

# ✈ BEFA Newsletter ✈

BEFA: Phone (425) 237-2332, M/S 94-35

840 West Perimeter Road, Renton, WA 98057-5346

## *Fair Winds, Blue Skies and Happy Holidays to All!*

### New Solos!

<u>Name</u>	<u>Date</u>	<u>Instructor</u>
Quynh Truong	11/1	Yager
Joe Borries	11/29	Hickman

### Congratulations!

<u>Name</u>	<u>Date</u>	<u>Rating</u>	<u>Instructor</u>
Jeff Harding	11/18	Pvt SES	Wolington
Ken Paoletti	11/25	Commercial	Wolington
Darryl Ljunghammer	11/29	Private	Veryioglou

### Coming Events

<u>Event</u>	<u>Time</u>	<u>Date</u>	<u>Location</u>
• <u>Aircraft Maintenance Team</u>	6-9pm	TH	RNT
(Contact Walt Cameron)			
• <u>BEFA Holiday Potluck</u>	Noon-6pm	12/21	RNT
• <u>Board Meeting</u>	5:00pm	12/13	RNT
• <u>CFI Meeting</u>	5:30pm	12/14	RNT
• <u>Instrument Ground School</u>	PM	2/11/08	RNT

### From Your President By Frank Marshall

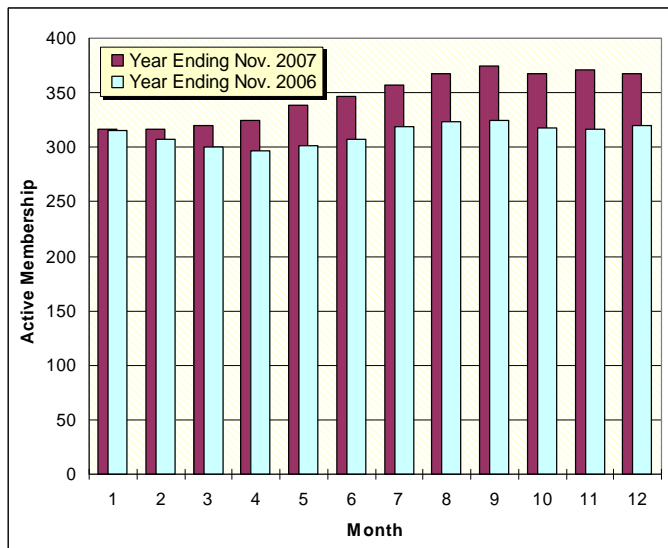
**Election Results:** Congratulations to Ken Sain, Austin Watson, and Mike Sievers, who have been elected to the board positions of Vice President, Treasurer, and Safety Officer, respectively, for the 2008-2009 term.

We owe a debt of gratitude to the outgoing board members, Joe Kranak, Bob Bumpous, and Bob Guthrie, each of whom, I can tell you, has worked tirelessly for the betterment of our organization.

**How Big is Too Big?** Our association has experienced unusually rapid, probably unprecedented, growth in our membership over the past year. We normally expect a slight seasonal fluctuation in membership numbers, with a peak occurring in late summer, but this year that trend has been largely swamped by an unmistakable growth trend.

The following figure compares the mid-monthly active membership totals for the 12 months ending mid-November

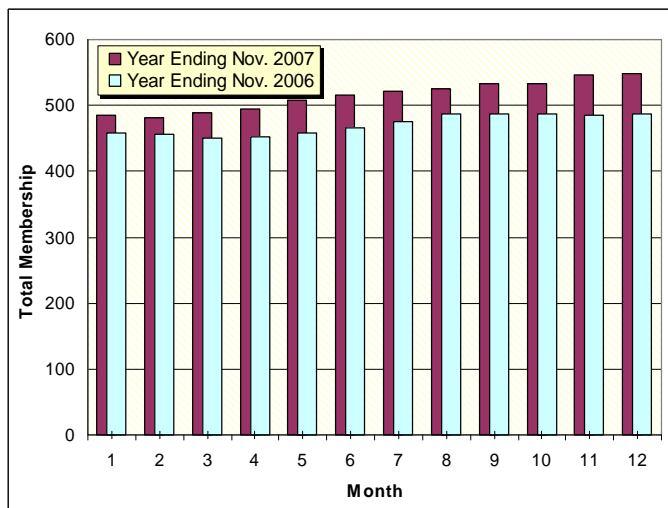
2007 with the corresponding totals for the previous year.



