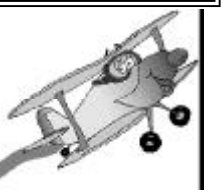
The Quinapoxet Model Flying Club

Smoke Signals



April Meeting

The next meeting of the Quinapoxet Model Flying Club will be held on **Monday**, April 9, at Paul McCulley's home in South Lancaster. Contact Paul at 978-365-9632 for directions if needed.

Meetings officially begin at 7:30 PM, but members usually try to arrive by 7 to grab some coffee and cookies and share war stories.

After official club business has concluded the monthly "Show and Tell" session follows. We've seen some pretty neat models and hardware this winter, but there's always room for more. So bring in your current project to show to the group. See you there!

March Meeting Minutes

Well, there are good turnouts, and then there are not-so-good turnouts...

So few people attended the March meeting (including most of the Officers) that no official business was discussed, so we went straight to "Show and Tell". Clearly, it takes a newsletter arriving every month to prompt folks to show up at the meetings. Mea culpa, I just couldn't get the newsletter out in time.

Check out Doc Bartlett's SIGNORITA in the February Show and Tell report. You can see it unfinished in February, and finished in March.

That's all, folks!

February Meeting Minutes

An excellent turnout of 20 members made it to the February QMFC meeting.

Financial Report: Club Treasurer *John Koziol* started the meeting off with his monthly review of the club finances. See his report on page 2.

AMA Grant Award: As mentioned in the February newsletter, *Jason Fine* had his Adult Education RC Instruction grant application approved by the AMA. At that time the expectation was the grant would be for $300, but the AMA actually provided $500 for this effort!

This is wonderful news, as their largess should fully cover the cost of conducting the course, using new equipment and materials, and should obviate the need for the QMFC to dig into our treasury.

Jason deserves full credit for this grant as he put a lot of time into drafting the application. Well done, Jason!

Spring Float-Fly: *Al Vasquez* reiterated his plan to hold a Float-Fly as the first club activity of 2001. The date for this event is April 28, and it will be held at the same Sandy Pond in Ayer that the previous Float-Fly's have been held.

Al will be inviting the local Scout troop to

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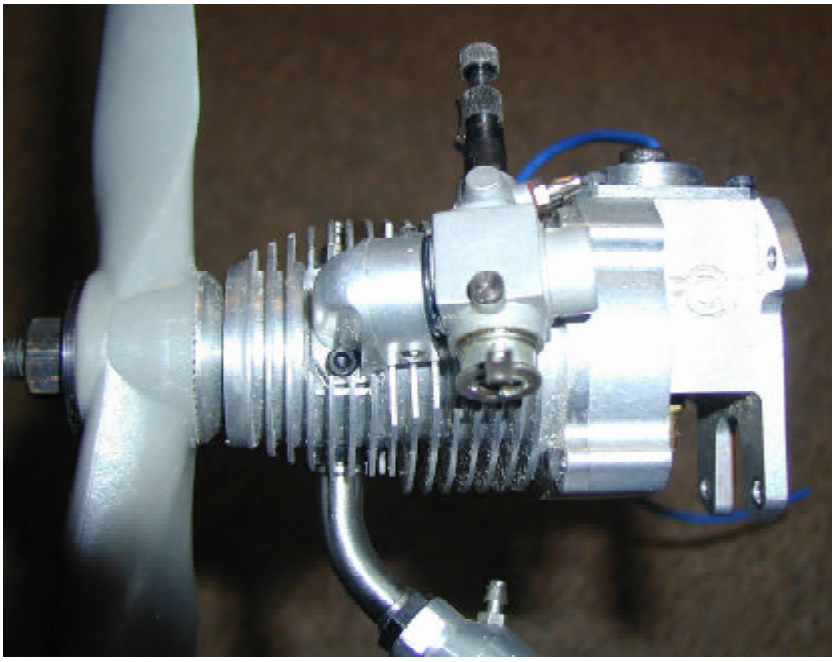
What the heck is that??



Ken Nygren brought in a "rotary valve" four-cycle engine, one of a pair destined for his DH Mosquito project. Want to know how it works? See page 5.

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Club Officers

President	David Schmidt 978-365-7332
Vice President	Paul McCulley 978-365-9632
Treasurer	John Koziol 978-649-5616
Secretary	Tim Edmunds 978-779-6406
Board Member	James O'Driscoll 508-853-0825
Board Member	Ron Sivonen 978-263-1909
Safety Officer	Joseph Zacame 978-779-5503
Chief Instructor	Dr. Richard Bartlett 978-779-5518
Newsletter Editor	Dave Tatosian 978-897-9291

Club Instructors

The following QMFC instructors are available to get you into the air, help you advance your flying skills, or get you checked out on a new aircraft. Take advantage of the instructor's expertise before you wish you had!

