



# PROP WASH

December, 2010

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

VOLUME 58



## Fall Fun Fly

On October Sunday, October 17<sup>th</sup> the Lewes RC club held its Fall Fun Fly. The wind did not spoil all the fun. Soup still ran two events including the timed 2 minute flight and a "dead stick" landing. Thanks again Soup!!!

**Dead stick landing:** Winner was **John Pulli!** Second place – **Charlie Parsons**

**Timed 2 Minute Flight:** Winner **Dawson Gillaspay!** Second place – **Charlie Parsons**

Bruce and others were also featured on WBOC's "Outdoors Delmarva." You all made us proud!!! Even Paul's broken prop☺

**Obituary for William N. Hopkins, Green Acres owner**

William N. "Bill" Hopkins, 91, of Lewes, born Aug. 5, 1919, the son of Alden S. Hopkins Sr. and Margaret (Reynolds) Hopkins, departed from his home to be with the Lord Friday, Oct. 29, 2010.

William was owner and operator of Green Acres Farm (Hopkins' Dairy Farm) near Coolspring, from 1943 to the present. He took great pride in opening his farm annually for educational tours for Sussex County elementary school age children.

He graduated Lewes High School, class of 1937; and earned a bachelor of science degree in agricultural education from the University of Delaware, class of 1942. He was an organizer and the first secretary of the Delaware Farm Bureau; director of federal ASCS programs in Delaware under the Eisenhower Administration; director of Land-O-Lakes Milk Cooperative and related milk marketing organizations for over 20 years.

William was highly recognized throughout his agricultural career with many awards. In 1983, he received the Sussex County Service Club's Service to Agriculture award; in 1984, the George M. WorriLOW Award, Service to Agriculture by Alumni of University of Delaware; in 1987, Delaware Holstein Association, Distinguished Service Award; in 1988, Sussex Vocational Technical Center - 18 years of loyal, dedicated service; in 1954, "Corn King" of Delaware producing 153 bushels per acre; in 1958, USDA Award of Merit; in 1990, designated Master Farmer of Delaware/Pennsylvania; and in 2010, received the 75 years certificate of membership in the Henlopen Grange.

In service to his community he was president of Lewes special and Cape Henlopen school boards; appointed to the original Sussex Vo-Tech school board; president of the Lewes Rotary Club; and was a 65-year member of Jefferson Lodge 15 AF&AM.

William was predeceased by his wife of 63 years, Dorothy Elizabeth (Cann) Hopkins in 2005. He was preceded in death by his parents; his grandson William Andrew Hopkins; great-grandson Ethan Max Williams; and his brother Alden S. Hopkins Jr. He is survived by his two sisters, Grace H. Hitch and Gladys H. Phillips both of Seaford; brother, George W. Hopkins of Lewes; children: the Rev. Diane E. Melson and her spouse Franklin Jr., of Bridgeville, the Rev. William C. Hopkins and his spouse Cathy, of Lewes, Nancy H. Lank and her spouse Christopher, of Milton, Walter C. Hopkins and his spouse Jenny, of Lewes, Dorothy H. Farmer and her spouse Richard, of Greensboro, Ga., Patricia H. Dieringer and her spouse Donald, of New York City, Dr. Brinton A. Hopkins and his spouse Kathy Ann, of Raleigh, N.C., Joseph R. Hopkins and his spouse Wendi, of Putnam, Conn., Marian H. Harvey and her spouse Todd, of Chesapeake City, Md., and Samuel R. Hopkins of Parrish, Fla.; 24 grandchildren; and 20 great-grandchildren.

Funeral services will be held at 11 a.m., Monday, Nov. 8, at Parsell Funeral Homes & Crematorium, Atkins-Lodge Chapel, 16961 Kings Highway, Lewes. Friends and family may call at the funeral home from 6 to 9 p.m., Sunday, Nov. 7, with Masonic services at 7:30 p.m., and also at 10 a.m., Monday morning. Interment will be at Coolspring Presbyterian Cemetery. In lieu of flowers, the family suggests donations to the Delaware 4-H Foundation, William N. and Dorothy C. Hopkins Family Endowment, 113 Townsend Hall, 531 South College Avenue, University of Delaware, Newark, DE 19716-2210 and the Tunnel Cancer Center, c/o Beebe Medical Foundation, 424 Savannah Road Lewes, DE 19958.

