Holly Cloud Hoppers Official Newsletter

Silver Lining

http://cloudhoppers.rcclubs.com Summer 2004

Be safe, have fun and don't have too many rules!

From The President

By Ed Kincer

On July 24th, Holly Cloud Hoppers hosted the 2nd inter-club fun fly for the year. Back in May, when Skymasters hosted the first fun fly, both clubs were tied after ten events. Then Skymasters won the balloon-breaking tiebreaker. This time with a gusty crosswind, Skymasters won 8 of 10 events for a clear victory. Skymasters won Crazy Taxi, Precision Touch & Goes, Timed Flight (without timer), RC Bowling, Land Mines, Taxi Pylon Race, Roops and Balloon Break. Holly won RC Golf and Limbo. Winning Holly pilots include Ken Klwier (limbo) and Bob Messenger & Warren Frank (RC Golf). Ask Bob about his "dive to land" gaining more points to firm up the win.

The SE Michigan Inter-Club Fun Fly is the brainchild of Skymaster Mark Smith who contacted area clubs, but so far only Holly signed up to fly. Both events to date have been great, good flying and better yet, newfound friends with whom to share the hobby. Pilots and observers from both clubs reported that they enjoyed the day and look forward to the next event.

We all need to talk-up the concept of the Inter-Club Fun Fly within our own club and with other area clubs. Although Skymasters won both events, the only pilots that lost are the ones that didn't fly. These events are designed for pilots of all experience levels to have maximum fun with minimum risk to airframes. We hope to have one more event this year as another area club is considering hosting it in late August or early September. Practice up and stay tuned. *EK*

Two very important safety features have been added to the flying field!!! The first is a cell phone designated for calling 911 emergency. This cell phone is located in the transmitter impound and has a cigarette lighter charger so it can be charged once a month. If you happen to be the person restoring charge on this phone please write on the dry erase board when the next charge is due.

The second safety feature is clear concise written directions to the field including GPS coordinates. These directions are posted in the bulletin board case under the pavilion. It is advised that no matter how familiar you are with the area, read these directions verbatim to the 911 operator. Emergency situations create a lot of adrenaline and stress, errors are very likely in such times when seconds count. Also if any one should need to leave the field to find a working phone to call, make sure these directions go with them.

The open house is just in a few days and this is absolutely the largest event the *HCH* will host all year. With all the action going on at the field it's easy for one to get distracted from his/her familiar routine of setting up, starting and flying an airplane. So take time to double-check everything, focus during engine starts and run up, also don't assume anything . Remember **SAFETY FIRST!!!**

For those that will be providing trainer planes for the ever-popular "buddy box" sessions to the public, remember to CHECK TX AND RX BATTERIES OFTEN! It's advised that you cycle both packs just a few days before the event to confirm they still have a satisfactory milliamp capacity.

Good luck to all that will be participating and lets hope the weather cooperates.

Before the September issue of R/C Report arrived in my mailbox I figured it was about time I sat down and read the August issue. R/C Report is only magazine that I read cover-to-cover, and when I was just about near the end I made a pleasant discovery. Right there on page 106 in "photo 4" and page 107 in "photo 5" I found a familiar face, my "R/C" mentor, Jeff Lambert. For those that don't know Jeff, he is a charter and lifetime member of the *HCH,* however he now lives in Arizona. The irony is I just saw Jeff earlier that day for the first time in a year. This celebrity will be at the open house and I'm sure he will autograph your copy of R/C Report if you ask nice.
Scott Rhoades (editor)

Events for 2004-05

- ***Open House -*** August 7th 12:00 noon
- ***Last Bash Potluck -*** Sept. 25th 4:00 pm
- ***Chili Fly-In -*** Jan 1st 2005 11:00 am
- ***Toledo R/C Expo 2005*** April 1,2,3

Things not to say when someone crashes

By Scott Rhoades

The upcoming *HCH* Open House is unquestionably the single largest event for the club all year. This event will bring the highest concentration of members to the field for a single day not to mention a vast amount of spectators. Given the high volume of flying activity that will take place, the probability of a crash or two is nearly absolute. When it does happen, there are just some things that should not be said to the grieving pilot. Below are sample phrases that are better left unsaid... At least for a few minutes.