Dr. Richard Bartlett	978-779-5518
Joseph Zacame	978-779-5503
William Baker	978-365-7133
Alberto Vasquez	978-433-9746
Paul McCulley	978-365-9632
Jason Fine	978-365-7344
Bob Perreault	978-537-0850

Sound Meters

The following members have sound meters to verify that a model is in compliance with the 90db @9ft sound limit. If you have any doubts about how loud your model is, ask one of these members to check it out with you.

Dr. Richard Bartlett	978-779-5518
James O'Driscoll	508-425-9141
Ron Sivonen	978-263-1909
Dave Tatosian	978-897-9291
Al Vasquez	978-433-9746
Joe Zacame	978-779-5503

QMFC Financial Report

Club Treasurer John Koziol sent in the financial reports covering the period from December 11 through March 12, 2001. The combined report follows:

Beginning Balance on December 11, 2000:		$1997.32
Deposits:		
Membership Renewals:	$347.00	
AMA Grant*:	$500.00	

Total Deposits:	$847.00	
Account Subtotal:		$2844.32
Disbursements:		
Mower Repairs:	$149.07	
Sponsorship for Jason Fine:	$355.35	
Monthly fee for checking account:	$5.00	

Total Disbursements:	$509.42	
Ending Balance as of March 12, 2001:		$2,334.90

* AMA grant on behalf of Jason Fine's Adult Education RC instruction project. See the February Meeting Minutes.
Thanks to John for his diligence in tracking the club finances!

February Meeting Minutes

(Continued from Page 1)

attend this event, and he's hoping to have models suitable for "buddy-boxing" with the kids on hand.

As the weather is bound to be cool that early in the Spring, Al is also planning on providing Hot Chocolate and warm pretzels to heat the hands and keep the munchies at bay.

This event has been well-attended by the Scouts and has engendered much good will between the town of Ayer and the QMFC, a credit to Al and his able assistants, and we'd like it to continue.

The usual cast of characters will help Al with this event, but they could always use an extra pair of hands and eyes. If you've seen any of the video that *Bob Perreault* has shot of these Float-Fly events, you know there's always plenty

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February "Show and Tell"

Thank goodness Doc Bartlett showed up with his SIG "Kadet Seniorita" kit-bash project to save the night of the February meeting!

Doc must have missed the dear, departed "Miss Daisy", as he set about building another smooth-flying model for his hangar. Starting with the SIG "Kadet Seniorita" design, Doc made many modifications to his rendition, most noticeably at the two ends of the fuselage.

Doc shortened the nose by about 3" to make the model more proto-typical of a conventional high-wing aircraft. He also changed the tail configuration, moving the fin back a few inches, and making the rudder more rounded than the original.

He then took out most of the wing dihedral, and added "barn-door" ailerons. And he configured the plane as a tail-dragger instead of a trike - salvaging the main gear from "Miss Daisy". Power would be provided by an OS 40 four-stroke engine.

Doc chose to cover this model with SIG "Coverall", a woven, heat-shrinkable fabric. After painting Balsarite on the attachment areas, the cloth was fitted in place and sealed to the airframe with a hot iron, then shrunk with a heat gun.

The weave was then filled by brushing on clear water-based "acrylic polyurethane latex" paint mixed with talcum powder. This was then sanded with 400grit to ready it for the finish coats.

Even with all the modifications, Doc said the CG came out dead-on to plan, the mark of an experienced builder.

At the March meeting, Doc brought the plane back in - finished. Check it out!

March "Show and Tell"

Here's Doc Bartlett's "bashed" SIG Kadet Seniorita, all decked out in her flying colors.

Doc used inexpensive enamel spraypaint to apply the color coats over the sanded base. Two coats of white and two of red were applied, starting with a misted first coat to get a good grip on the base, then followed five minutes later with a heavier, final color coat. He then topped it off with a coat of clear finish.

Doc commented that hot exhaust "eats up" the paint, so he redirected the silencer down and away from the airframe to minimize the impact of the exhaust stream.

