OFFICIAL NEWSLETTER OF SANDERSON FIELD R.C. FLYERS SHELTON, WA

# SANDERSON FIELD R.C. NEWS CHARTER NO. 3079

# CLUB MEETING

This months meeting will be held on Thursday August 12th at 7:00 pm

at the field.

June:

We finally held the raffle for the Lanier F-86 donated by Joe and Debralee Hein. The raffle was won by Gary House. Gary would like to sell or trade the F-86 see the ad in this newsletter.

Jody found the Gate wide open and wanted me to remind everyone that we are required to lock the gate behind us **at all times**, even if it's open when we get there.

The demonstration for the school went very well. Thanks to all the volunteers!

Jerry Reynolds soloed in June and got a Solo Certificate (thanks Sharon).

July:

July's meeting was led by the Vice President Dick Robb.

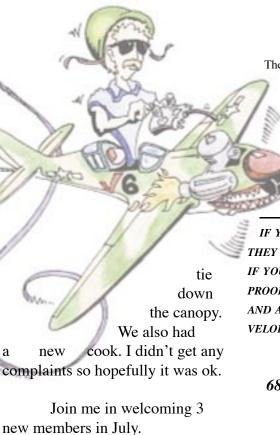
Money was approved for the fly-in on the 10th.

There was no board meeting in July.

There was an incident with a jet crashing in the woods and one

result of this mishap was a discussion of the possibility of some new rules for jet pilots. More info as it becomes available. See Pg. 2 Meeting adjourned at 7:30

The fly-in was fairly well attended even though it wasn't the best day for flying, it was windy enough we felt it was necessary to



Brian Husingh, Larry Claussen and Kyle Woyshnis.

For Sale or Trade:



Lanier F-86 Sabre

• Wing area - 531 square inches • Fuselage length - 48"

- Estimated flying weight 5.3 lbs
- Channels/Servos necessary -4

The model is pre-assembled and has been flown once. drop in your receiver,

servos and motor and your ready to go.

will sell for \$150 or trade for NIB OS 46ax.

Contact Gary House at (360) 427-3990

IF YOU HAVEN'T PAID YOUR DUES YET THEY ARE NOW LATE AND ARE \$40 IF YOU PAY BY MAIL SEND YOUR DUES, PROOF OF 2004 AMA membership AND A SELF ADDRESSED STAMPED EN-VELOPE TO THE TREASURER:

CHUCK KENTFIELD 6843 Gallagher Cove Rd NW Olympia WA 98502

If you really want to slow the process down send it to the secretary.

<sup>•</sup> Wingspan - 52.5"

<sup>•</sup> Engine - 40-47 two

# NOTICE:

We recently had a turbine crash in the woods. We were lucky and no fire resulted, however the board decided we should add the latest AMA turbine safety regulations to our own procedures. This way everyone can be made aware of the changes.

I'd like to take this time to remind everyone that we are all safety officers and if you see an unsafe act we need to respond accordingly.

You can get the new regulations by going to the AMA web site and downloading Document #513

Titled: Safety Regulations for Model Aircraft Gas Turbines

You can also go to our website and download the *Club procedures* from the info page.

http://sfrcf.quintex.com/Info.html

# HISTORY LESSON

#### The story of WD-40

#### Submitted by DAVE DAGGY

The product now known as WD-40 began as a search for a rust preventative solvent and degreaser to protect missile parts.

It was created in 1953 by three technicians at the San Diego Rocket Chemical Company. Its name comes from the project that was to find a "water displacement" compound. They were successful with the 40th formulation, thus WD-40.

The Corsair Company bought it in bulk to protect their Atlas missile parts. The workers were so pleased with the product, they began smuggling it to use at home. The executives decided there might be a consumer market for it and put it in aerosol cans. The rest, as they say, is history.

It is a carefully guarded recipe known only to four people, one of whom is the "brew master." There are about 2.5 million gallons of WD-40 manufactured each year. It gets its distinctive smell from a fragrance that is added to the brew.

WD-40 has been designated the official multipurpose problemsolver of NASCAR, a ringing endorsement if there ever was one. I told my NASCAR-loving sons about this, and they said they couldn't imagine how WD-40 could solve the Jeff Gordon problem.

