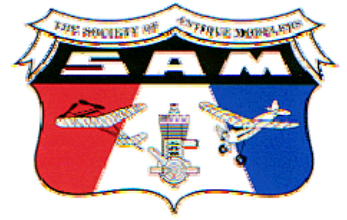




THE NEWSLETTER OF SAM 26, THE CENTRAL
COAST CHAPTER OF THE SOCIETY OF
ANTIQUe MODELERS. **OCTBER 2008 #229**



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NEXT CHAPTER MEETING will be at Hardy Robinson's on Wednesday October 15.
Nothing's changed there.

A **GREAT RAFFLE** will occur at the **John Pond Commemorative October 25/26**. Once again **Ken Kullman** got the ball rolling with both inspiration and some generous donations. And **Dan Carpenter** donated several engines from the **Don Barrick** collection, some of which we've sold locally, but now have five nice SAM eligible four strokes remaining.

The primary prizes are all good SAM competition engines as follows:

- 1) An Original Orwick 64 in beautiful condition with its green paint not even chipped.
- 2) A sound Brown Junior with excellent compression and cosmetically average.
- 3) A Saito 80, the largest SAM eligible closed rocker FS, and a real powerhouse.
- 4) An OS 48 surpass.
- 5) A Saito FA 45
- 6) An OS FS 26
- 7) An OSFS 40 with custom Barrick ignition points and Champion plug for Texaco.

Some of these FS engines have Don's machinist touches, such as an added feedback system from the crankcase vent to the intake to keep the excess oil off your airplane. There's also a Mystery Man kit, some props and anything else that might be donated by the time we raffle the goodies at the Saturday night banquet.

AND YOU NEEDEN'T BE THERE! With these nice prizes we're going to let the few of you who can't make it to Taft ship us a carton of money by mail at the rate of a buck a ticket, or 6 for five bucks. We'll enter your tickets and you can either: a) designate someone to pick your prize, or b) send us a list of your priority picks, or c) we'll have an unbiased agent select the most valuable prize remaining on deck in his judgment. With this many good prizes your odds are good for scoring a nice gambling investment. As each ticket is drawn the winner gets to pick from the goodies. Mail any raffle checks to SAM 26 in care of Treasurer Jim Bierbauer (see masthead above), or send cash or check with a friend.

WE USUALLY try to have our contests break even money wise, but with the moderate attendance contests are seeing nowadays, we're hoping the raffle will heap defray the cost of trophies and other costs associated with running the event. The flyer appeared in the last issue.

**Final Results of the 33rd Annual SAM 27 Crash & Bash
Schmidt Ranch, Elk Grove, California
September 26, 27, 28, 2008**

1/2 A TEXACO

	Contestant	SAM	Model	Area	1	2	3	Score	Prize
1	Eut Tileston	51	J-2 Cub		12:59	12:56	11:27	25:55	\$55
2	Tom Empey		MG 2		4:50	15:00	dnf	19:50	\$40
3	Jake Chichilitti		Baby Playboy		8:03	8:43	8:42	17:25	\$25
4	Steve Roselle	21	Dallaire Sportster	288	7:38	8:20	dnf	15:58	\$10
5	Mike Clancy	27	Lanzo Airborn	292	7:11	7:12	8:07	15:19	\$5
6	Gary Leopold	21	Rambler		4:32	6:51	8:27	15:18	
7	Mike Young		Kerswap		4:13	1:31	7:52	12:05	
9	Rick Holman		Lanzo Airborn	292	5:11	5:00	6:26	11:37	
8	Bob Covolo		Lanzo Bomber		5:54	5:38	5:39	11:33	
10	Stan Lane	30	Anderson Pylon		1:06	4:42	6:41	11:23	
11	Tom Moore	27	Miss America	310	7:07	3:46	OOS	10:53	
12	Bob Angel	26	Playboy Jr.	358	4:20	5:20	dnf	9:40	
13	Warren Pickering		Lanzo Racer		0:56	1:32	dnf	2:28	
14	Ray McGowan	27	Wasp	288	0:11	0:34	dnf	0:45	

