



Scott Calvin's Winter Project

After having a mini hangar sale....Scott ordered his winter project:

<http://www.ohiomodelplanes.com/65yak/>

Yak 54 Profile



Wingspan: 65.25"

Wing Area: 1200 sq in

Length: 59.5"

Weight: 7 lbs

Engine: .75 - 1.20 2-trk,
.91 - 1.25 4-strk

Scott has the fuse done and will get to the wings next. See the next page for some construction pictures.

CALENDAR OF 2007 EVENTS

Dec **CNX** **No meeting scheduled for December**

Jan 13 Next ESRC Meeting at the Glen Carbon Senior Center

TBA New Years Party

SAFETY FIRST

EVERY MEMBER IS A DEPUTY SAFETY OFFICER

Club Officers

President	Scott Calvin
Vice President	Craig Watson
Treasurer	Ron Moidel
Secretary	Earl Westergom
Safety Officer	Ryan Von Talge
Membership	Cliff Wisser

Board Members

Roger Watson, Cliff Wisser, Dwight Hayden & Tom King

Club Instructors

Fixed Wing

Scott Calvin
Mike Wilson
Tom King
Ron Moidel

Helicopter Training

Scott Fitzgerald
Ryan Von Talge

Aviation Truism *(Mostly True)*

"If you are gonna fly low, do not fly slow."

Anonymous Anti-submarine Warfare pilot

Scott's Yak Under Construction



This is a picture from the web site to give you a feel for the size of the completed model.

Great looking!

Check this out

You are not going to believe this demonstration of a B-29 and the Bell X-1. I recommend that you go to full screen viewing to really get the full affect of this man's ability.

This model B-29 is powered by four chainsaw engines. Think of the time and money that went into this project.

<http://users.skynet.be/fa926657/files/B29.wmv>

Enjoy! Ron Moidel

Hi Guys, Thought you might enjoy these links.

1929 Ford 4-AT-E Tri-Motor Airplane
<http://www.ipass.net/ginkgo/N9612home.html>

Tony Ferguson

1/4 scale cub for sale.

It is a clipped wing 81" ailerons needed. Plane only no electronics or engine. Never crashed - - selling to fund a new 27 percent extra. \$120.00

Also two channel electric plane RTF 550 motor brand new in the box \$75. Also a 70 size 3D profile 59 in wing span brand new \$110.00

Contact Jeffrey Anderson 314-283-9732 thank you.

Pilot and the Priest

A priest dies and is waiting in line at the Pearly Gates. Ahead of him is a guy who's dressed in sunglasses, a loud shirt, leather jacket and jeans.

Saint Peter addresses this cool guy, "Who are you, so that I may know whether or not to admit you to the Kingdom of Heaven?"

The guy replies, "I'm Peter Pilot, retired American Airlines Pilot from Dallas." Saint Peter consults his list. He smiles and says to the pilot, "Take this silken robe and golden staff and enter the Kingdom." The pilot goes into Heaven with his robe and staff.

Next it's the priest's turn. He stands erect and booms out, "I am Father Joe, pastor of Saint Mary's in Pasadena for the last 43years." Saint Peter consults his list. He says to the priest, "Take this cotton robe and wooden staff and enter the Kingdom." "Just a minute!" says the good father. "That man was a pilot and he gets a silken robe and golden staff, and I get only cotton and wood. How can this be?"

"Up here... we go by results," says Saint Peter. "When you preached -- people slept. When he flew, people prayed."

Aviation History

Boeing P- 26 “Peashooter”



Wingspan	8.5 m (27 ft 11 in)
Length	7.3 m (23 ft 11 in)
Height	3.1 m (10 ft 2in)
Weight	Empty, 996 kg (2,196 lb)



Beautiful Airplane



Known affectionately as the "Peashooter," the Boeing P-26 fighter was a turning point in military aircraft design.

It introduced the concept of the high performance, all-metal monoplane fighter. Nevertheless, while representing a radical departure from previous wood-and-fabric biplane designs, the P-26 retained features of its predecessors: it was the last open-cockpit fighter accepted by the U.S. Army Air Corps and the last with a fixed landing gear and external wing bracing. It was the last military fighter airplane manufactured by Boeing, and served as America's first line of air defense in the mid-to-late-1930s, until it was superseded by the more advanced Seversky P-35 and Curtiss P-36A.

Design of the P-26 started in September 1931 as a joint Boeing/Army project. The new airplane incorporated features proposed by both parties. Boeing was to construct the airframe with the Army providing the engines, instruments, and other necessary equipment. Construction began on the first prototype in January 1932, and the first flight took place on March 20.

The continued success of the prototypes prompted the Army to contract for 111 improved production aircraft in January 1933 under the designation P-26A. The initial contract was increased by twenty-five new airplanes, which were B and C models. This brought the total production to 136.

