

SMOKE SIGNALS

NEWSLETTER

CALENDAR

May 2

PAINTBALL SHOOTOUT

May 7

Club Meeting
Show & Tell

May 21

Club Meeting
Seminar- Engine Tuning

2015

CALENDAR

June 4

Club Meeting
Show & Tell

June 18

Club Meeting
Seminar - Applying
Night

MAY

BIRTHDAYS

May 3 Sal Richichi

May 6 Tom Cott

May 23 Harvey Schwartz

May 31 Robert Henken

May 31 Dennis Osik

Send all suggestions to:
newsletter@meroke.com

JUNE

BIRTHDAYS

June 30 Frank Anzaldi

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I believe it is a good thing to have our club President speak to the members using this forum, especially in winter when weather is bad, members are away in warmer climates and meeting attendance is down. So here is the message from our President Lou Pinto.

(Message From Lou Pinto (Club President))

As the cold weather comes to a close, soon we all will be complaining about the sun, heat, and bugs at the aerodrome. As president I would like to take the opportunity to thank all the members who stepped up. I would like to thank the clubs officers and board members who worked with me in getting things accomplished.

These past few months we have been meeting many times. One of the items was to create a new position. This new position is called the clubs senior advisor or club leader. It was voted on by the clubs officers and board members that Tony Pollio will be holding this position. He will be working closely with the clubs members, officers and board members and will be giving advice when asked.



As the clubs educational & building program comes to a close I would like to give thanks to both Nelson Ramos for running this program and being a fine instructor and also to Charlie Lando for getting us a place where we can meet on Saturdays. Special thanks to the AMA for making this program possible the last few years.

On May 2nd we will be hosting 1 of 2 paint ball events for the year. I want to give thanks to Russ Rhine for volunteering to be the CD and doing the necessary paper work for this event. I would also like to thank Dennis Osik for volunteering to be the chairman of advertising and forming a committee of members to work with him in making this event successful.

Without members stepping up and volunteering when asked events wouldn't be possible. So please step up when asked. **THIS IS YOUR CLUB.**

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The following pages include information sent to me via e-mail that I thought was important to share with you. This first was passed along to me by Lou Pinto asking for it to be included in the Newsletter

From: caddis110@aol.com
To: nel98rc@verizon.net
CC: meroke36@aol.com, bes.frens@verizon.net, Richard.Waldman@liu.edu
Sent: 3/21/2015 2:32:21 P.M. Eastern Daylight Time
Subj: Meroke Builders Article

Señor Nelson

Gracias! Appreciate the club plug in the newsletter. You - nailed it ... The CLUB teaches self sufficiency and confidence as well as how we can help each other... It's nice to fly, but more gratifying to fly what you've been able to create via "a build" and/or a repair to keep an investment flying.

It's not a waste (Builders Club) if a person doesn't use it, it's there for those who want to learn, or feel a need to keep balsa and nitro alive, as well as teach and appreciate electric alternatives in a balsa community.

We all appreciate you as the primary catalyst behind our community's success; a group of guys working together as a builders club But within an RC club.... Having fun and learning.

THANKS FOR BEING GENEROUS OF YOUR TIME, SKILL & EXTENSIVE KNOWLEDGE... Had a great winter

Jim G=

Jim then sent me the following for publication, expanding on his feelings.

Dennis;
I'd like to submit the following for the next newsletter.....

What's the value of a Builders' Club? Is it necessary?
Most joined Meroke because as a club it offered assisted flight instruction and guidance in building.....some did both ...terribly..... when teenagerssuppressed by limited budgets. One of the major advantages to joining the Builders Club is to learn self sufficiency and confidence so as not to be a weapon in our own hands around fellow fliers.

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Why a Builders' Club? First, it saves money. The Club builds the Club Trainers....now both electric and gas. As a club member, consider the enjoyment of your dues invested in flying targets you can shoot down with paint ball guns, make money while enjoying the destruction, and then resurrect the targets for a second, third, or even fourth suicide? If doctors learn to operate on patients by practicing on cadavers, isn't it logical to conclude if you have cheap cadavers, why not use slave labor to reconstruct them for the destruction table?

The Builders Club brings seasoned builder/pilot knowledge to students ranging in balsa construction IQ from zero to something more than zero. Consistent with the concept of "club".... building is a natural extension of How To Together. Those who know how... teach those who don't knowor don't know.what they don't know.

At the end of the food chain is a student who's learned to teach a student or help a fellow member in need.... that makes a lot of sense....especially if one wants to keep the art of balsa alive. The club helps those on a limited budget, those who want to build from scratch, self-assemble an ARF, or being able to repair ones' work of art after a first excursion into brush surrounding the landing approach. The Builders Club gives members an opportunity to help each other.. . It's nice to fly, but more gratifying to fly what you've been able to create via "a build" and/or repair an investment YOU can keep flying because of the knowledge and skills imparted by the Meroke Club .

