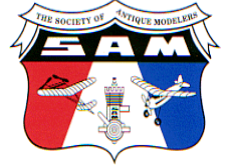




(Official
newsletter of
the
"BlackJack"
Club)

FEB2026#2602bhc



SAM21 CLIPPER

Society of Antique Modelers

Chapter 21

AMA Charter Club 1470



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Next Meeting:

Thursday Mar 5th, 2026

11am –3pm

Dr. Alan Peterson's House

1115 Seena Avenue

Los Altos, Ca 93024



SAM21 Current Affairs

Latest dope.....



- Next meeting will be on March 5th, 2026.
- Even though SAM21 membership fee is \$0, I will still need you to send in the renewal form for 2026 to let us know you are still interested to continue to receive the SAM21 Clipper. If we don't received the form, your name will be removed from the roster by end of March. You can send in a digitized version.
- Typo was made on the address on the renewal form, It has been corrected. The correct address is
Steve Roselle
17436 Airport Avenue,
Grass Valley, Ca 95949
- It is that time of the year that you need to update all the memberships and subscriptions. AMA (for most of us), SAM, dues are due now. Send them in so you will not miss any issue of the SAM Speaks, and have continue insurance coverage from AMA. SAM and AMA can be renewed online. No postage is needed! See the page 10 for information. And SAM21 too.
- SAM TALK is a online chat room for all SAM matters. <https://samtalk.hrncar.work/>
- SAM27 will not host a "Crash n' Bash" in 2026, as the SAM Champs will be in Schmidt Ranch in 2026. Stay tuned for the dates.
- The SAM Champs at the Ranch will be on September 16th-20th, 2026. More info to follow.

SAM short kits supplier:

Bob Holman Plans

12635 6th Street, Yucaipa, CA 92399

Phone: (909) 556-6513

E-mail: bhplan@aol.com

Web: <https://bhplans.com>

2025 Meeting Dates

1st Thursday after
the 1st Monday

7:00 p.m.

Dr Peterson's House.
1115 Seena Avenue, Los
Altos.

January-3

February-5

March 5

April 9

May 7

June 4

July 9

August 6

September 10

October 8

November 5

December 4

Christmas Banquet

Don't forget to
renew your

SAM 21

membership,
the dues is

\$0.00

for 2026



January Meeting Report

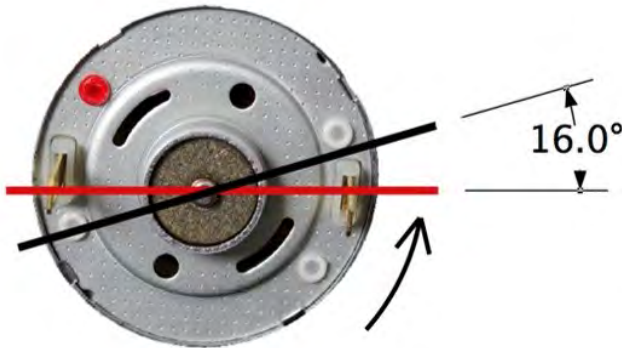
Attendees: Alan, Noel, Sam

Show and tell:

- Sam gave presentation on timing Speed 400 motors.



The Sp400 motor is clamped between two pieces of wood, a spanner is used to rotate the backplate of the motor.



The rotate is about 3/16" against the rotation of the motor at the parameter of the motor or

- Alan showed a FlySky 2.4 GHz transmitter and receiver which he is evaluating for his outreach program. \$55 from Amazon.

•

Business:

- Motion made, seconded, approved to send \$200 to Mike Myers to help defray the cost of the SAM26 spring contest.

- Sandwiches and cookies for lunch.
- Battery in Alan's truck had run down while Alan was on vacation. Sam used his emergency battery pack to start Alan's truck.
- Brian was MIA, Sam took meeting minutes, thank you.

AMA Safety Code:

As an AMA member I agree:

I will not fly a model aircraft in a careless or reckless manner.

I will not interfere with and will yield the right of way to all human-carrying aircraft using AMA's See and Avoid Guidance and a spotter when appropriate.