1/2 A Scale Duration

	Contestant	SAM	Model	Area	1	2	3	Score	Prize
1	Cecil Cutbirth	30	Curtiss Robin	288	11:46	11:43	dnf	23:29	\$30
2	Eut Tileston	51	J-2 Cub		11:18	11:40	dnf	22:58	\$15
3	Bob McGowan		Messerschmitt 17	288	4:50	7:53	3:50	12:43	\$10
4	Fred Landman		Klemm L33	287	0:06	0:28	0:14	0:42	\$5

TEXACO

	Contestant	SAM	Model	Engine	1	2	3	Score	Prize
1	Stan Lane	30	Anderson Pylon	OS 60 FS	53:08			53:08	\$30
2	Dave Lewis	21	Lanzo Bomber	Irvine 40	23:11			23:11	\$15
3	Wayne Conner	0	Lanzo Bomber	Ohlsson 60 SP	15:50	17:03		17:03	\$10
4	Mike Young		Flying Quaker	Irvine 40	9:42	10:04		10:04	\$5

Ohlsson 23

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Wayne Conner	0	Zipper	O&R 23 frv	7:00	5:13	5:25	6:01	13:01	\$5
2	Fred Landman		Soaring Eagle	O&R 23 sp	3:15	LOF			3:15	\$5

Brown Junior

	Contestant	SAM	Model	Engine	1	2	3	Score	Prize
1	Ed Solenberger	27	Trenton Terror	Brown Jr.	8:25			8:25	\$40
2	Gary Leopold	21	Polly	Brown D	8:17	0:06	3:50	8:17	\$25
3	Mike Young		Clipper	Brown Jr.	0:48	7:57	7:16	7:57	\$15
4	Bob Angel	26	Kloud King	Brown Jr.	1:43	7:28	2:09	7:28	\$10
5	Don Bekins	27	Long Cabin	Brown D	4:28	5:56		5:56	\$5
6	Tom Empey		Mercury	Brown Jr.	0:57	0:04	2:08	2:08	
7	Stan Lane	30	Trenton Terror	Brown Jr.	0:27	2:07		2:07	

Electric Texaco

	Contestant	SAM	Model	Motor	1	2	Score	Prize
1	Nick Kelez	27	Lanzo Airborn	AXI 2212	30:11		30:11	\$5

Electric LMR

	Contestant	SAM	Model	Motor	1	2	3	Score	Prize
1	Steve Roselle	21	Lanzo Airborn	Neu	10:00	10:00		20:00	\$25
2	Jim Thomas/Ball		Trenton Terror		9:59	10:00		19:59	\$10
3	Jack Albrecht	27	Leisure Bomber	Hacker	7:46	9:25		17:11	\$5

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Class A Glow LER

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Rick Holman		Stardust Special	Nova Rossi 20	7:00	7:00			26:04	\$40
2	Mike Clancy	27	Lanzo Airborn	Veco 19	4:53	7:00	7:00		20:58	\$25
3	Tom Empey		Lanzo Airborn	K&B 3.25	1:00	7:00	7:00		20:35	\$15
4	Dave Lewis	21	Lanzo Bomber	Veco 19	7:00	5:03	7:00		10:27	\$10
5	Ed Hamler	27	Lanzo Airborn	Veco 19	4:52	6:02	5:06		11:08	\$5
6	Dave Saso		Comet Mercury	OS 15	2:33	2:23	2:33		5:06	
7	Wayne Feiling		Kerswap	Veco 19	1:34	2:23			3:57	
8	Don Bekins	27	Lanzo Airborn	Veco 19					dnf	