- LOWER!!
- Are you done with the frequency pin now?
- That hit so hard dirt flew out of the transmitter.
- Once again – The plane will be arriving at your home in a box.
- Replace your divots.
- Should've used more up elevator.
- You keepin' that?
- I had a feeling your were going to crash.
- Will that be paper or plastic?
- Well, the rudder looks ok.
- There's a waste of a good airplane.
- I really thought you had it there for a minute.
- Better you than me.
- I missed that. Can you do it again?
- Think I know what you did wrong…
- Hey, it's nothing money can't fix.
- One gallon of glow fuel…. $15.
  One hand built R/C aircraft…. $650.
  Witnessing that crash… Priceless
- That's almost repairable.
- That was a PERFECTLY executed Figure 9 Loop.
- No matter how many you plant they just don't seem to grow.
- Clean up on aisle four.

Now I won't name names but I don't want to see the peanut gallery showing up at the field with this list ready to fire off a few one-liners.

Fuel Facts

By Don Nix

This article is the second in a series of five written by Don Nix, founder and former owner of Powermaster fuel. Mr. Nix expertly dispels myths and provides straight facts about glow fuel. The first article was published in the spring issue of Silver lining which can be accessed at the HCH web site.

Which Oil is Better - Synthetic or Castor?

Before we get started on the subject heading, I'd like to offer a couple more thoughts on the last installment, "***What's the Oil Content?***" - thoughts that have been remembered since writing the original column:
Many modelers who have been involved in the hobby for a long time, including those who have been away for years and recently returned, are very stubbornly remembering when model fuel just about *had* to contain something in the order of 25% oil - usually all-castor - and have a hard time dealing with the idea that virtually no one runs that much any more in modern engines.
The operative word here, of course, is "modern." The metallurgy in today's engines barely resembles that of a generation ago. The end result, as far as model engines are concerned, is that the engines today simply don't require as much lubricant - not *nearly* as much. I will be quick to add that those running antique engines in Old Timer events should certainly continue to use the old-time formulas - no doubt about it.

In addition to vastly improved metallurgy, we must remember than manufacturing techniques barely resemble those from years ago, in many ways. Modern CNC machinery has made it possible to routinely and cheaply make 1 or 1 million parts all exactly alike. Those of you who have come along in later years may be shocked to know that up until the advent of this new technology, every piston was hand fitted to every liner. There was no such thing as simply machining 1,000 pistons and 1,000 sleeves, picking one from each batch and having them fit. The belief in those days that some engines of the same size and make were markedly hotter than others was no doubt true. We've read that in those days, a .29 for example, might vary from as low as an actual .26 to a .32 - some 23% more displacement! More closely controlled tolerances have resulted in the ability to use much different fuels than a generation ago.

The second thought on the subject of total oil content came from reading the operating instructions included with a new imported 4-stroke engine - the DAMO FS 218 twin. It recommends a fuel containing 94% methanol, 5% nitro and ***1% Castor Oil!*** Clearly, this reinforces my point that "there ain't no such thing as a fixed percentage of oil content." Now, on to this month's subject:

Before we depart the subject of oil in model fuel, let's talk about a point that's argued vehemently all over the land - ***Which kind of oil is better - synthetic or castor?***

Each side has its very strong proponents, and each side is right, to a point. "Old-timers" tend to still favor an all-castor fuel, or at least one containing a liberal amount of castor oil. Modelers who have come to the hobby in the last 15 or 20 years have a strong affection to synthetic oils, or at least want their fuel to have mostly synthetics. Let's take a look at both types statistically:

SYNTHETIC OIL

Strong Points	*Weak Points*
Good Lubricity (It's "slick")	Most tend to cause corrosion if adequate inhibitors aren't added.
Little to no carbon or vanish buildup inside	Burns off surfaces at about 100 degrees lower temperatures than castor oil.
Leave less oily mess on models	Many types and qualities, making it hard to choose the best one
Available in a variety of viscosities	Expensive - good ones cost almost twice as much as castor oil increasing the cost of the fuel.
Totally soluble in nitromethane	When used as the sole lubricant, a greater quantity is required which increases the cost of the fuel.

CASTOR OIL

Great Lubricity	Tends to cause carbon and varnish buildup in engine if cheap grade and/or too much is used.
Reduces the amount required, resulting in more power and better idle.	Messier on model than synthetics
Will tolerate internal temperatures about 100 degrees higher than any synthetic	Somewhat sensitive to extremely cold temperatures mild separation in solution, residue on model becomes almost "buttery" in consistency.
Almost 50% cheaper than good synthetics reduces cost of fuel.	Insoluble in nitromethane. In solutions above 40% - 50% nitro, will separate unless some sort of co-solvent is used.
Great natural rust and corrosion inhibitor	Generally available in only one viscosity

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I'd like to insert here that there is a "Chicken Little & The Sky Is Falling" rumor making the rounds of the Internet these days that the manufacturers of castor oil have recently changed their methods of making the product, and the castor oil we are getting now is either wholly or partially incompatible with methanol.

