

# Central Carolina Radio Modelers Club



On the Fly!

May 2017

Editor in Chief: Marc Wentnick

Club Meetings are held at the **field** the **2<sup>nd</sup>**. **Tuesday** of every month unless otherwise noted

**Order food at 6:00**  
**Meeting start at 7:00**



Board  
of Directors

Board meetings are **tentatively** held every 1<sup>st</sup>. Tuesday.  
Time and location to be announced.

Please contact:

Tim Holland

336.508.5596

[hollandt@triad.rr.com](mailto:hollandt@triad.rr.com)

Ronnie Garris

336.906.0565

[rgarris@aol.com](mailto:rgarris@aol.com)

**Happy 25<sup>th</sup>.**  
**Open House**  
**Anniversary**  
**CCRCM!**

## OPEN HOUSE

**MAY 29<sup>TH</sup>.**

CD: RONNIE GARRIS

[rgarris@aol.com](mailto:rgarris@aol.com)

336.905.0565

## IMAC

**AUG. 19-20**

CD: STEVE SIDES

[ssides@triad.rr.com](mailto:ssides@triad.rr.com)

336.944.2462

## CUB DAY

**JULY 16<sup>TH</sup>.**

CD: ROBERT UNDERWOOD

[paverman@underwoodpaving.com](mailto:paverman@underwoodpaving.com)

336.885.2318

## ELECTRIC FLY-IN

**SEPT. 16<sup>TH</sup>.**

CD: MARK WILLARD

[gr8guy4u101@live.com](mailto:gr8guy4u101@live.com)

336.431.7601

# FLOAT FLY

SEPT. 30TH.

CD: TOM BLACK

[tblack8086@gmail.com](mailto:tblack8086@gmail.com)

**CLUB MEMBERS ONLY**

## NC AVIATION MUSEUM

Saturday, June 10<sup>th</sup>.

Static Display  
Nan Brinson

[deucebrinson@northstate.net](mailto:deucebrinson@northstate.net)

336.472.2828

**Work  
Day  
May 13<sup>th</sup>.**

**Volunteers  
needed!**

**Contact:  
Tim or Ronnie**



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**25 Open  
Houses!**

My gosh what an  
achievement. This got me  
thinking....hmm....1992.

Let's take a look at it!

**IN 1992...**

Woolworth's announced it  
was closing over 900  
stores.

All shown in averages

Dow Jones  
3301

Cost of a new house  
\$122,500.00

Income  
\$30,030.00

Gallon of gas  
\$1.05

1 lb. Of bacon  
\$1.92

### Miscellaneous

Ross Perot announced  
his bid for president

against Clinton and  
then president Bush  
Clinton wins

John Gotti  
sentenced to life

Hurricane Andrew  
hits South Florida

McDonalds opens  
the first restaurant in  
Beijing China

Euro Disney  
opens in France

TWA declares bankruptcy

IRAQ keeps hampering UN  
inspections for weapons of  
mass destruction

Russia makes it legal to  
own your own business

FDA bans silicone  
breast implants

Riots breakout in L.A.  
after the acquittal of 4  
white officers in the  
Rodney King case