Class B Glow LER

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Don Bishop	26	Lanzo Bomber	K&B 4.9	8:00	5:46	8:00		16:00	\$45
2	Rick Holman		Stardust Special	Nova Rossi 21	7:56	7:28	8:00	7:38	15:56	\$30
3	Joe Poco		Lanzo Bomber	OS 25	7:59	6:30	4:51	7:21	15:20	\$15
4	Bob Angel	26	Stardust Special	Torp 29	2:23	8:00	6:59	6:42	14:59	\$10
5	Tom Empey		Lanzo Airborn	K&B 3.5	6:14	7:35	5:45	7:09	14:44	\$5
6	Joe Poco		Westerner	OS 25	7:04	5:51			12:55	
7	Dave Lewis	21	Playboy Sr.	K&B 4.9	4:10	4:57	4:06		9:07	
8	Wayne Feiling	30	Kerswap	MVVS 21	1:44	5:11	2:52	2:30	8:03	
9	Andrew Tickle	27	RC-1	Magnum 28					DQ	

Class C Glow LER

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Rick Holman		Lanzo Bomber	Jett 40	9:00	9:00			10:54	\$45
2	Tom Empey		Playboy Sr.	K&B 5.8	9:00	8:10	9:00		7:45	\$30
3	Dave Lewis	21	Anderson Pylon	K&B 4ORR	0:26	7:30	7:47	6:26	15:17	\$15
4	Mike Young		Lanzo Bomber	K&B 5.8	1:38	4:53	7:52		12:45	\$10
5	Bob Covolo		Lanzo Bomber	McCoy 35	4:42	6:18	6:03	3:58	12:21	\$5
6	Don Bishop	26	Lanzo Bomber	K&B 6.5	9:00				9:00	
7	Andrew Tickle	27	Clipper Mk I	OS 35	1:27	1:13			2:40	
8	Bill Copeland	21	Hayseed	OS 40						

Class A Ignition LER

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Jake Chichilitti		Playboy Jr.	Elfin 2.49	3:42	7:00	7:00		14:00	\$30
2	Wayne Conner	00	Lanzo Bomber	Elfin 2.49	5:02	6:58	5:27	6:04	13:02	\$15
3	Dave Lewis	21	Playboy Jr.	Elfin 2.49	3:51	3:30	0:57		7:21	\$10
4	Gary Leopold	21	Playboy Jr.	Elfin 2.49	0:54	0:23			1:17	\$5

Class B Ignition LER

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Rick Holman		Lanzo Bomber	McCoy 29	5:42	8:00	7:41	8:00	16:00	\$35
2	Wayne Conner	00	Lanzo Airborn	Orwick 29	5:35	0	7:18	7:53	15:11	\$20
3	Stan Lane	30	Anderson Pylon	Hunter 21	4:28	2:38	5:37	4:58	10:35	\$15
4	Andrew Tickle	27	Lanzo Bomber	O&R 23	2:55	2:47	3:43		6:38	\$5
5	Fred Landman	27	Alert	Hornet 29	2:22	0:44	0:50	0:10	3:12	\$5

Class C Ignition LER

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Bob Angel	26	Lanzo Bomber	McCoy 60	8:35	9:00	9:00		0:09	\$40
2	Don Bekins	27	Lanzo Airborn	Spitfire	9:00	9:00			dnf	\$25
3	Don Bishop	26	Lanzo Bomber	McCoy 60	6:52	8:02	9:00	8:37	17:37	\$15
4	Rick Holman		Lanzo Bomber	McCoy 60	1:47	0	9:00	8:15	17:15	\$10
5	Stan Lane	30	Anderson Pylon	McCoy 60	5:33	4:00	0:39	9:00	14:33	\$5
6	Dave Lewis	21	Clipper Mk I	O&R 60	6:00	6:25	5:00		12:25	
7	Tom Empey		Sailplane	McCoy 60	3:34	5:10	6:17	5:33	11:50	
8	Ray McGowan	27	Hurricane	Super Cyclone					dnf	

Antique

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Bob Angel	26	Lanzo Bomber	McCoy 60	10:00	10:00			11:59	\$30
2	Rick Holman		Lanzo Bomber	McCoy 60	8:30	10:00	10:00		9:58	\$15
3	Don Bekins	27	Lanzo Airborn	Spitfire	7:10				7:10	\$10
4	Dave Lewis	26	Clipper Mk I	O&R 60					dnf	\$5