I have talked at some length with the "Head Techie" of one of the largest castor oil importers in the U.S., and I want to go on record as saying that, according to the best information I can find, ***This is total B.S.*** The Head Techie actually laughed out loud when I told him what was going around. He said, "You know, there isn't much we do to the stuff. We press the oil out, filter it, grade it and package it. As far as I know, nothing has changed." It apparently started with one of the fuel manufacturers. For what reason, I have no idea, unless it's to help them promote their proprietary synthetics. (Incidentally, I have read a response on the net from SIG, agreeing with the fact that it's nonsense.)

So, there you have it. "You pays your money and takes your choice." Actually, it's a little better than that, and the obvious answer is - use a combination of the two, in proportions that will come nearest to enjoying the benefits of each, while minimizing the adverse characteristics.

A few years back, the modeling community was in a "synthetic oil frenzy," and the swing was toward all-synthetic fuels. Happily - at least in this writer's opinion, we've seen a very noticeable swing back toward the center, with the majority seeming to prefer a synthetic/castor blend. We think this makes sense, and many years experience proves it.

The most frequent comment I hear from lovers of all-synthetic fuels is, "Brand XX leaves a lot less oil on my model." My response to that is, "Doesn't that bother you? If you don't see much oil on your model after flying, that tells you one of two things - or both: Either there wasn't enough oil in there in the first place, or the oil is burning off with the methanol. Neither is good. There's no way oil can burn off and properly lubricate at the same time." This is usually met with a puzzled look, then one of the light dawning, having just realized something they never thought of before.

Oil residue in model engines is a natural as barking is to a dog. We have to learn to live with it.

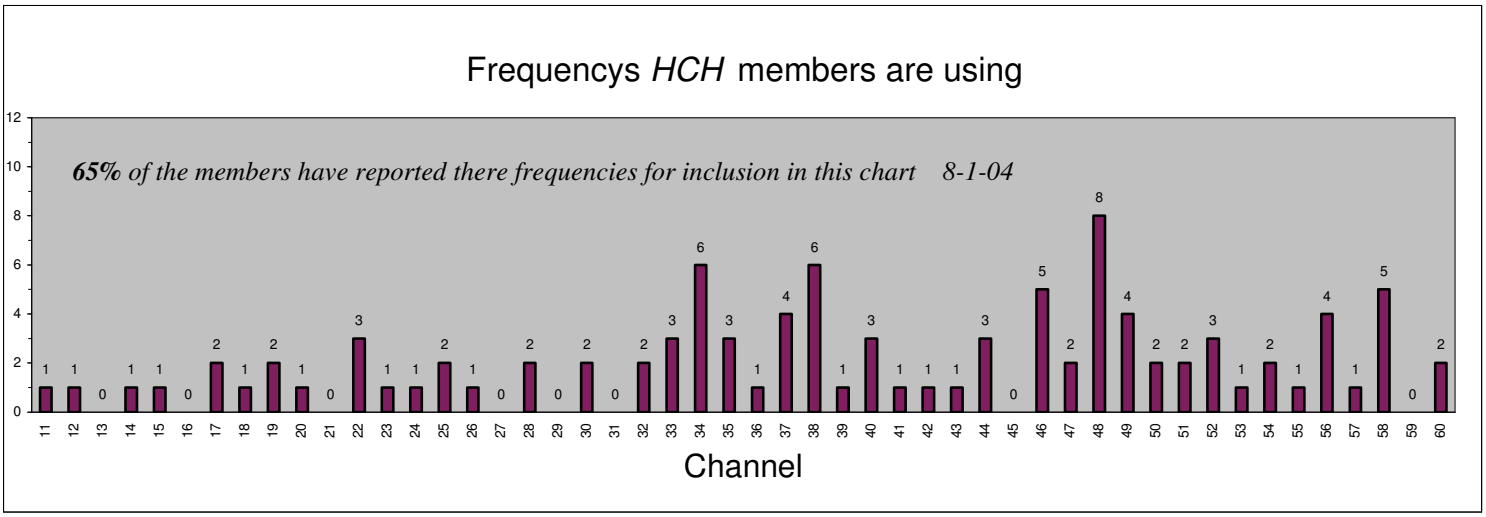
As an aside, not long back a friend sent me a copy of an article published in a European model magazine. In one part, the writer stated, "The Americans are the only ones rich enough and dumb enough to use synthetic oils." Perhaps overstated just a bit, but it has some validity. There a couple of types of engines that *do* require an all-castor fuel, or at least one with a considerably higher castor content than most others. One would be the Fox ringed iron piston type, and the other would be the small Cox engines, because of their rather unique ball-and-socket connecting rod-to-piston design.