I will not operate any model aircraft while I am under the influence of alcohol or any drug that could adversely affect my ability to safely control the model.

I will avoid flying directly over unprotected people, moving vehicles, and occupied structures.

I will fly Free Flight (FF) and Control Line (CL) models in compliance with AMA's safety programming.

I will maintain visual contact of an RC model aircraft without enhancement other than corrective lenses prescribed to me. When using an advanced flight system, such as an autopilot, or flying First-Person View (FPV), I will comply with AMA's Advanced Flight System programming.

I will only fly models weighing more than 55 pounds, including fuel, if certified through AMA's Large Model Airplane Program.

I will only fly a turbine-powered model aircraft in compliance with AMA's Gas Turbine Program.

I will not fly a powered model outdoors closer than 25 feet to any individual, except for myself or my helper(s) located at the flightline, unless I am taking off and landing, or as otherwise provided in AMA's Competition Regulation.

I will use an established safety line to separate all model aircraft operations from spectators and bystanders.



Drone Ball Bearing Diesel

By Jack Hiner



Drone with fixed compression head.

My first SAM contest was the 1995 Colorado SAM Champs. I flew A Texaco plus Electric Texaco and Electric LMR events. I had flown sport control line with diesels from the late 1950's until 1969. Nothing larger than 2.5 cc diesels. So was familiar with model diesel operation.



I thought future SAM events for me to fly using old time diesels would be Texaco and Limited motor run events. The engine choose for this was the Drone Ball Bearing .29 cu. in. diesel for the LER event and maybe Texaco.

MECA BULLETIN & SWAP SHEET January 1981 had an article by G. Munich The Drone Diesel Story. SAM Speaks July August 1997 has an OLD ENGINE ANALYSIS by Charlie Bruce on Drones. January 1948 Model Airplane News had an article by Jack Baya on building a variable compression head for the Drone.

I got four Drone Ball Bearing diesels. One free from an old time SAM member in his 80's and

three I purchased. I exchanged some emails with David Owen in Australia for tips on operating a fixed compression diesel such as the Drone. Now I was ready to fire up the Drone.

All four Drones blew head gaskets after about 8 runs. The gaskets were fiber and about 50 years old. So, another email to David Owen. David had a Drone Ball Bearing version Diesel and made me some soft aluminum head gaskets. The following thickness .024, .029, .034, .038 and .045 inches. Since I would be removing the head to try different thickness head gaskets, I used Allen head 6-32 head bolts. Also 5-40 Allen head screws for the crankcase.

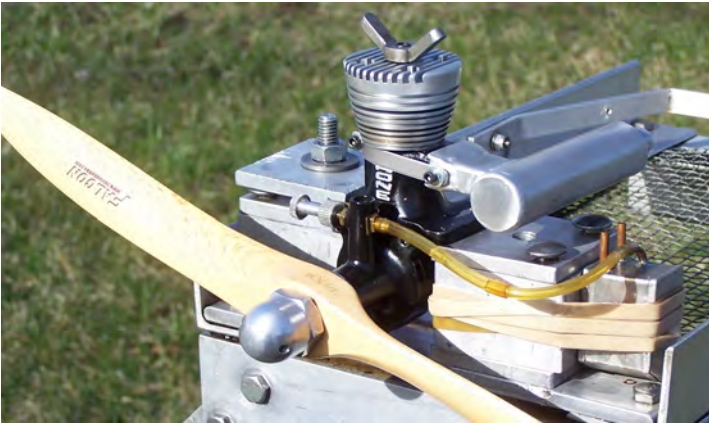
With the head gaskets David made for me I was running the Drones. No problems until Winter came and I had problems starting on very cold days. Solution, Aerodyne (Allen Heinrich) sold a variable head for the Drone. So, I purchased a couple. These heads were drilled for 5-40 head bolts and my Drones had 6-32 head bolts. A fine tapered reamer solved this problem.



Drone with variable compression head.