A Builders Club isn't a waste if a person doesn't use it, it's there for those who want to learn, or feel a need to bring a balsa or foam object to life. It's not all about gas either, now the club incorporates electrics and electronics. The Builders Club is about the voluntary imparting of knowledge. It's a place to meet on weekends and share what you know with those who want to know. It's a place where practical and functional meet it's a group of members having fun creating confidence and functionality within members .

No club can succeed without assets, and ours is no exception. As newbie builders we've been able to leverage the knowledge of regulars like Lou Pinto, Charlie Lando, Keith Follow, as well as many other members who stop by to coach or just participate. However, our club's greatest asset is Nelson Ramos. He's the club historian, the mobile hangar, tool shed, supplier, purchasing agent, master troubleshooter, instructor, mentor, professor, and champion of the "emergency fix" all too preceded by a student "oops". We can call him any time on any subject and get an answer....now that's a walking, talking repository of knowledge..... it takes a lot to keep up with twelve students playing with sharp tools, razors, heat guns, irons, scrapers, CG racks, Monokote, balsa, glue, CA, and assortments of parts and balsa body components....controlled chaos....but always in control because of Nelson's focus, flexibility, infectious humor, can-do attitude, generosity, and encouragement.... We all owe Nelson a debt of gratitude for being so generous of his experience, and your students ALL SAY ...BECAUSE OF YOU....FOR BEING GENEROUS OF YOUR TIME, SKILL, AND KNOWLEDGE... WE ALL HAD A GREAT WINTER.

THANKS.....THE MEROKE BUILDERS CLUB MEMBERSHIP

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This next e-mail is great advice from our guru Nelson Ramos to Charlie Lando who suggested I include this in the Newsletter...ask and you shall receive!

Date: April 7, 2015 at 12:42:53 PM EDT
From: "Charlie Lando" <bes.frens@verizon.net>
Subject: RE: Batteries
To: <nel98rc@verizon.net>
Cc: "Dennis Osik" <osikmd@verizon.net>

Great response, Nelson!!!
MANY THANKS!!!
Perhaps Dennis could use it in **SMOKE SIGNALS**.

Charlie

From: nel98rc@verizon.net [mailto:nel98rc@verizon.net]
Sent: Monday, April 06, 2015 6:09 PM
To: bes.frens@verizon.net
Subject: Re: Batteries

Hi Charlie,

I would cycle the batteries and see if it holds the charge. I sometimes let the battery sit after a full charge ,check the voltage and the next day recheck and see how much I lost . If the battery loses a substantial amount ,this battery wont stand up to a load. (NOT GOOD!!) Also a receiver and transmitter battery is inexpensive compare to a model. A range check is a good idea with the engine off, and another range check with the engine running . Check the glow plug ni-cad driver battery. What about glow fuel? Was the bottle open or seal. How old is the fuel ? If the bottle was open and stored for a while it might not be worth using. LOTS of questions? Did you clean the engine and use after run oil for storage, check the linkage on the carburetor make sure the push rod moves freely with the carburetor arm. You have enough for now check all this and we'll continue as we go.

Nelson

On 04/04/15, Charlie Lando<bes.frens@verizon.net> wrote:

Hey, Nelson!

I haven't recharged or checked my control and power batteries – mostly lithium hydride – for over a year. I have all the equipment. Should I look out for any problems?
Any suggestions/help will be appreciated.
With, luck I should get into the air again this year. Here's hoping.
Happy Easter to you and yours!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Charlie

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Another article sent in by Phil Friedensohn.