## Protecting Yourself From Hazardous Materials

by Chris Myers Notam, Bayou City Flyers, Katy, Texas

If we caught our kids out in the garage sniffing paint or glue, we would send them to counseling. Yet, as adults we do this and call it modeling.

Last year I read an article about a man who was working with acetone in his house. After using it, he almost collapsed. Getting out of the room and lying down, he returned to normal.

When I look at the shelves in my work room, the chemicals stored there range from Balsarite to various spray cans, paint, lacquer, pesticides, etc., to CA to acetone, along with a couple cases of fuel. In addition to this, I use balsa and do a lot of sanding, creating particles to clog my lungs.

In the process of repairing and maintaining our aircraft, our hands come in contact with several hazardous materials. Our body absorbs these chemicals, and consistent exposure to them can be a danger to your health.

If you dissect our hobby, it quickly becomes apparent that we often spill fuel and CA on our hands. We sniff the paint and glue fumes and use grease and oil in our maintenance. It all gets on our hands. If you are an active modeler, you have a lot of exposure to hazardous materials.

Below is a list of a few items you may want to keep around the workshop. They should help minimize the risk of exposure to hazardous materials.

1. Get a fire extinguisher.
2. Go to an auto paint and body shop and pick up a good face mask.
3. Buy a small fan for ventilation. **[Tech editor's note:** A large fan is recommended. In order to move more air, a small fan must be run at a higher speed and that causes some of its own problems. A large fan running slow moves sufficient air without making other problems.]
4. Work in a room that is properly ventilated.
5. Buy a box of rubber gloves.

Our hobby is great fun, but more than the propeller deserves some serious attention to keep you from being in harm's way.

Fly safe and have fun. →

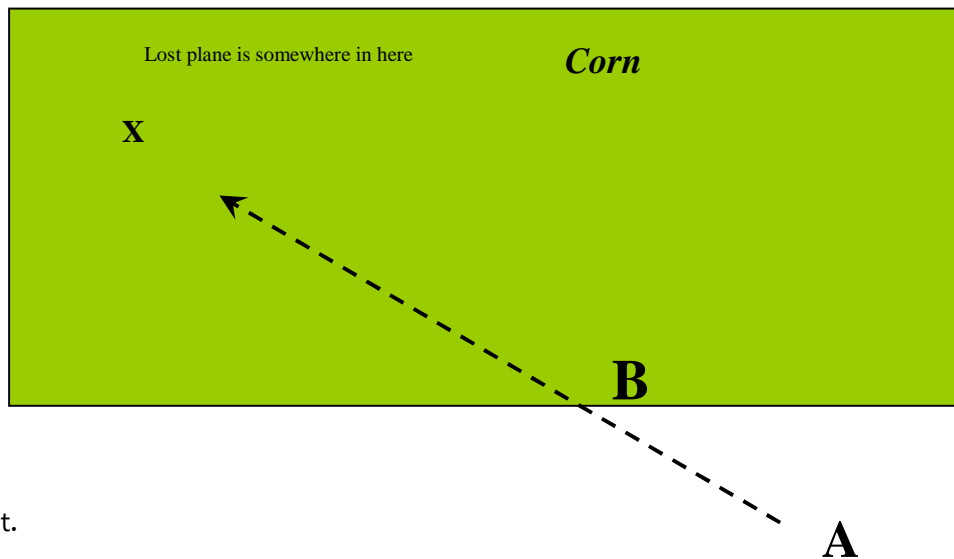
## FINDING LOST R/C AIRPLANES USING GPS

by Jon Joyce

A few years ago, I published instructions for using a handheld GPS unit to locate downed airplanes in corn or other heavy cover. Since that time, unknown forces continue to lure R/C airplanes from Hopkins Field into the corn. Working groups form to search using two-way portable radios and long poles, but to my knowledge, GPS units have not been employed. I recently ran across a copy of my old article and realize it was not as clearly written as it might have been. I have rewritten it to see if it finds wider application. A good time to field test the method is now while the corn is down.