When running with the Aerodyne head the compression screw would back out. Allen Heinrich said ad a piece of string into the threads. Instead, I had a friend make up a compression locking lever. Another problem solved. When running the Drones vibrated much more than the 2.5 cc diesels, I had run years ago. Unbalanced props reduce the vibrations some.





After running a number of different prop sizes, I checked with Allen Heinrich to see what RPMs he has getting with various props. Allen was getting more RPMs with various props than I was. So, I decided to send two Drones to Don Blackburn. Don was a U/C speed flyer decades before.



Drone with an O.S. 912 motor mount.

From Aero Electric in Michigan, I got some crank case gaskets for the Drone Ball Bearing diesel. One year at the Toledo R/C Show I got some ball bearing for the Drone from BACA Bearing. I sent two of each with two Drone diesels to Don Blackburn. Don did some piston lap, crank balancing and polishing. Now my Drones had better RPM numbers than Allen's.

Now for some serious bench testing. I chose an APC 13/7 Sport Prop for the testing. I tried Aerodyne, Davis, Red Max and Olde English mix for fuel. Aerodyne gave more RPM. Drone serial number 11434 had longer exhaust duration than the other three and more RPM. The more I ran number 11434 the better it got. On a good day with Aerodyne fuel 6,900 to 7,000 RPM. Even hitting 7,100 a few times.

The Aerodyne contra piston is machined aluminum with an "O" ring for seal. I had two "O" ring failures. So talked a friend into machining a contra piston for two "O" rings. But I had trouble installing the contras into the head. Allen Heinrich has a tool for this. I sent the contras with 2 "O" rings for each head to Allen, and he installed them for me. No more failures.



Now time for some test flying. I had a full size Playboy Cabin too big for LER with this engine but OK for testing. At 7,000 RPM the drone on the Playboy vibrated more than I wanted. LER was out and time for a plan B. If I set up the Drone for Texaco

with intake restriction and ran about 4,000 RPM with much less vibration.

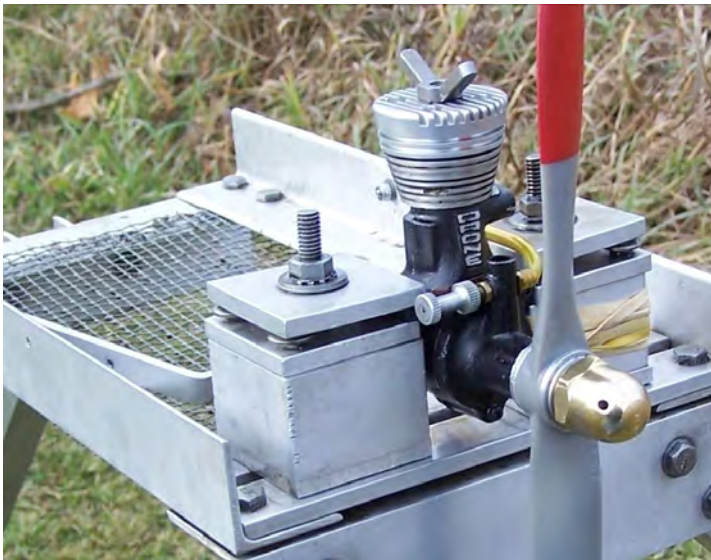


Drone for Texaco with intake restrictor and Falcon 14x8 prop. 810 sq. in. Holman Airborn short kit.



I sent one of my Drones to Don Blackburn to make an intake restrictor for Texaco. Best results were a diameter of .092 inches. I have used this in an Airborn

810 sq. in. with the Drone and 14/8 prop for Texaco event in Mid-West SAM contests. A couple of second places but beat by Tom Boice with four stroke glow engines converted to ignition.



The Airborn with only 810 sq. in. wing area you do not get a lot of fuel for Texaco. The Drone with proper prop would do well in full size Bomber or Airborn. Then 28 cc of fuel for longer engine run. Exhaust restriction for longer motor run. R/C throttle for even better fuel economy. I picked up a custom muffler for the Drone. R/C carb and was looking for someone to install on the Drone. But a few years ago, Chuck Hutton from Michigan gave me an O.S. four stroke .60 glow engine converted to spark ignition. So, I have gone no further with the Drone for Texaco now that I have the O.S. .60 four stroke for Texaco.