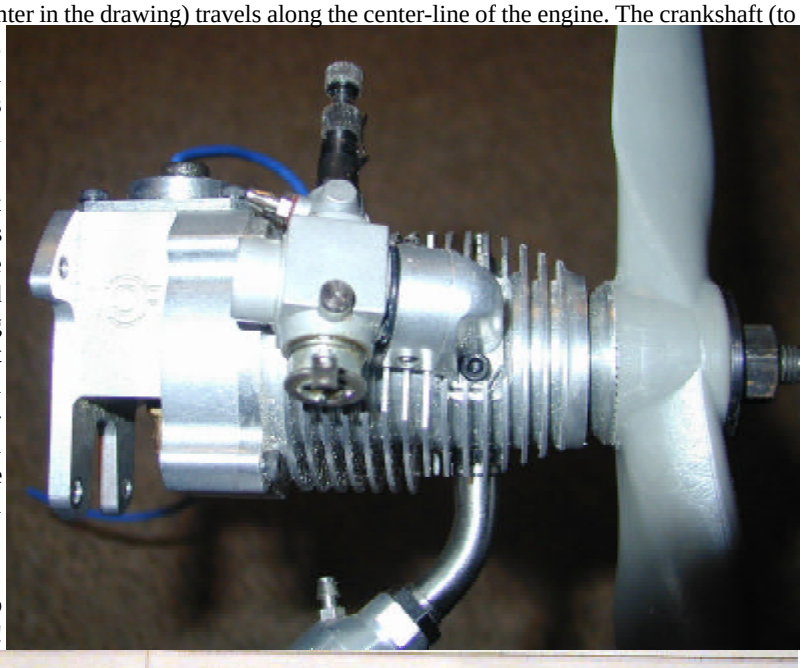
All-up weight of the model is 5.5 pounds, which combined with the 750 square inches of wing area provides a wing-load in the 16-18 ounce per square foot range.

Very light loading indeed, which should result in a comfortable plane for those light wind days where you just want to kick back and soar high.

Nicely done, Doc!

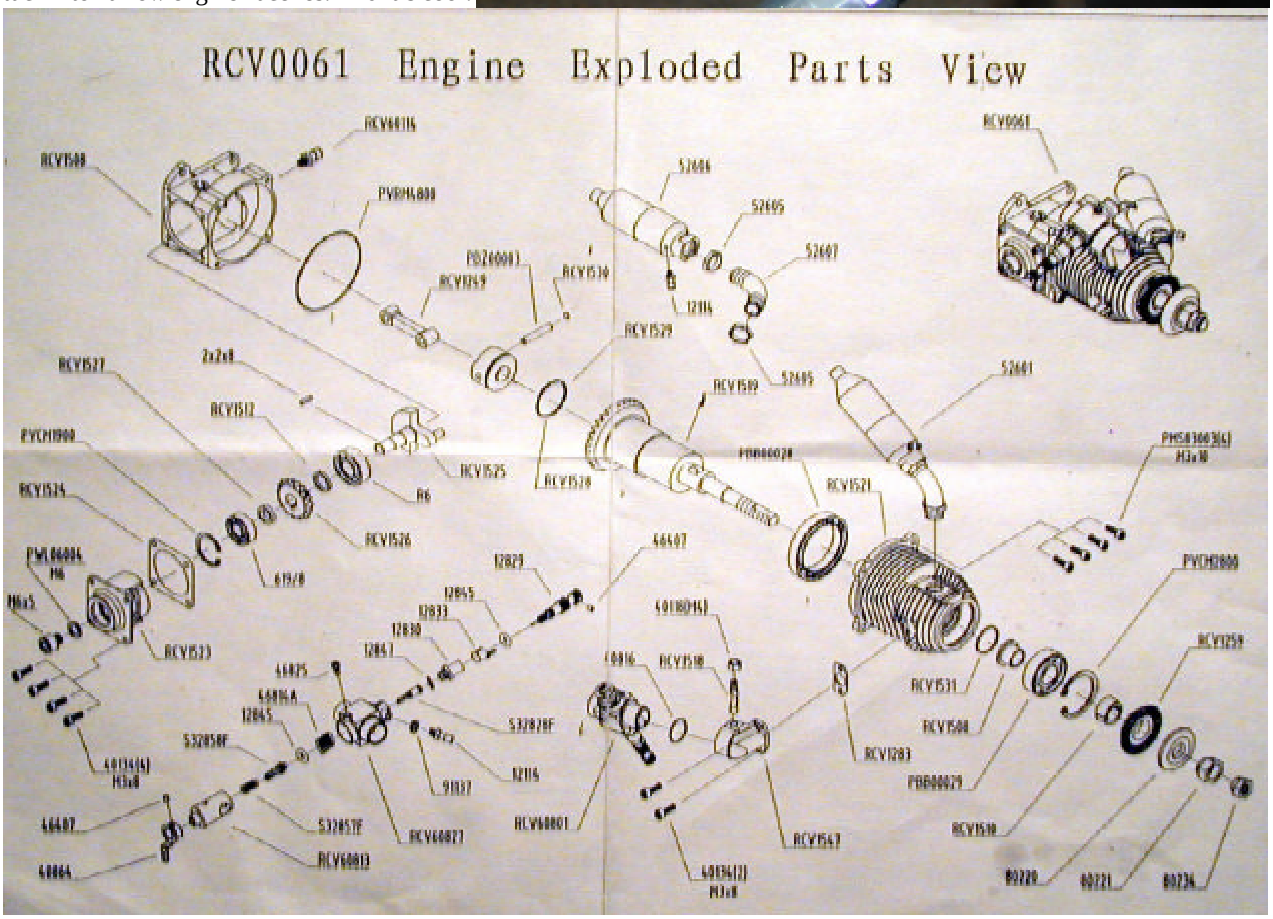
March "Show and Tell"