**Active Membership**

The ending total of 368 active members is 15% more than the previous year's total.

Our total membership, which includes members on leave of absence, has also surged in a comparable fashion, as shown in the following figure.



**Total Membership**

In this case the mid-November total of 548 members is almost 13% above the previous year's value.

In many ways this kind of growth is helpful to our financial health. The share purchase amounts paid to the association have helped fund capital expenses (such as for an additional Cessna 172S, a new simulator and a new security system) and some long deferred facility maintenance expenses (new exterior paint, new heating and air conditioning system, new roof treatment, parking lot repairs, etc.).

Of course, the increased monthly dues income helps with our fixed expenses, including aircraft insurance and our self-insurance fund.

There is also a downside, however, to this kind of rapid growth. For one thing the growth in the size of our fleet has not quite kept pace with the membership growth, having increased only about 11% (from 19 to 21 airplanes), and there is noticeably more scheduling pressure on some of our airplanes, primarily the low-end training airplanes. (We are continuing to look for a good opportunity to purchase another Warrior.)

And, most importantly, our loyal staff, which has not grown at all, has cheerfully accepted the burden of dealing with more airplanes, more members, more tach book entries, more monthly statements, etc. While the initial impact of this is simply a productivity gain benefiting us all, there is obviously a limit to how far we can go in this mode. This is something the board will have to monitor closely as we go forward.

In the meantime we all owe a debt of gratitude to our staff for the way they have accepted the extra workload, and if they occasionally seem a little harried, please understand that there is a good reason!

**Fuel Surcharges:** Surcharges and rates for December are as follows:

Aircraft	Base Rate	Surcharge	New Rate
BE76	\$159.00	\$38.00	\$197.00
C150	\$52.00	\$11.00	\$63.00
C172	\$68.00	\$15.80	\$83.80
C172SP	\$75.00	\$17.80	\$92.80
C172XP	\$120.00	\$15.20	\$135.20
C182Q	\$100.00	\$26.00	\$126.00
C182RG	\$105.00	\$26.40	\$131.40
Citabria	\$75.00	\$15.80	\$90.80
C210	\$169.00	\$30.40	\$199.40
PA-28-151	\$68.00	\$15.80	\$83.80
PA-28R200	\$99.00	\$18.00	\$117.00
PCATD-M	\$15.00		\$15.00
PCATD-NM	\$20.00		\$20.00
SR20-WD	\$113.00	\$24.00	\$137.00
SR20-WE	\$133.00	\$24.00	\$157.00

("M" and "NM" refer to members and non-members,

respectively, and "WD" and "WE," to weekdays and weekends plus holidays, respectively.)