In celebration of their 50th year,

the company conducted a contest to learn the favorite uses of its customers and fan club members (yes, there is a WD-40 Fan Club). They compiled the information to identify the favorite use in each of the 50 states. I was curious about Georgia and Alabama and found the favorite use in both states was that it penetrates stuck bolts, lug nuts, and hose ends. Florida's favorite use was "cleans and removes lovebugs from grills and bumpers." California's favorite use was penetrating the bolts on the Golden Gate Bridge.

Let me close with one final use the favorite in the state of New York: WD-40 protects the Statue of Liberty from the elements. No wonder they've had 50 successful years.

from The Tail Spinner Longmont Aircraft Modelers Association Mike Guliza, editor Longmont CO

# **Engines:**

#### MOUNT DIRECTION AFFECTS EASE OF STARTING ENGINE

#### By ED MOORMAN

The direction you mount your engine upright, sideways, or inverted can have a considerable effect on how easy it is to start and run. I am going to discuss the pros and cons of each method, but first there is an important item that might be overlooked: the fuel tank location. Locating the fuel tank correctly could play a major part in the direction you mount your engine.

If you are not using a fuel pump or regulator (and most people don't), the carburetor jet should be at a location level with, or no more than a quarter inch below, the centerline of the tank. This will give the most consistent engine runs.

# CLUB OFFICERS

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Board Member	Darryl Casad	(360)275-8690
Alt Board Member	Bob Beatty	(360)426-5601
Alt Board Member	Chuck Kentfield .	(360)866-9473

#### The carburetor jet

For most engines, the carburetor jet is even with the needle valve. Some carburetors have an offset, or even remote, needle, so lets use the jet.

Look into the carburetor of your engine. There should be a tube down in the throat running part or all the way across. If the tube runs all the way across, the jet is on the bottom. This jet should be even with the center of the tank. If the tank is too low, the engine will lean considerably during flight. If it is too high, the engine will tend to flood easily and run rich.

When the tank is properly located and the engine correctly set, the engine should run slightly rich for the first minute or so. Then, it should run at full power for the remainder of the flight.

#### Trainer maladies

Take a look at your trainer or another airplane with the engine mounted upright. I'll bet the carburetor jet is at or near the top of the tank. If this is the case, your engine will lean out considerably during the flight. Muffler pressure helps some but still does not cure the problem. Raising the tank is the only effective solution.

#### Upright mounting

An upright mounted engine is the easiest to handle. The controls, low and high speed needles, and the fuel nipple are in sight and easy to access. In addition to being the easiest to handle, this is also the safest, especially when you are just learning to fly. A hard landing usually results in nothing more than a broken propeller and bruised ego.

Balanced against this is the fact that an upright engine is easy to flood. Fuel can only run into the crankcase so you need to be careful of over-choking before attempting to start. Also, if you do not unhook your pressure line when you are filling your tank, the overflow goes into the muffler. This excess fuel can run from the muffler into the cylinder, causing flooding and a possible hydraulic lock during start.

Another possible detraction of upright mounting is many kits with upright engines have the tank mounted very low. This results in lean runs. When you are breaking in an engine and running it sloppy rich, this doesn't matter much. However, when you want the engine to scream, a low tank can mean a lean setting at the end of the tank. In the worst case, this will result in an overheated engine, a blown glow plug, or a possible engine seizure.

#### Side mounting

This is my favorite engine mounting direction. The engine is fairly easy to run. The main needle valve is easy to get to, but the idle needle is now underneath, meaning you have to lift the airplane or turn it over to make an adjustment. I hope you will only have to do this a couple of times when the engine is new, so this problem won't be a big concern.

It is harder to flood a side-mounted engine as excess fuel can run out of the carburetor onto the ground rather than into the crankcase. It is also much easier to get the correct tank location with side mounting. All you have to do is put the tank directly behind the engine and the proper location is assured.