Handheld GPS units retail for around \$100 and have a couple of features that are particularly useful for this application. Using latitudinal and longitudinal coordinates, the GPS can store geographic locations (called Waypoints) to an accuracy of within a few feet. A simple press of a button records the location of the GPS at that moment – in your hand, most likely. A second useful feature is a map that records a breadcrumb trail where the GPS unit has been traveling.

Using GPS Waypoints, the R/C pilot can efficiently search cover that is over his head without being able to see a reference point. Old School: absent GPS, when the plane goes down “out there somewhere” in the corn, a line of communication must be maintained between someone at the base who can see the big picture, including the searchers carrying a long pole, and the searchers being guided to the suspect location of the plane. We have all been there. New School: the handheld GPS does not need to see anyone or require communicating – it needs to see only the satellites. Thus, the pilot can conduct an efficient search for his airplane without the aid of others. (continued on page 4)



Here is how to do it.

The first and most difficult step is for the pilot to get an accurate line on where the aircraft went down. One reasonably reliable method used by some is simply to lay the R/C transmitter down with the extended aerial pointing to the location where the airplane was last seen or thought to have gone down.

Second, use the handheld GPS to put into memory the location (call this point A) where the pilot, or observer was standing when the line was determined. You are standing on that spot, so push the button and set in Waypoint "A."

Third, identify a point of reference along the aerial line to the down plane -- perhaps a clump of grass on the edge of the cornfield. Call this point, Point B. Now proceed to that reference point "B" and set it into the GPS as Waypoint "B."

Now, insert a "go to" from point "B" to the point "A" in the GPS. This will instruct the GPS to show the way to navigate to point "A" and will provide a compass bearing from point "A" to point "B." This reference compass line is the best guess as to the location of the lost airplane. Suppose, for example, that the GPS indicates the compass direction back to A is  $120^\circ$ .

Fourth, now head away from point "B" into the corn toward the airplane with an eye on the GPS, ensuring that the compass direction to "A" (in our example,  $120^\circ$ ) does not change. Remember, the GPS must "see" the sky so you may have to hold it high so it can see. Continue to move out along this compass line until the airplane is located.

If the airplane is not discovered within a distance you are confident is far enough, you either walked over it or you walked a faulty line. The likelihood is that the initial estimate of direction was faulty. Move over a reasonable distance and reestablish a new line back to "A" (say for example,  $123^\circ$ ). No luck? Move to the other side of the original line, say  $117^\circ$ , and try again. Still no luck? Remember the bread crumb map -- it has recorded your search path. Have a look. Any obvious holes in the search grid? Use the map and the bread crumb trail to search those gaps. Finally, be sure to walk out far enough! Airplanes are frequently found farther out than the pilot estimated.

The beauty of this strategy is that the searcher can maintain his orientation without seeing the reference point. The GPS also keeps a bread crumb map of the search, permitting the searcher to identify "holes" in the search grid.

2/75

It all started back in 1947 when I was stationed as N.A.S. Jacksonville as an instructor in the Aviation Ordnance school. I had built a few C/L models and all of them were of the scale variety. A flying buddy transferred out and left me a big box of modeling junk and, among other things, I found a kit for a set of scale Edo floats. I thought they would look great hanging under a scale aircraft so hunted for a suitable model. I found the Cleveland *Luscomb Silvain* to be just right and went to work on it. The word was in those days, however, that it was impossible to get a model off the water on scale floats. (I found out why later on.) I figured I would be getting discharged in less than a year though, and I could fly it off the snow in my native Massachusetts. I enthusiastically completed the model and gave it a nice silver paint job with red trim. I had no photos or drawings showing the float installation so I eyeballed it. I attached the floats the way I thought they should be and the way they looked good to me.