Mike Tyson CONVICTED

of raping Miss Black Rhode Island Desiree Washington	Television	NCAA Basketball Duke (Ya Duke!)
	Law & Order	
	American's Funniest Videos	
NAFTA is signed (don't ask!)	Home Improvement	Kentucky Derby Lil E Tee
	The Jerry Springer Show	
	L.A. Law	
Technology	Matlock	
	Married with Children	Famous Quotes
Windows 3.1 released	Star Trek: Next Generation	"I didn't inhale" "It's the economy, stupid!" Candidate Bill Clinton
	60 Minutes	
Microsoft releases WORKS	Sports	
	Baseball World Champs Toronto Blue Jays	
AT&T releases first video phone for \$14,99.00		"Great sucking sound" Candidate Ross Perot
	Superbowl XXVI Washington Redskins	
The first nicotine patch is approved to stop smoking	NBA Champions Chicago Bulls	"Can't we all just get along?" Rodney King
The Space shuttle Endeavor maidens without a hitch	Stanley Cup Pittsburgh Penguins	"There's no crying in baseball" Tom Hanks, in 'A league of their own'
Hollywood		
	U.S. Open Golf Tom Kite	"Friends don't let friends drive drunk!" US Dept of Transportation
Aladdin Home Alone 2 Batman Returns Lethal Weapon 3 A Few Good Men Sister Act The Bodyguard Wayne's World Basic Instinct Unforgiving Honey, I blew Up The Kids Reservoir Dogs	U.S. Tennis (Men & Ladies) Stefan Edberg/Monica Seles	Time Magazines Man of the Year
	Wimbledon (Men & Ladies) Andre Agassi/Steffi Graf	Bill Clinton
		Miss America
	NCAA Football Alabama	Carolyn Sapp (Honolulu, HI)



## Scandels

The aircraft carrier  
Saratoga accidentally  
launches live missiles  
during a joint US/Turkish  
excercise killing several  
Turkish officers

Booty Shaking makes it's  
debut with the release of  
Sir Mixx-a-Lot's  
*Baby got Back*

Princess Diana and Prince  
Charles separated after  
his affair with  
long time love  
Camilla Parker Bowles was  
revealed

## POP Culture

A shipping container  
filled with 28,000  
rubber duckyes was lost  
a sea.  
They are still being  
found around the  
world.

Cost of a Superbowl ad  
\$850.000

## Deaths

Anthony Perkins  
Chuck Connors  
Marlene Dietrich  
Cleavon Little  
Paul Henreid

Dana Andrews  
Jose Ferrer  
Dick York  
Sandy Dennis  
Shirley Booth  
Benny Hill  
Sam Kinison  
Vincent Gardinia  
Molly Picon

# HELP

Okay, I did something  
stupid as usual. I decided to  
fly my carbon Z Cub with a  
bad cold soldier joint at the  
battery during Cub day last  
year. I turned left the plane  
stayed straight and landed  
on the tallest tree in North  
Carolina!

Thank goodness John Klein  
after 4 long hot sweaty hours  
retrieved it. Unfortunately  
the tail-feathers broke as she  
came off the many branches  
blocking her way down.



I'm looking for the left  
side 90 degree plastic  
support that lives on the  
underside of the rear  
horizontal stabilizer.  
If you have one please  
contact me!

[ebida3@yahoo.com](mailto:ebida3@yahoo.com)

## NEW TOYS!

Brother Mark Willard picked  
up a beautiful ME-262. The  
detail is incredible. Cooling  
vents, camo scheme and  
overall quality make this new  
addition a sure winner!





**June 26<sup>th</sup>, 1943**

**48** P-47's attached to the 56<sup>th</sup>. Fighter squadron were out on a mission to protect B-17's back from a bombing run on the their way to England.



**A** young fighter pilot named Bob Johnson fly's Blue 4 at the tail of the formation. Fifteen miles inland Johnson spots something at 5 O'clock high. The tiny specks behind him are a formation of Focke-Wulf's 190's Germany's most heavily armed single engine fighter. Piloting these planes are the best of the best in the Luftwaffe. Adrenalin surges Johnson calls out

on the radio. He tries to call out again but before he can complete his call the enemy is right up behind him. They open fire on him. They just about destroyed the aircraft from under him. The tail feathers were shot to heck, the canopy was stuck a little less than half way, the engine was belching thick black smoke and oil was splattering all over the windscreen. An explosive shell sent bits of red hot metal in his right leg, a machine gun round gazed the very tip of his nose.