## Safety and Operations Briefing

By Wes McKechnie, BEFA Operations Manager

### AIRCRAFT PAINT JOBS

I'm a bit testy about this but here it goes. Take a look at the paint jobs on the top of the horizontal stabilizers, wings and top cowl on 8326U and 704GC. These are representative of what happens when pilots scrape ice off the wings with ice scrapers and who knows what other devices. This is terrible, avoidable and absolutely inexcusable damage that is going to cost you, the owner pilots of these BEFA planes a lot of money in early paint jobs. A discussion came up about how we need to "educate" pilots not to use this technique, but in further deliberation it begs the question how can we educate common sense? Would you ever think to take a scraper (I actually found an ice scraper in the back of one of our C-172's), to your nice SUV or car? Heck no, so what possesses one to do this to any plane, regardless of if it's a \$25,000, \$80,000, or a potentially \$350K airplane? These are your planes. It is no different than if you did this to your car, except that other careful and responsible BEFA members are going to also suffer the consequences of actions of other members that they have no control over. This ties directly in with Bob's article on 'fessing up to damage, except this type of damage is difficult to categorize as accidental. We have got to change our mind set to the fact that these planes and facilities are your property, but is also shared with other owners and if there are members who don't have respect for their property, then this is not a compatible operation for their participation. If this is what happens to the planes prior to flight, the extension of this attitude to what may happen in flight is frightening. This attitude represented by this damage will kill someone eventually. Flying is forgiving at times, but poor habits will eventually catch up with lethal consequences.

### COLD WEATHER OPERATIONS AND NASA GROUND ICING ONLINE COURSE

For those who have forgotten, BEFA has STRICT procedures governing the cold weather operations of our aircraft. This especially applies if the overnight temperatures have been near or below freezing and you choose to fly early in the morning when we have structural icing on the planes, in the form of frozen rain/snow or heavy frost. ***If you are not prepared to take some extra time to preheat the engine and properly deice your plane in accordance with our standard operating procedures, do yourself and your fellow members a favor and cancel your flight.*** We have attached our annual "Cold WX Ops" procedures at the end of this newsletter, as a tear-off checklist that you can leave in your flight bag. It is important for all of us to be fully familiar with all of the procedures needed for de-icing airplanes and preheating the engines. Flying the airplane without preheating the engine leads to increased engine wear on valuable engine

components (which you will eventually pay for in the form of increased hourly rates), as well as significantly increasing the difficulty of starting the aircraft engine. If the outside temperature has been 32 degrees F or less overnight and you are scheduled to be the first flight of the day, you **MUST** follow our cold weather operating procedures. If there are any questions about our cold weather operating procedures, please let myself or one of our flight instructors know.

In addition, the FAA and NASA have produced a course on both in-flight and ground icing. I strongly recommend anyone who is planning to fly when ground icing is present to take this course. You can access the course at: <http://aircrafticing.grc.nasa.gov/courses.html>.

### **BEFA HOLIDAY OPERATIONS SCHEDULE & POTLUCK REMINDER**

Reminder: BEFA staff will be off from 1200 Christmas Eve through Christmas Day, and New Year's Eve through New Year's Day, (1200 the 24th through the 25th, and the 31st through the 1st of January). Additionally Staff and CFI's will probably be taking some personal time off the week between those dates, providing limited coverage.

Also, the annual BEFA drop in Holiday Potluck is scheduled for Friday, December 21st, at the Renton Office from 1200 to 1800. Bring in a food item to share and talk a little flying. Call the office if you have any questions.

### **TOYS FOR TOTS BARREL**

We once again have a barrel in the office in support of the Marine Corps' *Toys For Tots* Drive. Please drop off an unwrapped toy. Donations are very welcome and needed!

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### **GRIEVANCES/INCIDENTS:**

- 11/1/07 7568T Wrong plane taken on flight, did not dispatch on board.
- 11/2/07 54088 Gust lock and pitot cover not put on plane.
- 11/16/07 4801D Door found unlocked.
- 11/17/07 4801D Not chocked, Gust lock in backwards, Fuel selector valve left on "both", tie downs too loose.
- 11/30/07 739BT Shoulder strap left hanging out door while being flown. Paint damage. (Thanks to the member who had the responsibility and courtesy to step up and take responsibility for this).