MODEL Airplane NEWS electric flight

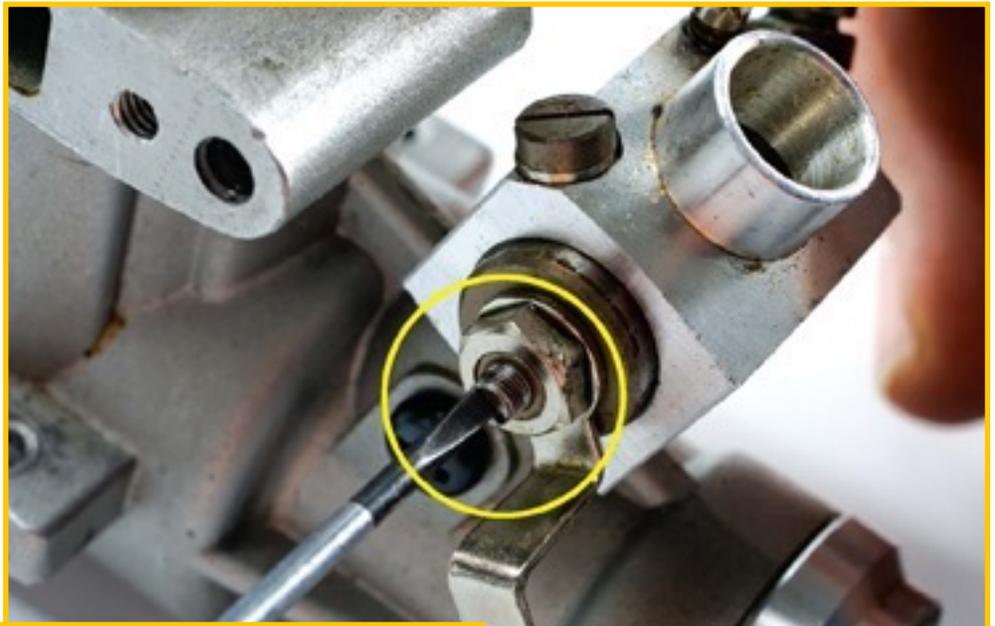
RC Airplane Maintenance – Carburetor Basics

by Gerry Yarrish

PHOTOGRAPHS BY HOPE McCALL

The old saying, “Takeoffs are optional, but landings are mandatory,” certainly applies to RC pilots. But if your engine is not properly adjusted, the landing pattern and touchdown can be a very iffy proposition. Two-stroke glow engines must have a solid and reliable idle; it’s even more important than all-out top-end rpm. Let’s examine the basics and see what can affect your engine’s performance.

To adjust the low-end needle valve, you have to use a fine tip screwdriver. For safety’s sake, be sure to stop the engine before you adjust it.



With a single-needle carb, there is a small air-bleed hole in the front for the low-end idle mixture. You adjust the mixture screw to open and close the hole to adjust

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When the engine runs, the fuel flows into the carburetor because of the low pressure created in the venturi and higher atmospheric pressure acting on the fuel through the tank vent. The higher outside pressure pushes the fuel toward the lower pressure area. Without a vent, the fuel could not flow. To help increase tank pressure and improve fuel flow, a length of fuel line can be connected to the tank vent and the pressure fitting on the engine's muffler.

For a fuel system to work at its best, the tank must be located as close to the engine as possible. This is because when the nose of the plane is raised, the fuel flow is affected by gravity, and the draw lessens. Also, the tank should be positioned so its center is between 1/2 and 3/4 inch below the spray bar. This position is a good compromise and provides proper fuel flow for both a completely full tank and an almost empty one.

The size of the propeller also affects your engine's idle performance. A larger prop with more mass provides a beneficial fly-wheel effect. Smaller, high-revving propellers such as those used with pylon-racing airplanes have less mass and don't idle very well.

Another important factor is the engine's glow plug. When an engine idles with an overly rich fuel mixture, the engine will begin to load up with unburned fuel in the crankcase. When the throttle is opened, this unburned fuel will transfer into the combustion chamber, quickly cooling or even killing the glow plug. If this is a recurring problem, first try to lean the idle mixture; but if it continues, use a hotter glow plug or install a plug that's equipped with an idle bar. The bar helps shield the glow plug's element from some of the raw fuel to maintain proper operating temperature. Also, for good sport flying, use fuel that contains at least 5 to 10 percent nitro. Using FAI fuels with no nitro content can lead to poor idling performance.

Remember, always be careful when making the high-end needle-valve adjustments, and since you'll need to use a screwdriver, stop the engine to make the low-end idle mixture adjustments. Make all your initial needle adjustments by 1/4 turns; then, when you get closer to the idle setting, use 1/8 and 1/16 turns to home in on the ideal setting.

It is very important to obtain a reliable idle. More models are damaged because of an engine-out situation during the landing pattern than at any other time during the flight. Learn to properly adjust your carburetor and avoid that dreaded dead-stick landing!



Many newer engines such as this Evolution .36 2-stroke, have their high-end needle valve assemblies placed in the rear of their engines away from the prop. It is connected to the carb with a short piece of fuel line.

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THE BASICS

The carburetor is the part of the engine where fuel is mixed with air before it enters the engine case. The air passes through the opening at the top of the carburetor and enters the venturi, a long tapered tube that speeds up the airflow into the engine. The increase in air velocity causes a drop in pressure, which draws the fuel from the tank. In the middle of the venturi (at the low-pressure zone) is a brass tube assembly called the spray bar. The fuel passes through the spray-bar jet and then mixes with the incoming air.