**J**ohnson's ship plummets and spins out of control from 40,000 ft. as it does it shudders and screams oil is now everywhere and

everything he does is not righting his dire situation. Flames start to lick his face and arms. Most of his instruments where not working. Johnson said in a later interview, *"I resigned myself to dying. This is how it ends."* But instead of giving up he kicks hard left with rudder and yanks hard back on the stick. Amazingly the aircraft responses and starts coming out of it's death spiral and he is able to maintain some control. He is still losing altitude but not that fast. He tries to open the canopy but the being jammed it won't move. He tries to brace his feet on the dash and with everything he has pull the canopy but it didn't and wouldn't budge. He even tried standing and squeezing through the busted Plexiglas but his parachute got horribly snagged.

**J**ohnson takes stock of his situation. He scans the skies looking for friendly's but he is all alone. At this time the FW's left him for dead. He pounds on the canopy frame but still nothing. He is in a glide descending and losing altitude very slowly. He realizes that the smoke has abated and the plane is going down but gliding stable. The controls

appear to be somewhat responding as well.

**H**e happens upon a dot at his 4 O'clock. As the dot gets larger it proves to be a yellow nosed Bf-109 closing quick. His heart sinks. He is being intercepted by the German ace Egon Mayer who was one of Germany's most experienced pilots. Mayer is credited with shooting down 102 enemy aircraft in 353 combat missions in the Western Front alone. By the time he comes across Johnson he has already had 3 ½ years combat experience and scored 66 kills.

### **P-47 Thunderbolt**

**T**he P-47 Thunderbolt was designed by Republic Aviation as an interceptor. It's primary armament was it's .50 caliber machine guns. As a fighter bomber she could carry five inch rockets or a bomb load of 2,500 lbs. When fully loaded the aircraft was one of the heaviest fighters of the war. She was powered by the powerful Pratt & Whitney R-2800 Double Wasp. In fact, the plane was designed around it. That's why the fuselage looks the way it does. It's very stocky in front tapering towards the tail. Some said if you stood her

up on end she looks like a *jug*, hence the nickname.

**T**he R-2800 was being already used in two other aircraft at that time the Grumman Hellcat and the Vought Corsair; this engine was a proven winner.

**T**he P-47 was effective as a short to medium range escort fighter in high altitude air combat and she was also utilized as a ground attack plane in both the Pacific and European theaters.

### **Humble Beginnings**

**O**riginally it was designed to replace the Seversky P-35.



*P-34 Seversky*

**T**he first designs in 1939 was called the P-43 Lancer. It was built to show off the capabilities of the new body with the Pratt & Whitney 1830 radial engine. The P-43 was limited in production because Republic was working on a more powerful P-44 Rocket and a fighter designated as the AP-10 which later was dropped by Army.



*P-43 Lancer*

**A**s the war escalated in Europe into 1940 Republic and the USAAC concluded both planes were inferior to the German's planes. Republic tried desperately to improve on the design. She was now designated the XP-47/ P-47A. All metal construction with elliptical wings a straight back leading edge slightly swept back and self sealing fuel cells where some of the improvements. Air conditioning and a roomier cockpit was another. Extending the cockpit further and covering it with the canopy gave the plane that razorback look. A pilot said it was like '*flying a lounge chair*' through the skies. But the ship was fraught with problems. The sheer size and prop clearance made for harrowing take-offs, the side ways canopy had a tendency to jam and multiple gun installations in tight areas where prone to jamming due to ammo belt travel configurations in these tight spaces. Maneuverability was



considerably less than that of the Spitfire and Bf-109. The ignition system arched and lost spark at high altitudes where the ailerons twitched and froze.

The newly organized USAAF ordered 171 of them. (*c'mon you gotta laugh!*) Republic slowly worked the bugs out and what emerged was the P-47B.

**A**ll P-47B's had the sliding canopy and a new GE turbo-supercharger regulator. The navy version had the radio mast behind the cockpit slanted slightly forward. There were many variations of both the P-47 A & B's too many to list here.

#### Enter the variant P-47C.



P-47C

**P**roduction changes proved to the USAAF that the plane was good enough and quickly ordered another 602. Both the B & C variants were very similar in looks.