—Jack

New is old again.



You can teach old dog new tricks. I took up a new hobby, 3D printing. I wanted to learn about it after I retired, but not until a friend was doing it and egged me to take it up to learn together.

Anyway, got myself a starter printer, and still making things that I can download off the web. Then I learn to play with the simple 3D CAD program to make simple parts.

A friend was looking for some old wheels for his old time model and wanted to find the old aluminum wheels. So I thought I might be smart enough to make some.



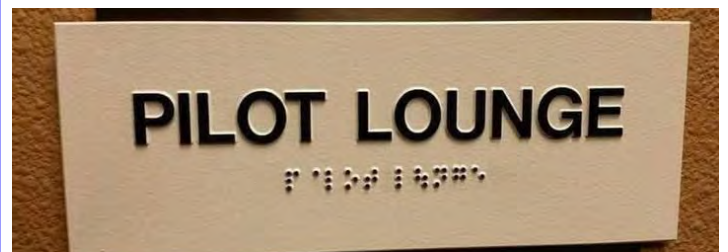
Here is the original aluminum wheel.



Here is the 3D replicator made wheel.

Took me a few tries to get this far, and there is room for improvements. The end product spec: 2.25" and weighs 0.71oz each. I think it is strong enough to handle the good landings!

—Brian



Mark Your Calendar and Book the Hotel....

SAM 26 Pond Commemorative Contest 2026

April 18-19 @ Wekerle Field

3130 DiGiorgio Road, Bakersfield, California

Saturday April 17 0800-1600	Sunday April 19 0800-1530
A Ignition	A Glow
B Glow	B Ignition
C Ignition	C Glow
Texaco Combined	Antique Combined
Brown Jr. LER	Ohlsson Sideport
Electric LMR	Electric Texaco
Speed 400 90 second run	Speed 400 120 second run
Spirit of SAM	Electric Rubber LMR
OT Glider	½ A Texaco
Foxacoy	36" Electric Repli

Gates to the field will open at 1500 on Friday April 17. Dry camping allowed for RVs or trailers.

If you have a kit or engine to donate for a raffle, bring it or them along.

We hope to arrange for lunch on the field on both days.

If you have a model that qualifies for any RC event in the SAM 2025 Rulebook, bring it.

We will award plaques and stickers for any event that is flown. For more information contact

Mike Myers—Contest Director

Text or phone: 818 349-3799 or e-mail mikemyersqln@charter.net



A Friendly Reminder....The Renewal Process

SAM21, AMA* and SAM membership renewal links are listed below. (*newer AMA members might have a different renewal dates.) SAM21 still going with the old fashion way, forms and checks in an envelope and stamp on the outside.



Use the renewal form and send renewal fee to **Steve Roselle 17427 Airport Ave, Grass Valley, Ca 95949**. The SAM21 2025 membership is \$0.00, yes, ZERO.



Go to <http://www.mysamstore.com/> click on "Join/Renew Membership" on the upper left . It will redirect you to a renewal form. Fill in the form and click on the "submit form" button. The next page will be to select the online/print option. After that it will direct you to Paypal page to pay the dues.



<https://www.modelaircraft.org/membership/enroll>

click on the left box "Renew A Membership" blue box and follow the instruction. You might to registered first.

2026 SAM 21 Officers

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Tele: 408-472-0274 E-mail: billvanderbeek@yahoo.com

SECRETARY: vacant (Sam Niece)

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SAM 21 - 2026 Membership Application Form

Check one: NEW Member RETURNING Member

Check one: FULL Member **FREE**

SAM No. _____ AMA No. _____
(Req'd if full)

Name: _____

Address _____

City, State, Zip _____

Phone: _____ Cell _____

Mail Form & Dues to SAM21 Treasurer: Steve Roselle 17436 Airport Ave, Grass Valley, Ca 95949