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Ohlsson Sideport

	Contestant	SAM	Model	Engine	1	2	3	4	Score	Prize
1	Wayne Conner	00	Ethy	Ohlsson 60	7:00	7:00	7:00		21:00	\$35
2	Dave Lewis	21	Clipper	Ohlsson 60	6:57	5:36	6:40		19:13	\$20
3	Jake Chichilitti		RC-1	Ohlsson 60	4:38	7:00	7:00	5:06	19:06	\$15
4	Stan Lane	30	Clipper	Ohlsson 60	4:55	5:03	5:34		15:32	\$5
5	Rick Holman		RC-1	Ohlsson 60	7:00	2:01	3:47		12:48	\$5

Special Commemorative Event

	Builder	SAM	Pilot	Model	1	2	3	Score	Prize
1	Tom Ball	27	Bob McGowan	Trenton Terror	15:04			15:04	\$25
2	Tom Ball	27	Mike Clancy	Fokker D-8	1:07	5:24	6:39	6:39	\$10
3	Eut Tileston	51	Eut Tileston	Fokker D-8	2:48	5:10		5:10	\$5

Sorta Old Time Glider

	Contestant	SAM	Model	1	2	3	Score	Prize
1	Jim Thomas		Grand Esprit	20:00			20:00	\$25
2	Robin McGowan	27	Windrifter	15:26	2:30	2:05	19:59	\$15
3	Bob Angel	26	Nameless Waif	6:00	3:48	3:54	13:42	\$10
4	Mike Clancy	27	Spirit	2:17	1:05	8:46	12:08	\$5

Speed 400 Special Event

	Contestant	SAM	Model	Area	1	2	3	Score	Prize
1	Steve Roselle	21	Dallaire Sportster	300	15:00	15:00		30:00	\$35
2	Nick Kelez	27	Lanzo Airborn	292	15:00			15:00	\$20
3	Andrew Tickle	27	Quaker	288	5:23	LOF		5:23	\$15
4	Ed Walker		PB-2		0	LOF		0	\$5
5	Ed Walker		Wedgy					dnf	

Class A Texaco

	Contestant	SAM	Model	Power	1	2	3	Score	Prize
1	Cecil Cutbirth	30	RC-1	PAW	13:19	12:37		25:56	\$5
2	Fred Landman		A Box	MVVS 19	1:05	6:24	0:19	7:29	\$5

SAM 27 Concours d'élégance

Brian Ramsey, Judge

	Model	SAM	Builder
1	Fleet Biplane	27	Tom Ball
2	Westerner		Joe Poco
3	Fokker D.VIII		Tom Ball
4	Fokker D.VIII	27	
5	Jersey Javelin	27	Fred Landman

Thanks for your participation with these beauties.
Pardon again our incomplete record of this concours.

****** MARK YOUR CALENDARS ******

The 34th SAM 27 Crash & Bash Schmidt Ranch September 25, 26, 27, 2009

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The 43rd SAM CHAMPS Boulder City NV October 4, 5, 6, 7, 8, 9, 2009

THE CRASH'N BASH enjoyed an excellent turnout with 27 participants putting up flights. Weather was great, even if a bit toasty, with flyable winds all day long for three days. The usual stories of success and disappointment were part of the action, but one particular event seems worth reciting.

Tom Empey leads an adventuresome life, and has a knack for getting involved in some unique circumstances. But in this particular instance he wasn't directly responsible, or at least he wasn't present when the trouble began. The ladies were sitting in a circle in the shade of the Young's' travel trailer enjoying cool refreshments when one of them noticed flames licking up just on the other side of Tom's model trailer. A quick investigation found one of Tom's planes engulfed in flames. Fire Marshall Patty Empey mustered the ladies into action, organizing them to dump their drinks on the blaze. But the picture below seems to indicate that in the excitement some of the drinks might not all have been water or iced tea, but maybe an alcoholic beverage or two. Anyway here is the result below.