The air portion of the air/fuel mixture is regulated by the large aluminum barrel that rotates to increase and decrease the size of the intake hole. The flow of fuel is adjusted by one or two needle valves at one or both ends of the spray bar.

Older 2-stroke engines (and many 4-strokes) have a single high-end needle valve to adjust the mixture at full throttle and a small air-bleed hole in the front of the carburetor to adjust the idle mixture. As the throttle barrel closes, it opens the air-bleed hole to the venturi. A small idle-mixture screw meters the amount of air entering the carburetor. Opening the air-bleed hole lets more air in and leans the idle mixture, and closing it lets less air in to richen the mixture.

Two-needle carburetors (as the name implies) are equipped with two needle valves, one for the high-end mixture adjustment, and a secondary low-end needle valve (sometimes referred to as the low-speed needle) to adjust the idle mixture. When you turn the high-end needle clockwise (screwing it in), it leans the mixture by restricting the amount of fuel that enters the carburetor. Turning it counterclockwise (unscrewing it) richens the mixture by allowing more fuel to flow. Usually, the low-end needle is smaller than the high-end needle, and in some cases, you'll need a fine-tip screwdriver to adjust the idle mixture because it is recessed into the center of the throttle arm. When you turn the low-end needle clockwise, it richens the idle mixture, and turning it counterclockwise makes the mixture lean.

When the throttle barrel is closed, it also moves laterally, which in turn moves the low-end needle gradually into the fixed spray bar, thus leaning the idle mixture. Of the two types of carburetor, the two-needle type is more sensitive to adjustments and provides faster throttle response through the midrange.

OTHER CONSIDERATIONS

Besides the mechanical differences between single-needle and two-needle carburetors, other things can affect your engine's performance. Very often a poor engine idle can be traced to one or more of the following:

- The fuel system setup.
- The distance from the fuel tank to the engine.
- The vertical position of the fuel tank relative to the carburetor's spray bar.
- The propeller size and pitch.
- The type of glow plug.

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Shown here with the throttle barrel fully open is the spray-bar fuel-jet assembly. The low-end needle assembly is to the left, and the fixed high-end assembly is at the right.



As the throttle barrel closes, the low-end needle assembly moves laterally into the fixed spray bar. This is why adjusting the low-end needle affects the high-end mixture adjustment.



SETTING THE IDLE

Here's how I set my idle. Of course, to set up a reliable idle mixture, your engine must first be broken in properly. Be sure to install the propeller you intend to fly with the engine. Also, use a good optical tachometer to check the engine rpm.

Start the engine, let it warm up, remove the glow plug driver and open the throttle fully.

- Adjust the high-end needle for maximum rpm, and then richen the mixture for a 200 to 300rpm drop.
- Close the throttle to the full-idle position. The engine should idle between 2,500 to 3,000rpm.
- After 30 seconds or so, advance the throttle back to full power. If the engine sounds wet (sputters and spits raw fuel out of the exhaust), the engine is loading at idle and the low-end needle valve is set too rich. For safety concerns, stop the engine and lean the idle mixture 1/8 turn (counterclockwise for the air-bleed adjustment screw for the single-needle carburetor, or 1/8 turn clockwise for the two-needle carburetor).
- Restart the engine, and readjust the high-end needle for maximum rpm; then richen for the 200 to 300rpm drop. This is important, as when you adjust the idle, the high-end mixture will also be affected. Run the engine at full-open throttle, and then reduce power to idle and wait 30 seconds. Open the throttle fully again and see what happens this time. If the same thing happens, repeat the procedure, and lean the idle mixture another 1/8 turn.
- If the engine speeds up but sounds starved of fuel (or quits abruptly) when the throttle is advanced, the mixture is too lean and needs to be richened. It may take several engine starts and stops to home in on the proper needle settings.
- Once you find the settings for a smooth and even transition from the full idle to full-open throttle, adjust the idle-stop screw, or adjust your throttle servo travel for the lowest reliable idle speed. An acceptable idle is anywhere from 2,300 to 2,700rpm. Remember, you're not looking for the absolute lowest idle, you want the lowest reliable idle setting.



MEROKE RC CLUB

ANNUAL AMA SANCTIONED

PAIN'TBALL SHOOT OUT

SATURDAY MAY 2, 2015
11:00 AM - 4:00 PM

Rain Date SUNDAY MAY 3, 2015

LUFBERY AERODROME
CEDAR CREEK PARK, SEAFORD, NY

FUN FOR ALL AGES

SHOOT THAT PLANE OUT OF THE SKY

Children under the age of 12 require adult supervision

FOR MORE INFORMATION, PLEASE VISIT OUR WEB SITE AT www.meroke.com