Pattern flyers traditionally prefer an all-synthetic fuel, for a couple of reasons, I think. One is the fact that pattern flyers practice *a lot* - hour after hour after hour. That much use, plus the tuned pipe setup that is almost universal with them probably, tends to cause a greater problem with varnish and carbon buildup than in sport types. (At the risk of bombarded, I also think it's largely a state of mind. "Joe Champion uses all-synthetic, so that's what I'm going to use.")
The other area where we have seen all-synthetic fuels gain in popularity in recent years has been with model helicopters, probably for the same reasons. Also, the trend toward 30% nitro fuel for serious competition has led to using a lower viscosity lubricant, and, as shown in the comparison charts above, this necessarily dictates using synthetics.

Next installment: **Nitromethane - the mystery ingredient?**

This article is reprinted with the consent of Mr. Nix for use in the HCH Silver lining newsletter.

Frequency Distribution



Frequency or Channel

Have you ever been faced with determining a channel number from just the frequency number?

For example: You know the frequency is 72.050, like most modelers you need to look on a chart to determine that it's lucky channel number 13. Well here is a method to figure out frequencies and channels without a chart!

Take the hundredths from the frequency (72.810; use just "81")
Subtract 21 (81-21=60)
Divide by 2 (60/2=30)
Add 21 (30+21=51)
the answer is channel 51!

This can also be reversed, and yield the frequency when only the channel number is known, although this is less useful at the field:

Take channel number (51)
Subtract 21 (51-21=30)
Multiply by 2 (30x2=60)
Add 21 (60+21=81)
Put 72. In front of the answer (72.81)

Don Ayers (internet)

Tips and Techniques

Cutting Surface - Sewing Mat

Use a sewing mat to cut your covering on. They are available at most fabric stores, the better ones are self healing (don't show cut marks for years) and best of all they have a grid printed on them. Line up one edge of the covering along a grid line, then using a long straight edge you can cut pieces of nearly any size without measuring and placing marks on the covering. Speeds up the process quit a bit.

Norm Cecil (internet)

Prop Mounting

When mounting a prop on an engine I like to bolt it on so when the engine stops the prop will be horizontal. This decreases the likely hood of a broken prop should you make a rough dead stick landing. The best way I found to accomplish this is to mount the prop like normal then slowly rotate the prop counterclockwise until you meet compression resistance. If the prop is not horizontal at this point loosen the prop nut and rotate it so it is (without letting the crank turn). Tighten the nut then flip the prop a couple times to test. It may not come to rest horizontal but remember wind pushing on the prop will rotate it against the engine compression.

Scott Rhoades (HCH)

In his book, Sled Driver, SR-71 Blackbird pilot Brian Shul writes: "I'll always remember a certain radio exchange that occurred one day as Walt (my backseater) and I were screaming across Southern California 13 miles high. We were monitoring various radio transmissions from other aircraft as we entered Los Angeles airspace. Though they didn't really control us, they did monitor our movement across their scope. I heard a Cessna ask for a readout of its groundspeed. "90 knots" Center replied.

Moments later, a Twin Beech required the same. "120 knots," Center answered.

We weren't the only ones proud of our groundspeed that day as almost instantly an F-18 smugly transmitted, "Ah, Center, Dusty 52 requests groundspeed readout." There was a slight pause, then the response, "525 knots on the ground, Dusty."

Another silent pause.

As I was thinking to myself how ripe a situation this was, I heard a familiar click of a radio transmission coming from my backseater. It was at that precise moment I realized Walt and I had become a real crew, for we were both thinking in unison. "Center, Aspen 20, you got a groundspeed readout for us?"

There was a longer than normal pause… "Aspen, I show 1,742 knots." No further inquiries were heard on that frequency.

Longmont Aircraft Modelers Association "The tail Spinner"

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Holly Cloud Hoppers

Radio Control Flying Club

AMA Charter club #3117

HCH Member

Flying Field located on Mackey Rd. 1/4 mile south of Grange Hall near I-75 Holly, MI

GPS location N42 48.596 W83 34.342

Visitors always welcome!