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### **Notes From The Office**

#### **'Attaboys For Our Volunteers**

Your fellow members continue to pitch in to keep us running smoothly, often saving money in the process. This month we thank:

- Mason Wright for painting lines.
- Matt Gianni (CFI) for producing the visual presentation for the New Member Orientation.
- Howard Wolvington (CFI) & Jack Yager (CFI) for moving planes during the wind storm.
- Matt Gianni (CFI), Greg Soter and Mike Rynhoud for working on the orientation program.
- Glenn Showalter for cleaning our office windows, they look great.
- Kari Seppanen for oil bottles.
- Daryl Hickman (CFI) for painting.
- Jack Yager (CFI) for cleaning up the plumbing mess.
- Daryl Hickman (CFI) for getting drowned when doing the GPS database updates.
- Daryl Hickman (CFI) for filling up the float truck gas cans.
- Bob Ingersoll for donating and delivering a big screen TV for the lounge.
- Terry Thomas for donating and delivering sheetrock for the lounge.
- Howard Wolvington (CFI) for donating an aircraft battery.
- Will Allen (CFI) for picking up pilot.
- Glen Dalby and Diana Klug for donating heavy duty 100' industrial extension cord.
- Jack Yager (CFI) & Daryl Hickman (CFI) for repositioning planes.
- Terry Thomas, Howard Wolvington (CFI) and Stu Lancaster (CFI) for repositioning airplanes.

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### **Volunteer Help Is STILL Needed**

BEFA has a regular need for volunteer help. Unfortunately, Boeing work demands are making it increasingly difficult to provide community service. BEFA has many needs and cannot satisfy them without member help. If you can contribute, please call the office to volunteer. Some of the things that require volunteers are:

- Help is needed cleaning out the ramp cracks and pouring in sealant.
- Airplane washers needed.
- Oil bottle fillers needed
- Members with painting experience for painting the pilot lounge
- Members with wood/Pergo floor installation experience needed

If you can head up or help on any of the above projects please let Wes know. Your efforts are greatly appreciated!

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## From Your Safety Officer

By Bob Guthrie

This is my last note as Safety Officer and I was struggling for a topic, when to my surprise, several of our float plane pilots brought to my attention that there seems to be a lack of understanding of airworthiness directive compliance on your ability to go flying.

**Airworthiness directives (AD's) are not service bulletins and they must be complied with.** Some time ago, Wes changed our standard operating procedures, and had the AD's listed in the sign out book with a requirement that we both review the AD's listed and initial the book to show that we knew the airplane was indeed airworthy.

The pilot in command is responsible to determine that the aircraft is airworthy. In our case that responsibility rests with the pilot and sometimes the flight instructor. Some instructors are like me, when they have taught a student everything they need to know about signing out they leave that task to the student because we are scheduled too tight, and we have to finish one and go to the next one. However, if the student forgets to check the AD's, the instructor is at fault. Regardless of whether you are a student pilot or a rated pilot, if you forget to check whether your airplane complies with its airworthiness directives, you are at fault. We should all remember this is a serious problem, and could affect our ability to safely fly.

Have you ever hurt a BEFA airplane? I have, and it is an unpleasant feeling. Some of us apparently damage a BEFA airplane without knowing what we did, because we don't report it. There have been several incidents this year that cause me to think that damage was done and the pilot knew it and still did not report the incident. We have to do better. BEFA is a training organization and we will damage our airplanes for a variety of reasons. My favorite is "bad air" - every thing looked good and "bang" we landed hard. Just last week somebody pulled the Citabria into something red, and put a slice in the fabric. A few weeks ago somebody stepped on the Cirrus flap hard enough to require a new flap, and several months ago somebody landed the float plane hard enough to break one of the engine mounts. None of these events were reported to Wes, and that has to stop.

We are better than these events would indicate, and we have a great fleet that is well taken care of. Let's all do our part to continue having a safe place to fly.

It has been a busy two years and hopefully we don't give Mike Sievers too much work in the next two years.

Fly safely

Bob Guthrie

**CFI Meeting**  
By Bob Guthrie

Our fourth and last CFI meeting for the year is scheduled for Friday, December 14 beginning at 1730, in the Renton classroom.