Another shot of Ken Nygren's "rotary valve" four-cycle engine, with the parts diagram below. If you study the diagram closely, you can see that the piston (just to the left of center in the drawing) travels along the center-line of the engine. The crankshaft (to the left of the piston) runs 90° to the piston travel, and rotates a pinion gear. The pinion gear then rotates the same "cylinder"that the piston slides within, with a 2:1 reduction (the same reduction that a conventional cam shaft gear provides).



The spinning cylinder acts as both prop shaft (you can see the threaded end pointing towards the right in the diagram) and also provides intake and exhaust valving (notice that the intake and exhaust ports enter at right angles to the spinning cylinder/prop shaft). As the cylinder turns it opens a path from the intake into the combustion chamber; that path closes just prior to the compression stroke; and after the piston bottoms on the ignition stroke, the cylinder is rotating to line up with the exhaust port, just in time for the piston to make the exhaust stroke.

Advantage? Aside from the four-stroke torque, the "skinnier" engine profile should be easier to tuck into narrow engine nacelles. And it's cool!



February Meeting Minutes

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of unexpected "highlights" during the day. Try to attend if you can, it always worth the trip.

Combat Gremlin Meet: Al has chosen the date of May 26 to hold a *Combat Gremlin* meet at the QMFC flying site, hoping that the field and access road have firmed up by then. Al has invited Jim Reith, manufacturer of the *Combat Gremlin* kit, to attend the meet and help set up the heats - and hopefully both will have the chance to compete.

Air Combat is the most fun you can have with a radio in your hand, and if the weather and turn-out are good it can be a great time for the spectators as well as the pilots. There's always plenty of excitement to go around, even without the (seemingly inevitable) "styrofoam snow storm" resulting from a solid mid-air collision.

Combat Gremlins are essentially "flying wings", and are constructed using a chunk of PVC rain gutter downspout for the fuselage and a simple foam wing, 48 inches wing-tip to wing-tip, using fiberglass tape as an "exo-spar" and a pair of "elevon" control surfaces for pitch and roll. A pair of balsa fins screwed onto the sides of the fuse provide lateral ("yaw") stability. There is no rudder - this is "bank and yank" at its finest.

"Stock" class models must be built to the plans, and must be powered by .25ci 2-stroke bushing engines (Thunder Tiger GP25 and OS 25FP engines are the most popular). Open Class models are allowed unlimited power (piped TT 36 and OS 32 ball bearing engines are particulary popular) and can make minor modifications to the plans.

Seasoned (and determined) veterans will often bring two or three fighters to a meet, or a fuselage plus a couple of wing sets. But it is often a novice flying a single model in his first Gremlin missions that takes the top prize. That's the way it is in RCAir Combat - and it's one of the reasons these events can be so much fun to attend.

These nifty little fighters can be built in one or two evenings if you start with a kit. If you have access to the World Wide Web, point your browser to the home of the *Combat Gremlin*, at:

http://www.racores.com/

to learn all about kits and construction. There's still plenty of time to get in on the fun. And Gremlins aren't just for combat - they are very entertaining models just for flying around the field - especially when field conditions favor hand-launched models.

So mark your calendars for these two event. Get your float planes ready to launch, and your fighters ready to scramble!

A big thanks to Al for kicking off the 2001 flying season with two sure-to-be-memorable events. And lets give him all the support we can muster!

That's all, folks!

Dave Tatosian, Newsletter Editor
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Smoke Signals

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