A minus for side-mounted engines, especially for new fliers, is the muffler. If you make a fairly hard landing, the nose gear may bend enough for the muffler to hit the ground. I have seen cylinders torn completely off the engine and the piston hanging in the breeze after a hard landing where the muffler hit the runway.

#### Inverted mounting

Many people don't like inverted mounting, although it is popular for Scale and Pattern airplanes. An inverted engine is actually hard to flood all the fuel tends to run out of the carburetor onto the ground. However, it is hard to clear a flood if you do have one. You need to turn the airplane over, remove the glow plug, or both.

Inverted engines also are harder to start by hand until you master the technique. Many people turn the airplane over in a cradle to start the engine the first time. For subsequent flights, the engine should start easily.

The tank should be placed lower in the airplane since the carburetor jet is lower. This can be a problem for some designs.

Inverted mounting is the most

streamlined, especially when using a rear exhaust engine. If you have not used a rear exhaust engine before, talk with someone in your club who has one before you go out and buy one. Nearly all rear exhaust engines are pipe-tuned and do not come with mufflers.

Well, there you have it: the whys and wherefores of engine mount direction.

from TRCC Noise Tucson Radio Control Club Chuck Brooks, editor Tucson AZ

#### TIP TIME:

#### How toe-in helps model aircraft

#### Submitted by RUSS O'BRIEN

In airplanes, toe-in aids in keeping an airplane going straight during takeoff roll and landing roll-out, particularly with tail-draggers. Airplanes with tricycle gear have the center of gravity (CG) forward of the main gear. This helps straighten out an airplane that has developed a yaw angle between where it is pointed and where it is actually going. A taildragger has the CG behind the main gear and a slight yaw angle is not automatically corrected but is made worse and can result in ground loop. Here is where toe-in of the wheels helps both types. An airplane rolling straight ahead has equal drag from each of the wheels. When it takes an unwanted turn to the left, the drag from the left wheel goes to zero while the drag at the right wheel increases. The net effect is the unbalanced drag exerts a retarding force and turns the airplane back to the desired

direction. This wouldn't happen without toe-in.

from Plane Talk Aerobatic Aces Bob Van Singel, editor Three Rivers MI

#### Hints and tips

#### Free building materials

It's election time and soon there will be tons of free building material available. In most parts of the country, coroplast signs are used by people running for office. Almost everywhere, the signs have to be down within a few days of election. If you see a sign up past that date, do your civic duty and toss it into the trunk of your car. It's great for things like elevators or even building whole 1/2A airplanes. Last year, I saw a 75 mph airplane with the wing built out of coroplast. Check out some of the SPAD Radio Control sites on the Web for some creative uses.

Another thing to keep your eyes open for is new-home construction. Formica discards are great for making durable templates to cut foam wings. Even short lengths of two-by-fours can be cut into pine wing spars if you have a table saw. Scraps of foam bead board are useful to cut foam wings or even wing tips.

from Great Plains Combat News Control Line Combat Newsletter for the Great Plains Bob Furr, editor Omaha NE

Cut-off wheel sets

from Fred Huber

Sears sells a diamond cut-off wheel set that fits Dremel and Black & Decker "Wizard" mototools. These wheels eliminate the frustration when dealing with fragile "sand" wheels you buy 20 at a time and break each time you use them. The package comes with two wheels and the mandrel and is inexpensive. No more fragments of cut-off wheel flying around the shop (but you should still wear safety glasses)!

#### Holes for wing dowels

A standard scenario for installing holding dowels in the leading edge of the wing is to put the wing in place on the fuselage, mark it through the pre-drilled holes, remove it, and drill for the dowels. The problem is when you drill, the drill bit "wanders" slightly and the alignment is off.

Solution? Use a piece of brass tubing as a hole saw. Cut teeth in one end and glue into a piece of hardwood for a handle. Now you can start the hold with the wing in place. Pushing and twisting the tubing allows you to cut right through balsa and even light plywood with little effort. Put a small piece of dowel in your first hole so the alignment stays accurate for the second hole. Note: A longer piece of brass tubing, with teeth on the end, can cut nice holes in the aft fuselage for nyrod exits.

from Plane Talk Aerobatic Aces Bob Van Singel, editor Three Rivers MI