF SAM 26, THE CENTRAL COAST CHAPTER OF THE SOCIETY OF ANTIQUE MODELERS. **EARLY OCTOBER 2010 #250**

THE COASTAL FLYER

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NEXT CHAPTER MEETING will be at Hardy Robinson's on October 20.
THIS MONTH the newsletter comes early for a couple of reasons. Last month's letter had a problem when it was converted from word to PDF format. That's computer geek stuff for you guys who aren't burdened with such trivia. I didn't notice it until the letter was distributed. Part of the header above dropped out, but that wasn't the problem. The header for the John Pond flyer went blank, which also dropped out the changed dates for the John Pond Commemorative. So here's the **RESCHEDULED JOHN POND COMMEMORATIVE DATES: October 30 & 31**, just a week later than initially scheduled. I just received my Model Aviation (on 9-22-10) and they failed to get the date change into the contest announcements, so please pass the word.

The other reason for the early newsletter is that I'll be busy prepping for and conducting the Pond event at the end of October, followed immediately by the November newsletter to get results out, along with a November 10 deadline for the February 2011 Model Aviation column.
CLARIFICATION: I sometimes get too brief in explaining things so I'll re-re-re-visit and expand on that rules quirk about the Antique events. Under last year's rules Ed Hamler could (and often did) enter his ignition engine powered Airborn in (so-called) Antique Glow. But the ship wasn't eligible for Pure Antique because it was scaled down. This year's rules eliminated ignition engines from the Antique glow event so the ship is now ineligible for either event. The change also eliminated glow to ignition converted engines completely from either of the Antique events.
THE SAM CHAMPS has just ended at Muncie, so we'll post a few pictures and some minimum news about how our chapter members fared. The SAM web site has the full RC results, courtesy of Contest Manager Dave Harding. Each year there are demands for faster news release of results in SAM Speaks, etc. But in a way that kind of spoils the fun. There'd be more anticipation, speculation, etc if the news had to come cross country by Pony Express, and no one would be the poorer.
AN IDEA was put forth that the Contest Directors each year should come from the opposite end of the country from the Champ's location. The assumption was that the CD would be flying to the event in a commercial jet and wouldn't be able to easily transport and fly models, and could therefore devote full attention to CD duties. This year, RC CD Don Bekins apparently had plenty of good help, because he managed to direct the RC events, plus fly in at least five of them. That good help also filled in nicely when Don unfortunately had a hand in prop accident. So it would appear that SAM could save future transportation funds each year <u>if</u> enough volunteer help could be recruited early and locally. The CD's transportation (and hotel) costs are traditionally covered by SAM. Local driving costs are normally much less than air fare. Bringing the CD cross country would still work fine as long as the volunteer agreed to pay his own transportation costs.

TAFT ACCOMODATIONS are expected to be a little tight for the Oct. 30/31 John Pond event, even though the Oildorado celebration is over. Early reservations are recommended. The favorite Caprice Motel says they're fully booked for a big wedding party, although they'll put your name on a cancellation list. Meanwhile three of our guys coming from the central coast have booked at the Motel 8 in beautiful downtown Maricopa, which is an easy 6 mile drive to the field. In the past, some have even stayed in Bakersfield, which isn't too far and is an easy open desert drive.

Caprice Motel AAA rates. 222 Kern St., Taft 1-661-765-2161
Topper Motel 101 E. Kern St., Taft 1-661-765-4174
Holland Inn 6th and Warren, Taft 1-661-765-5267

Motel 8, Maricopa (you can't miss it) 1-661-769-8291
Tell 'em you're with the flying group for $45 single, $55 double.

And in Buttonwillow, 26 miles North of Taft. I believe all are on the main drag.

Super 8 Motel	1-661-764-5117
First Value Motel	1-661-764-5207
Motel 6	1-661-764-5153
Good Night Inn	1-661-764-5121

Paiks Ranch house restaurant (banquet site) is next to the Caprice Motel at 200 Kern St., Taft.

ALL IT TAKES IS IMAGINATION. Our Alaskan representative, Van Wilson sends this ultimate model transporter built by Fred Keller, with his wife Judy as passenger. Van sent it with a straight face, so I believe it's real and not a photo shop job. Radio Flyer is an appropriate name since Fred is himself an RC pilot.