When I was discharged in the fall of 1948 and returned home, I had the opportunity to visit some friends who lived on a lake in Connecticut. I took the model along assuming that it wouldn't get off the water, but I thought it would be fun to at least taxi it around on the water. When everything was ready for the first taxi tests, it turned out to be quite a circus. I was the only person around who knew how to start a model engine. I was also the only person who could fly one. Fortunately I was also a very good swimmer—a grave necessity under the existing circumstances. I got everything set up as follows: My father was stationed at the oars of the row boat we would be using, as he was very experienced in handling such a vessel. My youngest brother was assigned the task of holding the control handle in the boat. The boat was rowed to a position 60 feet off shore. I had another brother hold the starting battery and gas for priming, and my oldest brother held the *Luscomb*. We were waist deep in the water. As it turned out, I had just enough brothers to handle all of the necessary chores. Otherwise I would had to have pressed my mother into service at one of the strategic posts.

All was ready, so I primed the Arden .19 (that's an engine, for most of you who probably never heard of it) and it quickly barked to life. (It was about the best running engine of that era.) After setting the needle valve and giving last minute instructions to my crew, I did the Australian Crawl, the breast stroke, or something as I swam to the boat. This takes a little longer than just running to the center of the circle to take the control handle. I climbed into the boat, took the handle from my youngest brother and positioned myself in the center of the boat. I gave my oldest brother the signal to release the model. Off it went skimming across the water. It looked beautiful leaving a smooth set of wakes behind the floats. As speed increased she came up on the step, and shortly thereafter lifted majestically from the water. Hey wait a minute, a model won't fly off scale floats! Oh well, it got off somehow, so lets just enjoy flying it and will worry later about why it took off. It was the smoothest and easiest flying model I had ever flown, and when the tank went dry the landing was even more beautiful than the flight.

FLYING MODELS



## Floating Around

by Henry Haffke

Beginner's luck made his first C/L flight off floats a success, then came problems.

Photos: Jay Duncan



The photo at the top of the page shows author Haffke in 1947 in Jacksonville, Florida, with the *Luscomb "Sivain"* that started it all. Bottom photo is a line up of his PBY-5A, "Skimmer" and "Super Cruiser."



Now, dive out of the boat after handing the handle to my #3 brother, and swim to the model. Then swim with model back to launch point. Gas it up and have another go at it. Each flight was the same. Even though the engine had no throttle, I even found I could bring the model down and set it on the water and take off again with full power.

After this fantastic success I decided to build another float plane, and I chose to model a *Fairchild 24* with Ranger engine which flew passenger hops off the Connecticut River in Agawam, Massachusetts. To get data to work from, I took pictures of the aircraft when they had it out of the water. When the model was finished it

looked beautiful, and I rushed to the lake to try it.

You know how the story goes: Dad rowing, #3 brother in boat with handle, #2 brother holding gas and battery, and #1 brother holding the model. Start the engine, swim to boat, climb in and get ready. I gave the signal for release and the model moved ahead picking up speed. I couldn't get it airborne. One, two, three circles around the boat on the water. It was moving plenty fast, but it wouldn't get unstuck. The model was close to same size, had the same floats, was a little lighter and had another Arden .19 up front. I finally broke it free, and I mean *broke* it free. I yanked full up after rocking it up and down a few

times and she finally let go of the water. Once in the air it flew fine, but when the engine died the landing was a disaster. It plopped down on water and flipped over on its back. A couple of more flights showed no improvement. Now I was really puzzled. I hadn't flown much since previous season, and it had been nearly a year since water flights, so I thought I may be rusty (from all that swimming to boat and retrieving models after landing). Maybe I should get a Labrador Retriever) I decided to try the *Lucomb* a few times. On the next trip to the lake I brought both models, and when I put them on the boat dock alongside of each other I noticed something I had not seen before: With both sets of floats rest-