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## Instrument Rating Ground School

By Frank Marshall

As of this writing, there are two open spots remaining for this year's Instrument Rating Ground School. If you want to reserve a spot, now is the time to sign up, either on the Renton office sign-up sheet or by telephone. If all available spots are taken by the time you try, taking the first or second standby spot is worth a try, since it is not uncommon for last-minute conflicts to force a cancellation or two.

The nine-week course will be offered on Monday and Wednesday evenings, beginning February 11, in the Renton classroom. It will prepare you to take the FAA Instrument Rating Knowledge Test, and will help you with your instrument flight training as well.

The cost is \$300 (\$330 for non-members). Payment is due by December 31 (members may choose to have it billed to their BEFA account as of December 31) to cover BEFA's cash outlay for supplies.

If you have any questions, please contact Frank Marshall at 253-838-1661..

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## A Voice from the Past

By Frank Marshall

I just received the following email message today from a former BEFA member. I am guessing there might even be a few 30-year members who actually remember a student pilot named Fred (Spanky) Clifton. I am sure there are many who will find his letter interesting.

Sir,

*I was recently searching the web looking for the status of aircraft I had flown. I was pleasantly surprised to find that N704GC (Cessna 150) is still with BEFA. I was a member of BEFA for about 18 months between early 1980 to late 1981 when I worked for Boeing in 707 / 727 / 737 Weights. I soloed and did my private practical in 704GC in 1981. That lit a fire so I quit my job at Boeing, joined the Air Force and went to USAF pilot training. I graduated at the top of my pilot training class (it must have been that great foundation laid at BEFA) and went on to fly the F-15, F-16, F-5 and MiG-29 over the next 23 years. Anyway, it was good to see 704GC still flying and BEFA still doing well.*

Thanks for your time,

**spanky**

Fred Clifton, Lt Col, USAF (ret)

F-16 Instructor

USAF Weapons School / CBD Training, Inc.

Nellis AFB, NV

**Extreme ATC Way Down Under**

**By Marissa Singleton**

From now until some time in February 2008, you have an opportunity to learn more about “summer” air operations and daily life in the challenging environment of Antarctica, from the comfort of your warm computer room. One of my good friends, Dan “Howdy” Houdeshell, is working as an air traffic controller contractor at McMurdo Base. Howdy (a former controller and ATC supervisor from Cleveland ARTCC) was very happy to share his web log (blog) location with you. On his blog, he has some great stories and photos about living and working in Antarctica. You can find his blog and linked pictures at: <http://dadhowdy.blogspot.com/>

Related to the blog, a recent AOPA ePilot article had a link to a very interesting article on how the FAA certifies the Ice Runway at McMurdo. Here is the link, if you missed it: <https://employees.faa.gov/org/linebusiness/ato/news/features/story/index.cfm?newsId=54012>

Amazing stuff! Happy reading!

**For the Web Heads: Links**

**SCHEDULE MASTER:** <http://www.schedulemaster.com>

or

1-800-414-6114 using your user ID, password and phone menu

**Jeppesen Employees Flying Association:**

<http://www.flyjefa.org>

**BEFA Homepage:** <http://www.befa.org>

**Webmaster:** John Scearce [john.p.scearce@boeing.com](mailto:john.p.scearce@boeing.com)

**Classified Ads**

This space available for free classified ads by BEFA members. Contact the newsletter editor.

**Officers and Staff**

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<b>Maintenance</b>	<u>ACE Aviation</u>	Contact, in order:
	1) Ops Manager: Leave voicemail (425) 237-2332 or Pager 206-540-7720	
	2) Ops Officer, or 3) Any Board Member	
<b>Everett</b>		
<b>Office:</b>	No phones at this time in Everett. Please call RNT Office in an emergency, otherwise call Doug Jacobs or Oscar Naimi (phone numbers below).	
<b>Maintenance Focal:</b>	<u>Brian Behrend</u>	Wk: 425-266-9134 Cell: 425-280-1215
<b>Facilities:</b>	<u>Oscar Naimi</u>	Wk: 425-315-0566
<b>Safety Mgr:</b>	<u>Mike Dubbery</u>	Cell: 425-239-3630
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	<u>Doug Jacobs</u>	Cell: 206-853-3164
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## **COLD WEATHER OPS CHECKLIST – FOR YOUR FLIGHT BAG**