YOU DON'T NEED A PARACHUTE to go sky diving! However, a parachute is strongly recommended if you intend to do it more than once.

These ‘Champ’s photos came from Tom Ryan’s “thebuildingboard.com” website. Unfortunately, flier and ship names weren’t there, but I’ll try to fake it wherever I can. Above left, that could be Eut Tileston watching an engine start. At Right we have SAM 26 member Jim Hainen whose specialty is Kloud Kings and Brown Jr’s. Results show Jim Winning one Brown event and a second place in the other.


Two of the five days were windy as can be seen by the flag at the free flight site. The poor free FF guys get hit hardest with wind. And it looks like George Shacklett’s Electric Valkyrie.


For those who’ve never been to Muncie, here are early morning aerial views of the RC site at left and the FF site at the right. That’s the RC site again at the top of the FF site photo. As I recall, you are looking sort of North in both cases. These were taken from Eut Tileston’s little electric powered RC photo plane.

RC RESULTS BRIEF: Contest Manager Dave Harding has posted complete RC results to the internet, but FF results will come later. We won't spoil the fun by trying to post them here as they're too voluminous and will appear in SAM Speaks.

I counted 10 fliers from SAM 26 in the results, and they posted 23 top five (trophy) finishes. Tom Boice alone had 9 top five and probably ran up a pretty good score toward an overall championship. Tom had an easy time in winning the B ignition event as the sole entrant. That was probably one of the high wind days. Most of our guys fly RC so I don't expect to se a lot of participation when the FF results emerge.

Once again 1/2A Texaco had the best participation with 25 fliers in the event. It's strange that despite the event's obvious success that someone always wants to tinker with the rules. Accurately recording everything at a large event is a problem, and you can usually peruse results and find some apparent discrepancies. For example, Ohlsson sideport was won in a 7 way fly-off among those with perfect scores. But the winner's result details don't add up to a perfect score. Usually it's just that a time card got turned in late, or something similar. I think there've been similar small kinks in published results of every 'Champs, so it doesn't pay to worry the details too much on Monday morning.

FROM SAM TALK comes this nugget submitted, I believe, from down under, by Ian McQueen

Here's a note for anyone who has **to replace ball bearings** in an engine. It is often / usually necessary to heat the housing (crankcase or whatever) to remove or install a bearing. In an article that was posted recently, the writer said to heat the casting with a torch, and to a very high temperature. To the contrary, I have found that an ordinary electric heat gun heated up the housing of my engine (O.S. 45FSR) adequately that I could install the bearings. As for fitting the main bearing onto the crankshaft, I put the crankshaft into the freezer for a few hours and it then slid into the bearing without difficulty. I then froze crankshaft and bearing together, then heated the housing and the bearing slipped nicely into place.

Ian

GASKET MAKING 101: From Model Airplane News, Feb. 2001. Making high-temperature gaskets using RTV.

Here is what you need:

Wax paper, Coffee filter paper, Permatex Hi-Temp Silicon, plastic squeegee, roller (wooden dowel), and piece of plate glass.

Here is what you do.

Place wax paper on the glass. Squeegee thin film of RTV on both sides of coffee filter and place on wax paper. Cover with another piece of wax paper and use the roller to roll it smooth (this forces the RTV into the filter). After it cures remove the wax paper and cut to shape. For thicker gasket use two layers of coffee filter. Safe to use on gas or glow engines for crankcase backplates, mufflers and carburetors. These gaskets are supposed to last a long time and be very strong.

THE 1/2A POSTAL contest window is now open until October 17. Do we even have enough ships to field a team this year? If so, we'll organize hastily by telephone.


Here's Ned Nevels, the SAMTalk webmaster. I'm not sure of the ship, but it's probably the Airfoiler he flew in 1/2A Texaco. At right, Tandy Walker's carefully constructed Sailplane is being prepared for its qualifying flight to solidy its concours event win.


It happens sometimes! This couple seems well able to suck it up and carry on. At right Larry Latowski demonstrates how to become famous (or infamous) with your name on the plane.