The Piper "Super Cruiser" (opposite top) was built in 1957 from a modified Berkley kit and rides on Edo floats. The span is 36" and it is powered by an Arden .09. The "Colonial Skimmer" (opposite bottom and above) was built a year later also from a modified Berkley kit. It was completely balsa

covered, finished in Aero Gloss, powered by a Fox .15 and packs a special hand-carved paddle blade reverse pitch prop. The high point of this plane's career came when it took First Place in the C/L seaplane competition at Aerocrafts 74 at the Philadelphia Civic Center Museum.

ing flat, the *Luscomb* nosed down and the *Fairchild* nosed up. Remember, when I installed the floats on the *Luscomb* I had nothing to go by, and in doing the *Fairchild* I used photos of the actual subject. Therein laid the discrepancy. The *Luscomb* floats were mounted at a very slight positive angle of incidence in reference to fuselage, and the *Fairchild* floats were at a negative angle. I lengthened the rear attach struts on the *Fairchild* and it did the trick. Once the change was made the *Fairchild* flew as well as the *Luscomb*.

Since that time I have built a Piper *Super Cruiser* on Edo Floats, and also a PBV 5A and the *Skimmer*. I am currently working on a PBV 5A for R/C that should be fun. I did the drawings for it nearly 20 years ago as a super-seal C/L model. I did quite a bit of work but never finished it.

Flying C/L on floats is a lot of fun. It's much easier if you can find a spot with a very shallow beach where you can stand in the water up to your knees or hips to fly. Otherwise you must be a good swimmer and have a good crew as I did. If you want to give it a try I would suggest mounting the floats so that the angle is adjustable. This is easily done by making the rear mounting strut of birch dowel and slotting the upper end into which an aluminum strip is epoxied. Drill several holes in the strip. These holes can be slipped over a wire through the fuselage and retained with a rubber band. It is very easy to change float setting this way. If you do try flying from a boat, remember that you can't run backwards if the lines go slack. And you'd better like the water. After flying I would wipe my lines with a rag and then wipe them again with an oily rag. With this precaution, I never had any trouble with the lines.



Henry's Consolidated PBV-5A "Catalina" spans only 24" and is powered by a pair of Cox .020 engines. Built in 1958, it is probably the smallest flying twin-engined airplane that we have seen around.



## Two-Cycle Engine Field Emergency—Dirt in Carburetor

From The Beacon, Miramar Radio Control Flyers, San Diego, California

Every now and then, when you can't get an engine to run right, the culprit is dirt in the carburetor. The engine was running fine last time out, and you haven't changed the engine settings. Now it quits at full power and won't idle.

What's wrong?

If you haven't been to the field in six months, make sure you're using fresh fuel! Fuel that's been sitting around for months, especially if it's left in the fuel tank, could be your problem. If it's not the fuel, put in a new glow plug.

Check the clunk hung up in the fuel tank for clogged fuel lines. If your aircraft comes to a sudden stop, the fuel tank clunk can slide forward, getting stuck in that position. Having eliminated these possibilities, you may have a fuel draw problem caused by dirt in the carburetor, most likely at the narrowest part where fuel is drawn through the needle valve. If backing out the needle valve doesn't allow the engine to run rich like it should, it's time to flush the carburetor.

At home, you can disassemble the carburetor for complete cleaning. At the field, a quick fix is to back flush the carburetor with fuel. This doesn't require carburetor removal and can be done in just a few minutes.