It's almost that time of year again for cold weather operations. With the warmer winters it's usually not as prevalent as in years past, but for those days at or below freezing, special fleet care is not only a serious safety consideration, but wear and tear on the engines and associated components affects us financially. If you are new to BEFA, please see a CFI for more specific training in this area. One thing we would like to stress is the need to get to the airport much earlier than normal if you are flying a plane that has not been prepped and warmed up by a previous flight in below freezing temps. Below are the annual "Cold Weather Operations" reminders which can also be found on our web site: befa.org.

If you read nothing else in this article, please read the next sentence.

**!!!FIRST FLIGHTS OF THE DAY SHOULD ARRIVE at least 1 HOUR EARLIER THAN NORMAL FOR COLD WX. (less than 32 deg. F previous night) PREFLIGHTS!!!**

With the return of inclement weather please take the time to review standard cold weather operations. Winter flying takes more preflight planning, including weather analysis, but the rewards are uncrowded skies and schedules, crystal clear conditions and cool air affording surprising increases in performance. As always, watch those Class B airspace bases with the improved climb rates. Your climb performance will get you to altitude faster than last summer's hot air did. Also, if we get a large area blanketed by snow, your familiar landmarks for Class B boundaries and the TFR's may not be as obvious as you're used to, and a little more care is needed.

The following is a reminder of cold wx. operation procedures:

### **RUNWAY CONDITIONS**

Despite the relative lack of snow we receive near the Puget Sound basin with our now warmer winters, the local large airports' maintenance crews do a fairly good job of keeping the runway/taxiway clear, especially at Boeing Field, Renton and Paine. Snow can often be spotty, dumping a fair amount of snow at your home or work, but little or none at the airport, and of course vice versa. **We've maintained normal and training ops in the past without much inconvenience, but you must be prepared to spend more time in preflight preparation regarding:**

- **Obtaining weather and runway info**
- **Brushing snow off and/or deicing wings**
- **Engine preheat ops if you're the first pilot of the day**

The briefing you get from FSS/DUATS will include a Runway Condition/Braking action report in the NOTAMS, or in the event of a heavy snow or ice storm, an airport closure notification until the runway surface has been cleared. If you use DUATS type briefings, you should call and talk to a live FSS briefer to glean any info or advice they may have that will not be reflected in the "data only" DUATS brief. The ATIS and live controller advisories can contain these reports, but remember, they are advisories. While generally pretty accurate, just because a controller says it "looks good" is not a substitute for good common sense. As always, you are the PIC and are responsible for good & bad decisions.

The "BRAKING ACTION/RUNWAY REPORTS" are classified as;

- "Good"
- "Fair"
- "Poor", and
- "Nil"

BEFA currently has no specific regulations pertaining to ice/snow operations, but traditionally suspend flight operations when runway conditions are reported "nil", or perhaps even "poor". Again, classifications do not preclude pilots from using common sense. If the runway surface is obviously a crummy mass of tracked up ice ditches then no matter what they're calling, don't go. Occasionally the taxi and runway will be reasonably clear/wet and quite usable during the day, but they have not changed or perhaps added the "poor-nil" report as a precaution late in the day, perhaps for the following reason: they did not anticipate the water from melting snow/ice refreezing as night falls. It may be fine as long as the sun is shining on the wet pavement, but at sundown or in shadows, look out – it's slick! Keep this in mind if you're going on a night flight even if NOTAM's or tower warnings are absent. A simple call to the airport or a walk to the end of the ramp usually will clear things up for you. Refer to your AIM, Section 4-3-8 and 4-3-9 for more information.