[www.ccrclm.com](http://www.ccrclm.com)

Brand new site!



P-47D

Initial deliveries went to the 56<sup>th</sup>. Fighter Squadron which as was Republic was based on Long island, NY. (*I used to work down the road from Bethpage where they were made many years earlier.*) By the end of 1942 marked the first P-47D's. **T**he D's were very similar to the C's. Stronger fuel tanks, a better more reliable ignition system, bullet proof windscreen and a breakaway jettisonable canopy were some of the changes. Self sealing fuel tanks and heavier 3/8ths. armor plating around the cockpit were even more. Curtiss 13 ft. props were changed for Hamilton Standard 13. 2 inch props giving a mere 6 inches for ground clearance! An electric motor affixed to the frame and an extender on the legs were used in later models for additional clearance.

**T**hunderbolts were being manufactured on Long Island and Evanstown, Illinois at this time. Barely

able to keep up with more orders production was licensed to Curtiss Aviation in Buffalo, NY given the designation P-47G.

#### Enter the British

**A**t this time all Thunderbolts had the razorback design. This gave poor rear visibility. The British had struggled with this on their fighters and came up with the bulged, 'Malcolm's Hood.' This only bulged the sides of the canopy over the tracks. This type canopy is seen on many British lent P-51 Mustangs. And a handful of British P-47's. However the English devised an all around canopy instead of a side bulge for their *Hawker Typhoon* and quickly adapted it to both the Mustang and Thunderbolt.

**I**n the summer of 1943 the first P-47's with the bubble top were released in the U.S. Many fighter pilots nicknamed the planes the 'Superbolts.' There were many other variants made like the P-47M built to chase V-1 doodlebugs falling in London although the last variant was the P-47N. It was designed as a B-29 escort fighter over mainland Japan if needed. Thunderbolts cost an

average of \$83,000. And a total of 15,636 were produced.

### Now back to Johnson

Johnson can do little to avoid the inevitable. He is up against a merciless enemy who now has gotten on his six. Mayer confidently pulls the trigger and the nose of the Bf-190 lights up letting loose a hail of 7.9 mm rounds peppering Johnson tail and trailing edge wing surfaces. Johnson could only hope it's going to be over quick. His only move is to keep hitting the rudder back and forth as if to bat the rounds and avoid taking hits. *It works!*

The maneuver causes Mayer to overshoot Johnson as the P-47 slowed due to the rudder acting as an air-brake; the plane didn't rock violently as you would expect because it was so full of holes!

With oil and blood in his eyes and a windscreen covered in oil Johnson can barely see his target but he fires the .50 cal just as if to say, 'Hey, I'm not done yet.' Johnson said, "It did nothing but made me feel good that I was still in the fight!" The 190 slowly circles back to Johnson's six and he could

only watch. But to his utter amazement the German pilot pulled along next to Johnson. He slowly looks over the battered Thunderbolt. Johnson is thinking this guy's out of ammo but the German officer shakes his head in disbelief and gave Johnson a wave. He then goes back to Johnson's six and again lets loose a barrage of steel that rips through the aircraft. Johnson could only hunch his shoulders praying the armor plating and the rest of the ship will hold out. After the second attack the firing stopped after 45 seconds which to Johnson seemed like eternity. Mayer once again came along side Johnson this time out of ammo saluted him while banking away and out of sight.

This is just one of the many stories that proved the resilience of the Thunderbolt.

I met a pilot from WWII who told me that to impress your girl you stood next to a P-51 and sent the picture to her. If you went to battle and wanted to stay alive you took up the P-47.

C'mon out to a meeting, we won't bite!

**THE 56<sup>TH</sup>. FIGHTER SQUADRON USING ONLY P-47'S THROUGHOUT THE WAR HAD ANOTHER ACES, HUBERT ZEMKE, FRANCIS 'GABBY' GABRESKI**

also known as



[CLICK HERE](#)  
for more info

**Dive, Fire  
and Recover!**

This was the Wolfpack's motto.