### Cleaning the carburetor:

1. Check to see where the main needle valve is set. Then remove it and set it aside. Remove the fuel inlet tubing. Adapt these procedures to engines with remote needle valves.
2. Connect the fuel tubing from your fuel pump to the fuel inlet nipple. Pump fuel. It's a bit messy but only takes a second or so. Almost invariably, the culprit is a particle of dirt lodged at the point where the tip of the needle valve throttles engine fuel. The back flush blows that particle out.
3. You've probably got excess fuel in the engine. To avoid hydraulic lock damage to your engine, remove the glow plug and washer and blow the excess fuel out of the engine with your electric starter. [**Tech Editor's Note:** Before you apply the starter, make sure the plug/washer are out of the head, then point the cylinder head so that when you run the starter is doesn't spew fuel all over someone else or something else that the raw fuel shouldn't be spattered on, friends, relatives, or pets. Usually, pointing the cylinder straight down does a great job and then it will be just your legs and feet that get the benefit of fresh fuel.]
4. Replace the glow plug, washer, needle valve, and reconnect the fuel tank line. Adjust the needle valve to its previous setting.
5. Check your engine and fly.

### Avoid getting dirt in the carburetor

In three words—use fuel filters! Somehow, dirt, or minute solid particles get into our fuel. In order to keep these particles out of my engines, I started using multiple fuel filters. Use one at the bottom of the fuel bottle or can. You'll soon find that once in a while, this first filter gets a bit clogged. Back flush it, and you start drawing fuel again. Use another fuel filter between the fuel pump and the aircraft fuel tank. Finally, always use a fuel filter between the aircraft fuel tank and the engine. When fueling the aircraft, disconnect the fuel line at the tank side of the engine fuel filter. This system works and eliminates the old problem of having to periodically back flush the engine to get rid of dirt. When flushing fuel filters, make sure you flush them both ways before inserting them back into the fuel lines. →

## Dumb Thumb!!!

This issue I'll talk about my most recent dumb thumb experience. Please note that while I should always have plenty of my own dumb thumbs to write about, I welcome any of yours for future issues!

I was starting to get worried that I didn't have a good "dumb thumb" experience to write about in this issue of Prop Wash. Life was good and I had been rolling along pretty well with my flying in the gym and because of weather, homecoming, birthdays, and holidays, I had not been out to the field as much as I wanted.

Then, just the other day, I crashed my Chinn Yak straight into the ground! Good thing it went straight in because there was little or no visible damage to the wings, frame or tail section. I did break the prop and the aileron hinges broke. Otherwise the plane appears to be in good shape.

Here's what I think happened. A few weeks ago I had almost run out of my last bottle of 4 stroke castor type 15% glow fuel. Bevan was there and came to my rescue offering to sell me a bottle of Wild Cat 2 and 4 stroke fuel for a great price. Not knowing when I would be able to get back to Seaford, I gladly took him up on his offer. I have since learned that many people love Wild Cat fuel but it's kind of hard to get as it is not found in our local hobby stores.

So this time when I got to the field, I used up the rest of my castor type glow fuel without mixing the two fuels. When I landed there was still a little left in the tank. I didn't want to waste the fuel and I didn't think that mixing such a small amount would make that big of a difference. When I started her up she would rev up a little and then shut off. This had never happened before. I hoped that it would work itself out after getting into the fresh fuel in the tank. It did after three similar starts.

This time the engine idled much higher than normal so I lowered the idle slider on my transmitter. She seemed to be running fine so I took her up to fly alongside her fraternal twin - Paul's Chinn Yak. I told him I would try to follow him. Big mistake! Paul is capable of flying much faster and more aggressively than I and I had an extremely hard time keeping up.

Next thing I know my engine dead stuck and I heard Paul say to bring her into the wind. The problem was that the wind was blowing across the runway and I seemed to lose airspeed very quickly. While trying to bring her around to land into the wind she became unresponsive and spiraled straight downwards. I'm not sure if I lost my aileron due to the aggressively fast flying or upon hitting the ground. Having lost it while in the air would help explain the unresponsiveness but so would a stall. I guess I'll never know but one thing I learned from this experience is to make sure I retune my engine when I change fuel types and different weather conditions. Mixing fuels is probably not a good idea either. I think I had become overly confident in the Saito's ability to start up and fly upon request with little or no problems. Lesson learned!