Here's the RC processing Kiosk. New SAM President Ed Hamler, second from left helps out CD Don Bekins, 4th from left, who keeps a watchful eye. I can't ID the owner of the nice looking Miss America at right.

MY #2 ANDERSON SPITFIRE engine wasn't performing to expectations compared to #1. Since neither had serial numbers, and looked like twins, I'd long ago stamped them #1 and #2 on the sides of the right lugs. But #2 was turning 2,000 RPM less than my good running #1 using the same prop and fuel. I'd never had the time, inclination, or reason to take #2 apart, but it soon became apparent that if it was to become a runner, something inside needed correction.

What I found was weird! Dick Fisher had opined that maybe the piston was in backwards, just as Steve Remington had found on his O&R 23 after it was overhauled by a professional. Well Dick was close. The cylinder liner was in backwards, which is worse yet! I'm surprised it ran as well as it did.

A backwards piston with the baffle toward the exhaust side will usually allow starting and running with some reduced performance. But a backwards liner produces a couple of problems. The Anderson was now restricted to just 4 exhaust windows instead of 6 to release the spent gases. And the bypass side now had 6 windows, but two were masked off and useless. The missing two exhaust windows couldn't easily be seen by peeking into the opening, as they're located pretty much around the corner and out of sight. Come to think of it, they also couldn't be seen because they were missing.

But the bigger problem with a reversed liner is that the port timing is messed up and the so-called *blow down* timing is backwards. Normally the exhaust port sits slightly higher than the bypass port in a two stroke. That allows the high pressure exhaust gasses to start escaping before the bypass opens to let the fresh charge in. With the ports reversed, the exhaust gases first start to blow down into the bypass and fight with the incoming fuel charge before the exhaust port opens later.

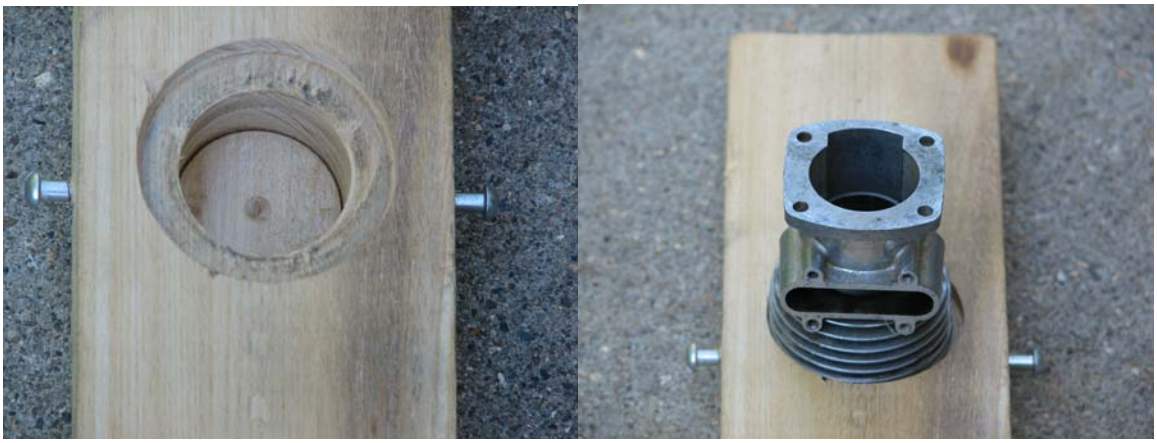
It seemed an unlikely problem, but if I'd have had any clue about it, I could have looked into the exhaust and noticed the top of the liner's exhaust port sat too low in the case. Also if the engine is assembled normally, you can move the piston all the way down and look across the baffle and see the top edge of the bypass port. Not so with the liner reversed.

So how did the liner get reversed? I'm not guilty as I'd never had it apart. The previous owner didn't do it either. He probably just sold it to me at a collecto because it didn't run well. It was a factory flaw! How so? The liner is keyed into the cylinder and only goes in one way. The cylinder is cast with a small flat on the exhaust side that projects into the circle where the flange of the liner seats. That flange on the upper edge of the liner has a matching flat ground on one side, so the liner will only seat in the case one way. But in this case, the flat on the flange was ground on the wrong side. An assembler would probably have never noticed the reversed ports and just put it together the only way it would fit. Below is the cylinder with the liner removed.