Anonymous...

After you solder the pins for the EC type (blue) connectors take a wire stripper and clean the pin by the lip that snaps into the plastic connector.

*Going around the  
gate is a  
No-No!*



**T**he hunters are the ones who go out and kill. Maybe one out of ten good fighter pilots will be one of

the hunters.

Jack Ilfrey, USAAF,

## Scene Around the Field



## CHICKEN WINGS

BY MICHAEL AND STEFAN STRASSER

[www.chickenwingscomics.com](http://www.chickenwingscomics.com)







**...and then I heard this bad sound!...**

I took my Parkzone P-47 off the wall and finally replaced a flap servo that was ailing.



The first flight I heard a lite buzzing the kind of sound you need to either lie to yourself and like Sgt. Schultz in late sixty's TV sitcom Hogan's Heroes, "*I no nossing!*" and hope the catastrophic event that you really know is gonna happens doesn't. Or you really know not to push it and **LAND!** Also the elevator wasn't responding as it should. She acted very tail heavy. Flying the plane reminded me of the videos of folks fighting to land a sailfish in Miami. I quickly returned to the runway and belly landed.

### Upon further inspection

the elevator servo glue had dried and shrunk due to age. The servo popped up and out of the tray and was at gravity's mercy. *Whew!*

Next day I decide to take her up with a four cell vs. the three cell I always used. I have been flying my Parkzone T-28 and Parkzone Mosquito with the four cell and she comes to life. A Watts-Up amp test showed a draw of 29 against the 30 amp ESC's.

Up I go and immediately go full throttle looking for that speed. The ESC kept overheating and resetting. As I pull back on the throttle to 50% I hear a grinding noise. Once again **GET DOWN!**

### Upon further investigation

here's what I found; the four cell overheated the motor that was starting to go anyway. The solder melted and scarred the magnets which sealed it's fate.



Here you can see those rectangular magnets lined up.



The missing magnets I removed to look at them carefully.



The magnets are scarred. The lead solder has melted and has been picked up and thrown.

**For those that remember cars with generators and early starters that over heated the term, '*Throwing solder*' means something to you. When a electrical motor overheats the solder melts and bad things happen.**



"You're a bit low on approach, Flight 203!"



From the round file



**THIS SKYRAIDER HAS  
SEEN BETTER DAYS!**



**Sound familiar?**

**H**ow many turns do I set my needle valves, or I messed up the factory setting, how do I setup my low end needle so I can start my engine? Here are some great tips to make you an expert engine tuner.

## **How to setup the needles so you can get Your engine started:**

Start by opening the high end needle about 4 turns from fully closed. This is just a starting point to ensure the high end needle valve isn't restricting fuel to the carb so you can adjust the low end needle setting.

## **The low end is easily set to a good starting point with the following procedure:**

**C**lose low end needle valve completely. Install a clean piece of fuel tubing into carb fitting, make sure it is long enough for you to blow into it with your mouth.

**O**pen carb to 1/5 open from closed position. Blow into fuel tubing while slowly opening up the low end needle valve. Stop turning low needle valve when you first feel air blowing into carb from your mouth or hear the sound of air blowing into carb. The flow should be restrictive and very small. We only want a small amount of fuel to flow (*air to flow*) at 1/5 throttle opening. This low end needle setting will get your engine running and may require further adjustment.

***This is just a ball  
park setting.***

**N**ow close high end needle valve and open carb to full throttle. Blow in fuel tubing and

simultaneously open high end needle until you have **FREE FLOW** of air into carb. You should not experience as much resistance to air pressure as you did on the low end. Your needle valve should be open between 2-5 turns (*it all depends on the carb folks*).

**T**his procedure guarantees you don't have a blocked carb or closed needle settings for low and high. This will get you in the ballpark which then will require you to fine tune your low end and high end for best performance--highly recommend the pinch test .