**Wild Cat 2 & 4 Cycle** Available in 10%, 15%, and 20% nitro blends, 2 & 4-CYCLE fuels were developed with 4-stroke engine performance and protection in mind. Wildcat 2 & 4 cycle fuels contain 18% oil volume (except for the YS/20 which contains 20% total oil) and is totally synthetic.

As a side note WILDCAT's YS/20 fuel actually contains 20% oil content, some manufacturers do not actually use 20% oil, check with the manufacturer to be sure. Because of the 18% oil content, WILDCAT 2 & 4-CYCLE fuels can be run in any 2-stroke engine (except ducted fans) where a fuel with total synthetic oil is desired.

#### FOUR STROKE FUEL FACTS

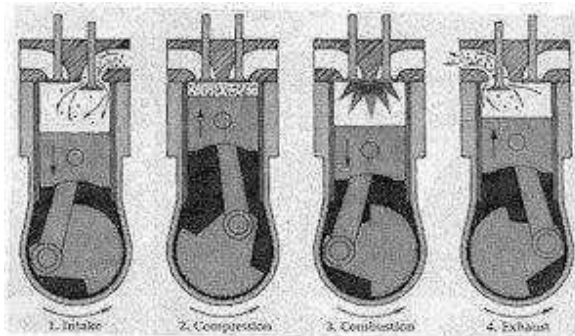
There are many myths about four strokes and fuel composition; we will simply state the facts.

**First** - Four stroke engines require more lubrication than do 2-stroke engines. This is do to the number of moving parts. Unlike a 2-stroke, a 4-stroke does not have the benefit of raw fuel and oil pumping through its crankcase for lubrication. A 4-stroke draws it's fuel in from the top of the cylinder by the down stoke of the piston. Lubrication is accomplished by blow-by at the BDC (bottom dead center) and run-down of oil through the lifter tubes. This oil must migrate to the bearings as well, therefore, volume is essential. (See disassembled 4-stroke -vs- 2-stroke below for comparison). Yes, despite the nonsense that some would try to get you to believe it's that simple.

**Second** - Wildcat recommends the lubrication package be totally synthetic. The use of synthetic oil is important in four stroke engines to prevent gumming and varnishing of the lifters and coking of the valves. Varnishing will occur on castor based fuels. This can lead to sticking valves, which will cause the valve set to get knocked out of time. Coking of the valves will cause improper seating of the valves causing a reduction in compression and incomplete combustion. Four stroke engines also have high exhaust gas temperatures and the use of synthetics greatly reduces carboning at the exhaust ports.

**Third** - Some fuel manufacturers claim that the number of moving parts in a 4-stroke is irrelevant to the oil content of the fuel, and they produce and recommend oil contents lower than that recommended by the engine manufacturers. Remember they do not provide the warranties for your engines they have no investment in your engine. Wildcat fuels meet or exceed the engine manufactures warranties of all common 4-stroke engines manufactured today. Because of the higher oil content, WILDCAT 2 & 4-CYCLE fuels can be run in any 2-stroke engine (except ducted fans) where a fuel with total synthetic oil is desired.

### THE 4-CYCLE PRINCIPLE



**A ]** On the down stroke, the intake valve is opened and the fuel/air mixture is drawn into the combustion chamber.

**[ B ]** On the upstroke, the intake valve has closed and the fuel/air mixture undergoes compression.

**[ C ]** Ignition takes place by means of the glow plug (not shown); the fuel/air mix explodes, and the piston is forced down for the second time in the cycle. This is called the "power stroke".

**[ D ]** The exhaust valve is open and the piston moves up for the second time in the cycle, and the burned gases are expelled out through the exhaust valve into the muffler.