The structure of the P-26 was based to a great extent on experience gained in creating the Boeing Monomail and other Boeing all-metal designs. However, unlike the Monomail, the Peashooter did not have cantilevered wings or retractable landing gear. Boeing engineers opted for the lighter structure that external bracing allowed. The fixed gear produced considerable drag, but it greatly reduced weight and structural complexity.

The fuselage was of semi-monocoque construction with aluminum bulkheads, formers, longerons, and skin. The wings were built of duralumin with two main spars supporting the ribs and the skin, which were braced with external steel wires. The fully cantilevered tail surfaces were of single spar, metal skin construction.

Power was provided by a 600-horsepower, nine-cylinder air-cooled Pratt & Whitney R-1340-27 *Wasp* radial engine, enclosed in an NACA cowling ring.

Maximum speed in level flight was 234 mph at 7,545 ft, with a service ceiling of 27,400 ft. Armament consisted of either two .30-caliber machine guns or one .50-caliber gun, synchronized to fire through the propeller arc. Two 45-kg (100-lb) pound or five 13.6-kg (30-lb) bombs could also be carried.

Originally, P-26As were built with streamlined headrests. Following the death of an Army pilot when his airplane overturned on landing, all P-26s were modified with a larger and strengthened headrest for increased protection.

After P-26A production had been completed, the Army sought to reduce the inordinately high landing speed of the airplane by installing experimental flaps on a P-26. The modification reduced the landing speed from 132 kph (82.5 mph) to 117 kph (73 mph). Boeing retrofitted the flaps to all A models and equipped the B and C models that were under construction. P-26Bs and Cs were identical to the P-26A with the exception of the installation of a fuel-injected R-1340-33 *Wasp* engine and modifications to the fuel system.

When the P-26 was removed from regular service, those aircraft stationed overseas were sold to the Philippines or were assigned to the Panama Canal Department Air Force (a branch of the U.S. Army Air Corps). Eleven P-26As were sold to China and one to Spain. Those serving with the air forces of China and the Philippines fought gallantly against the invading Japanese, scoring numerous successes before their destruction by the more numerous and modern aircraft of their adversaries.

The AMA News Page



www.modelaircraft.org

Glow Plug Problems

Today's glow plugs are well made products and they should give you good service. Although the life of a glow plug is unpredictable, you should reasonably expect a dozen or more flights out of one. It's always best to follow the manufacturer's specific glow plug recommendations, but if you have an engine that seems to eat glow plugs, the probability is that it is suffering from one of the following three causes:

Overheating: A glow plug coil will melt if it gets too hot. Reasons why this happens vary. Sometimes the combination of running an engine wide open with a lean setting before you take the glow plug heater off is too much for the element. Quite often people use a power panel which has a built-in surge feature, which sometimes results in a momentary over-voltage to the plug when the power is first switched on. When a glow plug fails because of overheating, the end of the element wire has a tear drop shape at the break. Sometimes a microscope is needed to see this affect.

Vibration: If the engine is soft mounted the element is shaken from side to side with tremendous force. This literally fatigues the metal until it breaks. When you look at the end of the element wire break through a microscope it has a jagged, rough type appearance. The only solution is to increase the rigidity of your engine mount.

Shockwave: Most model engines use a steel or brass liner mounted on top of a cast aluminum case. As the engine gets older, the liner flange works its way down into the case and lowers the head with it. When the piston clearance gets too low the increase in compression forces air out of the squish band area with supersonic velocity and the action on the glow plug elements is like when a jet plane zooms over your house and knocks out the windows. The cure here is to raise the head with another head gasket.

Less common reasons for failure: Cranking the engine when it's flooded sprays raw fuel onto the plug and the droplets beat the element over to the side of the housing where is shorts out.

Another problem that occasionally occurs is that engines sometimes wear abnormally, causing a crankshaft to crack, bearings to fail, or a connecting rod to chew metal off the crank pin. Of course, when this metal goes up and deposits on the plug element, and the plug burns out.

The Secrets Behind Building and Improving ARF Models

by Jim Soque

I would like to contribute certain ideas of how to make your ARF airplane more signature and a better built ship. More familiarity with your model will only improve your piloting skills and increase your confidence as a flier. The suggestions I make in this article are my own and from my own experience:

- Read your instruction manual from cover to cover.
- Take inventory of all the parts listed in the manual.
- Measure the engine mounts; change them if you think they are too short.
- Mount the engine to the engine mount with socket-head screws, washers, lock washers, and lock nuts.
- Use a ball-link for the carburetor pushrod on the engine.
- Change the tank to one you are familiar with.
- If a third tube is used for fuel-filling purposes, use additional hose and a clunk.
- Trim the cowl with a router/sander tool, and use a vacuum cleaner with hose to vent the fiberglass dust away from you.
 - When drilling the holes in the cowl, enlarge using a drill bit wrapped with some 220-grit sandpaper gradually.
- Attach a flexible pushrod material to pull the fuel hoses forward through the firewall.
- Cut the ventral vent hole three times the size of the air intake hole. This allows for maximum cooling of your engine.
- Measure the stabilizer tips to a center point over the cabin using an aluminum ruler and take note in centimeters, not inches. Measure twice and always use epoxy.
- Level any imperfect surfaces with your eyes, then put a level on it. Take away any balsa with a hobby knife.
- Use a 90° angle device for your vertical fin, or try a laser leveling device.
- If your kit comes with 2mm or 3mm hardware, switch it to 2-56 or 4-40 hardware instead.
- Change the supplied wheels to wheels with tread. Don't use cheap wheel collars.
- Use a hinge-slotting tool (I prefer electric) to widen the pre-cut hinges on control surfaces. Use slow cyanoacrylate glue on the hinge surfaces edge, then insert the hinge.
- Z-bend the links for the control rods at the servo arm end.
- Mount your cowl with beefier screws and washers.
- Mount your switch harness and charging jack opposite from the exhaust side of the aircraft.
- Use a glow-extension device for any inverted engines.
- Use scrap fuel line pieces to secure your clevises.
- Tape any servo extensions to the servos main wire for insurance.
- Run the antenna wire inside the fuselage and out the back whenever possible.
- After you finish, test run your engine, high and low end, before coming out to the field.
- Fully charge everything before packing it up and heading to the field. →

Safety is Everybody's Business

by Jim Rice (From the AMA Insider News Letter, Nov 7, 2007.)

If you are an AMA member, you need to be concerned with safety at your flying field. It is easier to take the heat from a fellow club member for correcting him or her for a safety violation than it is to take that same person to the hospital or the morgue. I own a hobby shop and it used to worry me to stop people and correct them on safety issues but one day it dawned on me that if one person creates a serious enough safety incident it could cost us a field, which would really hurt my business. If that person maimed or killed another good customer/friend. If they did any of that without me trying to intercede and make a difference, then I would probably never forgive myself.

So, the result has been that I take safety to heart every day at every field and I am as gentlemanly and tactful as I can possibly be so as not to aggravate a customer while at the same time fixing a problem at the field. Generally it is not necessary to scream at or humiliate a person who is violating safety rules, a gentle reminder can usually do the trick.

However, if it is really serious and a nudge doesn't do the trick, it may be necessary to take a more forceful approach or even call in assistance from your club's board of directors. It is important that we all have the opportunity to fly in a safe environment. I have seen pilots land, pack, and go home to avoid flying with or being around a pilot who is dangerous or drinking and flying. That only allows the standard to be lowered.

Complaining to each other about the problem without confronting it only aggravates you and your friends while appearing to condone the activity. Find a way to bring it up or get someone else to do it but don't wait until the next club meeting or tattle to the Safety Officer. It really needs to be fixed at the time of occurrence so it can be discussed, if necessary, between all parties present at the time. Every accident involving safety should be drilled into your mind and reviewed from every aspect to ensure that you know what caused it, what should have been done to avoid it and what you will do in the future to prevent recurrence.

I had a friend hit in the face with a Taurus and it buried the Enya .60 in his cheek all the way to the carburetor. As it turned out, the injured guy had gone dead stick and was walking across the runway to retrieve his airplane and the other guy was making a low, fast flyby. He was turned toward his airplane and could not see the first guy walking onto the runway behind him. He saw him only as his airplane collided with him.

It was all avoidable! Simple communication between pilots would have prevented the incident. I make sure I loudly call out "On the field" and make sure everyone in the air at the time acknowledges before I walk across the dead line and then yell "Clear" when they can use the runway again.

A second incident involved a man starting a G-62 with a starter and the assistant holding the large aircraft by standing in front of the horizontal stabilizer. As the starter was pressed against the spinner, the airplane moved backward between the holder's feet and simultaneously the engine started. As the man with the starter looked down to put the starter down, the airplane at a high idle moved back forward until it came to rest on the holder's ankles.

The man starting the engine just saw the airplane moving and thought his friend had released the airplane so he tried to reach over the propeller and grab the fuselage to stop the airplane. In the process, he got his forearm in the propeller and got several deep cuts in his arm requiring a trip to the emergency room and several stitches.

I reviewed the incident with an eye toward ensuring it never occurred when I was holding an airplane. The best answer is to kneel or crouch down and hold the airplane with your hands, however many of us are older, heavier, and lazier than others.

What I do now is stand over the airplane with the leading edge of the stabilizer against one ankle and then I place the other foot forward so that the trailing edge of the wing is against the shin. That way, the airplane cannot move back as the starter is applied and cannot move forward when it starts. If the airplane is big enough or is a biplane, I can stand with the stabilizer against both ankles then bend at the waist and hold the canopy or top wing to stop the airplane from moving to the rear. Restraints are good but they do not stop the airplane from moving back when the starter is applied.

Be Safe and enjoy the hobby.