THE REMAINS of Tom Empey's Mercury as photographed either by Euts shadow, or maybe by Eut himself. That's a Brown Junior engine, most of which is probably salvageable since Browns tend to run hot anyway. The wing was elsewhere, but what you see is the entire remains of the fuselage, even the ignition system and radio. This wasn't a Li-Po battery fire, and in fact Tom says even the ignition battery had been removed. So the likely ignition source was a shorted radio Ni-Cd battery. But the exact cause remains under investigation by the FAA.

ED HAMLER did his usual good job as Contest Director, but he had to take some time out Sunday for a few stitches to a couple of cut fingers from **another plastic prop injury**. At the end of the meet, when we shook hands goodbye it worked out nicely as we each offered our left hands, withholding our injured rights. My own injury happened a couple months back and is still tender, although I can use the hand almost normally. It seems some European propeller maker had set out to make an even sharper propeller than our own APC meat slicers. It's hard to imagine, but they did succeed and Ed had one of these on his Anderson Spitfire. He was just flipping the prop to hand start, when it backfired slightly and sliced into him. I felt that blade later and even the leading edge was sharper than an APC trailing edge. It's tough to imagine getting hit with that one with the engine running.



MY CRUSADE against **plastic props** failed to get them outlawed (for safety reasons) by vote several years ago. But I've since gotten a few converts through various demonstrations, such as putting my hand in one a couple months ago to show (sez I) the damage they can do. I have a gory picture of the results, but decided not to post it here.

But in a further demonstration I'd like to point out that the plain old stock wooden Top Flite prop pictured above was the one that won both the C ignition event and the And the Antique flyoff at the Crash'n bash. My new McBomber competed against several others of the same aircraft design and engine, except they were mostly (probably all) using plastic props. So it may be a limited trial, but it shows that plastic isn't necessarily a requirement for performance. And there's still another step to be taken. I've since put a smoother than stock finish on that prop for next time.

FLUTTER – By Dave Harding. Dave wrote this thesis for SAM Talk, reciting an adventure he had years ago with a group trying for an RC speed record, and I'm extracting the gist of it and greatly condensing it to fit these pages. He took information from several sources including Jim O'Reilly, the Martin manual, Martin engineers, Maynard Hill, and several others, so bear with us if I don't cite all the sources as we go along. Bob Angel.

Flutter in a simple wing, as opposed to a wing or tail with a control surface is dependent on two basic freedoms; flapping and twisting. One motion can feed the other in an increasing manner and you have flutter. Jim O'Reilly says the solution is to place the CG ahead of the shear center (Elastic Axis). The shear center is the chordwise location where a lift load, or your finger, causes the wing to bend but not twist. Under this condition the bending motion causes the wing pitch to diminish and this is a stable condition.

It's difficult or heavy to add the weight to bring the CG forward on the wing; this is the wing CG we are discussing. And, by the way, it is very difficult to bring the shear center ahead of the center of lift; the condition that eliminates the other root (as the dynamicists call it) "static divergence". This is where the wing just twists off.

I immediately realized that I had no idea what the flap and twisting frequencies might be, although I might be able to assess the shear center and CG. One thing became clear; the only parameter that I could change that always improved the flutter boundary was to increase the wing twisting frequency. Since the wing weight would be somewhat fixed I aimed at the twist stiffness. The guys wanted to build a foam wing with balsa skins as was the practice at the time.

The torsional stiffness of a thin-walled tube is proportional to the contained area and the shear stiffness of the walls; in this case the skins. I estimated that we could stand a much thicker wing than the real skinny ones Maynard Hill was using. With a 12% thick wing I predicted we should be able to reach 235 mph. And all other things being equal the 12% wing would have twice the stiffness of Maynard's 6% one. The breakthrough was to wrap the wing at a 45 degree angle with fiberglass reinforced packing tape before applying the balsa skins. This enormously increased the torsional stiffness. Nobody had done this before, so this fix was even better as you couldn't see it; the ideal "speed secret"!