## 2<sup>nd</sup> Annual Lewes RC Christmas Party at the Espositos!!!

**Where: Fran and Paul Esposito's Beautiful Home**

**When: Tuesday, December 14<sup>th</sup> 6:00PM**

**Cost per Person: \$20.00**

### **STARTER**

Assorted Mini Quiche  
Mandarin Orange Chicken  
Pop-Corn Shrimp  
Mini Crab Cakes  
Assorted Cheeses

### **SALAD**

Tossed Fresh Garden Vegetables with Balsamic Vinaigrette

### **ENTRÉE**

Roast Turkey Breast  
Pulled Pork with Bourbon Sauce  
Cavatoppi with Cheese  
Mashed Potatoes and Gravy

### **DESSERT**

Mudslide Brownies, Assorted Cookies, Chocolate Éclairs

### **BEVERAGES**

Beer, Wine, Sodas Provided  
*(Otherwise bring your drink of choice)*

Thanks again to Fran and Paul for hosting this event,  
which to many is one of the highlights of the year for our club!

## Tips & Tricks

I recently discovered a great way to mount canopies, cowlings, hatches, virtually anything that requires a mounting screw, to attach it to an airplane. I'd like to share it with the rest of my modeling friends.

As anyone who's ever tried to mount a fiberglass cowling or a plastic canopy on a balsa wood model knows, one of the most difficult things to do is to get the wood hard enough to reliably hold the mounting screws so they won't vibrate out in flight and allow the part to crack or fall off. In the past, the best method has seemed to be to use hardwood or plywood blocks, pre-drill the holes, and then harden them with CA. While that may work for a while, if you have to remove the screws a few times they eventually get loose again and you're right back at square one. Often, the next step is a bigger screw, which adds weight and looks crummy! So here's my solution ...

Cut a small piece of plastic antenna tubing slightly longer than the length of the screw. You can use any hard plastic tubing you have (not fuel tubing), just make sure the inside diameter is slightly smaller than the body of the screw. Antenna tubing is a perfect fit for the small allen-head servo mounting screws I like to use.

First, drill a small hole through the part and into the block (or balsa) as you normally would. Next, enlarge the hole to the outside diameter of the tubing. Make sure you're accurate with this hole, as it's important that the tubing fit snugly into the wood before gluing. You should have to tap the tubing into the hole with a small block or tool. If it's loose, drop down a size on your drill bit. You may want to practice on a scrap of wood at first to find the right bit sizes. Now just use thin CA to secure the tubing into the wood, and give it several minutes to dry.

Your screws will bite into the plastic tubing much better than they do into wood, and you can remove and replace them as many times as you need to. The friction of the tubing on the screws' threads will act like "lock-tite," and they won't vibrate out or loosen in flight. I keep several sizes of plastic tubing handy to match the various sizes of screws I use on my airplanes. You can use pan head, socket head, or flat head screws, whatever you prefer, they all work equally well with this method. And it's easy to modify an existing mount to use this method, too.

*Good Luck!*

—David McCormick, President, Falling Water Radio Control Flying Club, Soddy-Daisy, Tennessee

## Upcoming Events:

**Web Site:** Mike Ludden is updating our club's web site! Keep your eyes out and please send him any pictures and event information you may have.

**December Meeting:** Christmas Party  
12/14/2010 6:00 PM  
Paul Esposito's Home \$20

**December 25<sup>th</sup>** Christmas!!!

**December 31<sup>st</sup>:** New Year's Eve!

**January 1<sup>st</sup>:** New Year's Day

**January Meeting 1/11/11:** You might want to play the lottery on this day! American Legion Post #28 at 6:30pm



**President:** Jerry Springer – 690-6173  
**Secretary:** Dawson Gillaspay – 945-0329  
**Field Marshal:** Paul Esposito – 228-8597  
**Events:** Alan Walker, 684-0523

**Safety Officers:** Paul Knapik – 947-2627 and Jim Halpin – 684-4459

**Vice-President:** John Pulli – 945-8242  
**Treasurer:** Vince Peterson – 684-1265  
**Editor:** Garrett Lydic – 381-9220  
**Web Master:** Mike Ludden – 684-5162

**Instructors:** Bevan Buel, 703-2573; Paul Esposito, 228-8597; John Golomb, 541-4128  
 Mike Ludden, 684-5162; Eric Martin, Alan Walker, 684-0523; Clark Woodring, 227-3236