THE FIX was to pull the liner, grind another flat on the opposite side and re-assemble. But removing the liner on a tightly fit and well used Anderson is not a simple chore. The only advice I've ever read about this operation tells you to remove the head and stick a glow plug gasket between the piston top and the top edge of the sleeve on the exhaust side and crank the piston up to break the sleeve loose. This can not only damage something, but it usually doesn't work on a tightly fit, gunked up, and well used engine.

On McCoy engines, I've used long bolts, a closely fitted washer on the bottom of the sleeve, and a pipe or tube slightly larger than the sleeve sitting atop the case. Another big washer goes on top of the tube plus an added nut and you can tighten the nut and draw the liner right up and out.

But the Anderson's sleeve has a severe inside taper on the bottom edge. It's intended to allow easy installation of a ringed piston. The skirt edge is so sharp that even a closely fitted washer might damage it. So I resorted to making an inertia puller, similar to what I've used to remove stuck rear bearings from engine front plates. This is just a hardwood board with holes to allow the liner to drop out of the case from its own inertia when the assembly is slapped down on flat concrete. You can secure the work piece to the board with duct tape, or in this case I put a couple of screws in place and used tight rubber bands. I warmed the case with a heat gun and simply slammed the hardwood down against a sidewalk using a pivoting motion from the rear of the board. The liner came out progressively with about three sharp slaps.



Here's the inertia puller: The hardwood board is about 2 feet long. Forstner bits were used to drill the two concentric flat bottomed holes. At the right we have the cylinder in place before it's strapped down with rubber bands.

Lapped piston Andersons don't have or need that sharp edge on the bottom of the sleeve. Those sleeves would be easy to remove using a bushing driver set. A bushing driver can't work with engines such as McCoys of course, where the cylinder isn't open at the bottom.

I've seen one Anderson sleeve with flats ground on both sides of the flange, so you could assemble the sleeve backwards any time you'd like. Maybe the matching cylinder castings also have two flats, although I can see no reason, as the liner isn't going to rotate once it's installed. Another possibility is that the factory ran off a batch of liners with the flat on the wrong side, and salvaged them just as I did by grinding a second flat on the correct side.

RE-ASSEMBLY was routine, except the piston and rings were now reversed in the liner and they needed some break-in before any compression could be felt. The first run restored reasonable compression, but there's still some work to be done to get performance up to par. That leads to another subject:

ANDERSON SPARK TIMING could use some improvement. The timer is well built with very firm detents for advancing the spark. But when I measured things with a degree wheel, I found that each of the 6 detents were 15º apart. That's way too coarse to get a fine adjustment on spark advance. I suspect my #1 engine runs strong because the detent I've been running it in just happens to fall in about the right advance range. The #2 engine just may be out of sync on all of the notches and in the worst case couldn't be set closer than + or – 7.5ºfrom optimum.

THE SPARK ADVANCE FIX: I checked my #1 Anderson with a degree wheel and found that it had been running strong at 39º advance on the full advance notch. I'd started the #2 engine on that same top step and found that it ran hot and erratic, so I backed it off. A later measurement with the degree wheel showed that top step to be 50º advanced, which is way too much. But the next notch back was only 35º which is probably too conservative.

To tune the #2 Anderson's advance for best running I'll probably just remove the plunger and spring that engages the detent notches, and not use them. These engines are safe for starter use anyway, so I Can just find the best setting and lock the timer in place with the pinch screw, just as we do with the McCoy 60's. In fact this might be a good idea for any Anderson to maximize performance. This whole adventure with the #2 Anderson was very interesting, but (whimper), why do those odd things have to happen to me? Bob Angel.

CHAMPION GLOW PLUGS were mentioned in SAM Talk recently as being pricey and possibly unreliable due to their age. Pricey, yes, but then modern plugs are also pricey, at about 9 bucks a pop for OS plugs. But those old Champions can't be beat for some applications. Most modern glow plug makers skimp on the exotic metal plating (platinum, iridium, rhodium, or whatever) of the element wire to maximize profits. The plugs then end up on the cold side due to a shortage of that vital catalyst metal that helps ignite the methanol. This seems strange because they can plate that element wire so thin that there's probably less than a quarters' worth of exotic metal in that 9 dollar plug.