The model flew like a sport plane except it would go out of sight in a very few seconds. We didn't break the record, but we did equal it many times. With one day to try and twenty or so vocal advisors we never did. These exploits were described by Maynard in an article he published in one of the model magazines in 1970.

This leads us back to the discussions about Micafilm and covering. My limited experience with this material was with my first Stardust Special. The model showed real promise in LMR trim but did some funny things, one of them during a glide upset where it dropped uncontrollably for a distance at the Eloy contest.

But the high aspect ratio, non sheeted LE wing fluttered in the climb; from a puny electric motor yet! What to do? Well ETex was the first day and I managed to fly that at low power but still encountered an "event" during the glide. Al Heinrich had some Micafilm and Balsarite so that evening I repaired the few structural breaks in the wing and covered the leading edge with the Micafilm. Problem solved.

Watch that torsional stiffness guys and use stiff covering.
Dave Harding

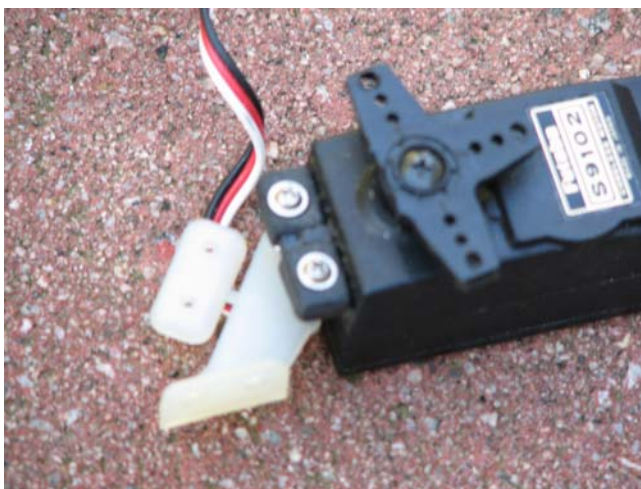
GASKET MAKING TOOL: You will probably think this is a leather punch. Well in another setting it is, and it's available at craft shops or through leather craft catalogs.



It works really well for cutting out the small screw holes in home made gaskets. It cuts cleanest if you put a small piece of cardboard or some folded newspaper on the anvil below the round punch. At times, I have also slipped a small section of old bicycle tube over the anvil for a semi-permanent backing. You can see exactly where the hole is going and aim for a pre-marked spot on the gasket.

CC'ING AN ENGINE: That's the shop term for measuring the compression ratio, by injecting a measured amount of liquid, (in CC's or cubic centimeters) it takes to fill the head space at top dead center. That information and the displacement, or swept volume can be used to calculate compression ratio. This is often done with a chemistry lab glass burette which is a pricey instrument.

From an Australian newsletter comes another way to do this without a burette, but instead using a precision digital scale with micro-accuracy. Since 1 cc of water weighs 1 gram, you just fill the cavity with water, then pour that into a scale pan and weigh it at the rate of 1 gram equals 1 cc.



Here's a neat little lightweight servo mount that can be made up from a pair of large control horns. For simplicity we're only looking at one mount at the front end of the servo. The whole thing is to be mounted against the fuselage side which would be toward your lap at the bottom of the picture. The tab is to be cut off, but was just left in place for the photo to help clarify what you're seeing.

THE FINAL WORD: It snuck up on us, but this very Saturday, **October 11** is our last opportunity to fly the **1/2A Texaco postal** event. So we've sent out a quick alert to Jose Tellez, who alerted Bob Facto and Tom Empey to do it if they can at their remote locations. But there may still be problems in that the weather guesser is prediction strong winds for that day. But they are offshore high pressure type, which sometimes just blow Southern California away (Jose) while just giving us unpredictable wspooky little gusts as they fight with the normal on shore breeze. We'll see

Robert L. Angel
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