## **Pinch test procedure:**

**F**irst start engine this way:

Prime engine by opening up throttle to full and blocking exhaust with finger. With blocked exhaust, rotate engine until fuel just enters the carb and watch the fuel line to see fuel displacing the air in the fuel line.

## **Remember the following rules about needles:**

- 1.** Low end needle affects the mixture below 1/2 throttle for most engines. Use it to adjust the idle and the transition from idle to full throttle.
- 2.** High end needle affects mixture above 1/2 throttle. Adjust it so engine is running 300-400 rpm shy of max lean rpm at wide open throttle.



**R**educe throttle from full to about 1/5 throttle opening. Apply glow ignitor and rotate engine (hopefully w/ starter) counterclockwise (for 99% of all engines out there) until engine starts. When engine starts, move throttle to 1/2 throttle and then remove glow driver.

**I**f engine won't start, try more throttle until it does. If engine will only start above 1/2 throttle, it means your initial low end needle setting was too lean. Richen it about an 1/8th of a turn until the engine starts at a low throttle (1/5 throttle) setting.

**I**f engine will not advance to 1/2 throttle w/ glow driver is on then leave at 1/5 throttle with glow driver until engine is warmed up-about 2 minutes should do the trick.

**A**dvance throttle again to 1/2 throttle slowly. If engine dies then your low end needle is probably too lean. Richen by 1/10 increments.

**O**nce you can get your engine running at 1/2 throttle then its time to remove the glow driver/ignitor. With ignitor removed, advance throttle to full throttle. Chances are your engine will be too rich and may even quit. If so, briefly pinch and release fuel line as you advance to full throttle to verify the mixture is too rich. If it is too rich, then in small increments lean it out until it will run at full throttle without quitting. This does not mean the high end mixture needle is set. This is just a starting point to ensure your engine is running at wide open

throttle (WOT) so you can make the proper adjustments.

**W**ith engine running at full throttle, slowly and carefully lean the high end needle valve until the engine is spinning at its max rpm. This can easily be determined by sound alone-no tach needed. This is where engine is producing most power but the mixture setting will cause the engine to run too hot and overheat. So, as a safety feature, always richen the mixture about 300 rpm shy of max lean rpm. Verify this by briefly pinching and releasing the fuel line to the carb. If the pinch test causes the engine to speed up and back down, then you have correctly set your high end needle setting. If engine doesn't speed up much or dies then you are still too lean and need to richen the mixture slightly until it passes the pinch test.

### You are almost there.

**W**ith high end needle setting set about 300 rpm rich of max lean rpm, recheck idle and transition. Let engine idle for 30-60 seconds and then snap throttle to WOT. If engine hesitates in the transition, fine tune mixture so that the transition is snappy and idle is reliable. I personally like a lean idle mixture so I can idle for long periods without fuel pooling up in the crankcase which causes stumbles when transitioning to full throttle. You can also use the pinch test when the engine is idling. Pinch and hold fuel line with engine at a fast idle. Engine should speed up and die about 4 seconds. If it takes longer,

your low end needle is too rich, if it takes less time or if your engine dies instantly, you are too lean and need to richen your low end needle.

**O**nce low end needle is set, you will probably never have to adjust it again. However, your high end needle should be checked before every flight by doing the pinch test at WOT to verify the mixture is slightly rich.

**T**his 5 second test and adjustment, if necessary, will guarantee you a reliable engine that will last a long time. Our carbs do not adjust for changes in temperature, humidity, barometric pressure, etc... and a small change of 5 degrees in temp can cause a properly tuned carb to be out of tune and possibly too lean (*or too rich depending on whether it gets hot or cold outside*). Hope this essay helps the newcomers to our hobby and prevents them from becoming one of the set it and forget it crowds that do not benefit from optimum tuning for the best engine performance and longevity out of an engine.

Thanx goes to my pal

**HOMEBREWER**

from **RC Groups.com**

I hope to see you at Workday. We always need a hand. Work as much or little as you can we're not choosy!

**Until we read again!**

*'Chef' Marc*