You can verify that a plug is cold by running it at a moderate speed while applying and removing battery heat. Most of the time you'll hear the engine speed up with heat applied, meaning the plug is cold. At top speed, you may not need as hot a plug, but a modern throttled engine needs the heat at low speeds to prevent flameout.

Most four stroke engines tend to run cold, which is why they sell special hot plugs at a slight premium price. But even those plugs often aren't warm enough. This is where old Champions come in. I've found in every case that Champion glow plugs will run a four stroke as well as, and usually better than the modern four stroke plugs. During glow plug development, Champion and others were experimenting with both plugs and fuels, and were probably applying more plating to the plug element wire. I don't recall ever burning one out.

DEAN PAPPAS has an excellent article in the October Model Aviation, covering glow engine adjustment. There's some coverage of glow plugs. I have a different opinion about one small item covered. I've read this article and others which state that glow plugs get coated with a gray something or other and become useless. Yet I've only had one plug get hopelessly coated under one specific condition, so that it failed to work properly. Most of the time when a little gray or dark coating gets on a plug element, let's say from a slow rich run, it's easily salvaged. Just follow up with a hot fast run for a few seconds and the coating usually burns off just as a self cleaning oven cleans itself.

The one time I had a plug get hopelessly fouled was during an oddball experiment. I've since forgotten what I was trying to prove. A drop of Armor-All protectant in a gallon of glow fuel is often used to stop fuel foaming. It works. For some reason I loaded up a thankful of fuel with a large amount of Armor-All additive in a Cox 1/2A Texaco engine and fired it up. I watched the tachometer progressively pick up about two thousand RPM in a minute or less. But that was followed immediately by a progressive RPM drop and finally flameout. After that I could only make the engine run on un-doctored fuel using battery heat on the plug.

Large amounts of Armor-All, used over time, will produce a glass like coating on a glow plug and in the combustion chamber. Cox plugs are in the hot range. I suspect the engine speeded up initially because the plug was cooling into a more favorable heat range for that engine under that load. Then it kept cooling to the point where the fire wouldn't stay lit as the catalyst on the element got covered over.

That big box above is necessary for SAM 27's Rich Minnik to transport his giant Rocketeer, shown at the right as it's being readied for its initial flight. The flight was successful.

Let's hope that 9-1/2' Custom Cavalier wing Jim Bierbauer is holding doesn't need a similar custom box for transport. Jim and Dick Fischer are cooperating on the project, and give us regular progress reports.

THE JIMMY ALLEN POSTAL was flown by the locals of SAM 26 at Taft on Saturday September 18. There were potentially 5 fliers and ships, but due to other commitments it narrowed down to just three. That was Hardy Robinson, Jim Elliott and Jim Bierbauer. We'll save the numbers report until the results from all chapters are in, but Bierbauer reports that despite one less flier and not much thermal activity they still posted an aggregate score about 75 seconds better than last year.

Jay Higgs and Steve Hulse also happened to show up from Bakersfield to fly regular OT RC ships. And while there they also gave the Jimmy Allen guys a helping hand, and may just have gotten hooked for next year's event. That day was the start of the heat wave that constitutes our official week of "summer". But Jim said the temperature wasn't too bad, even when they left about 1:30.

TAFT IS UNDER SEIGE AGAIN! The guys reported new for sale signs all along the roadway from town to the field and including the field area. I phoned Wes Funk who lives in Taft, and he said he couldn't shed any light on it. He also said there had been some confusion over ownership for some time. Chevron has been there for maybe 100 years and they supposedly sold it a few years back. Wes had checked county records some time ago, which showed the Taft Cemetery District as owner. The last time he called anyone, he said they suggested that users should probably be paying rent on the field, so he decided to stop calling.

THE LAST WORD: 'Ol Charlie Reich reports that Jack Van Dusen has retired from the Brown Jr. parts business. That leaves us with just Woody Bartelt as the only know supplier for Brown Jr. and Brownie parts. But Woody does have a fairly complete stock of those parts.

SAM Speaks Editor Roland Friestad says he'll have the complete run of Model Builder Magazine copied onto 2 or 3 DVD's and available by the end of October.

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