### **DE-ICING OF AIRCRAFT**

Attempted flight with ICE/SNOW/FROST on the plane is **TOTALLY UNACCEPTABLE**, not to mention life threatening. While this is stating the obvious, I can recite examples where this statement evidently needed to be screamed! Also - **DO NOT USE ICE SCRAPERS, CREDIT CARDS OR STIFF FLOOR BROOMS TO DEICE aircraft. The following descriptions are general guidelines only** – please consider using myself, another CFI, or our more experienced pilots' help/input if needed to learn prepping procedures for cold wx ops. The following are descriptions of ice/snow/frost accumulations on the airframe that must be considered prior to continuing a cold wx. preflight:

- *Accumulations of ice so thick and/or hard that, short of thawing the plane out in the hangar, the flight must be scrubbed.* A composite layer of snow that thaws then

refreezes, freezing rain, or extra thick layers of frost/ice mix are examples of this. Damage to the wings, paint and airframe could result in trying to remove this with anything other than a gradual heating/thawing process. Fortunately, this is not very common in the Seattle area, but it does happen. If the RNT hangar is used for this, please remember to mop up water from the floor. Regal Air at PAE will provide a warm hangar for heavy de-ice ops on a space available only basis, (usually at pilot's expense). Our PAE hangar generally is too cold for thawing, but could be tried. Please see Staff/Board Members or CFI's approved for hangar ops for use of the RNT hangar for thawing. Ace Aviation is also a possibility if they have room.

- *Moderate to light accumulations.* Use the de-ice fluid. You need a properly trained instructor or seasoned pilot to show you how to apply this if you have not done this before, and use gloves and safety glasses. THE FLUID IS IN GARDEN TYPE PUMP SPRAYERS LOCATED BEHIND THE DOOR NEXT TO THE STAIRS IN THE POP MACHINE ROOM, ALONG WITH THE PREHEAT HOSES, DEICE BRUSHES AND AIRCRAFT "NOSE PLUGS". A 55 gallon drum (a green barrel marked "UCAR AIRCRAFT DEICING FLUID CONCENTRATE") is in the hangar to replenish the containers. Give the fluid a chance to "work" a little before applying more, and then push off with the soft brushes, not stiff brooms. DO NOT USE FUEL or DEICE FLUID TO REMOVE ICE FROM WINDOWS!!! (Look at 704GC's "milky" Plexiglas to see what an overly aggressive pilot's use of av-fuel on an ice-encrusted window did, use only soft cloths on windows). Sometimes a soft brush/towel is adequate to remove snow or melting ice from wings, and would be preferable. Try this first, and then use de-ice fluid if not successful. Also, make sure that you are actually applying de-ice fluid! There was an occurrence several years ago where well intentioned pilots were saturating a plane with solvent, not de-ice fluid! A complete bath and relubing etc....., of the airplane was needed afterwards. Not too good for the windows either. Have to admit that was one clean plane though!
- *Light moderate to trace.* Simply turn the wings into the sunshine while you go about your normal preflight business, then take a soft brush or cloth to it. If the ambient temperature is adequate (just above freezing), you'd be surprised how soon this can work. If no sun, a good brushing, or a light coating of deicer followed by a brushing will do the trick.

ENGINE PRE-HEATING (Always refer to the POH "Cold Weather Operations" for review)

While most POH's recommend preheating below 20 degrees F, we prefer, if able, to pre-heat the engines for first

**flights at and below 30 degrees F (-1.1 degree C).** Consider how "cold soaked" the engine may (or may not) be from the duration and degree of the freezing temps. Pre-heating also aids in easier starts and prolongs engine life and enhances safe flight. If you start an engine without pre-heating in below freezing weather, it may cause premature wear, which may or may not manifest itself in your subsequent flight, and will shorten the life of the engine. We may be needing an engine or cylinder(s) before its planned TBO, or some other pilot (perhaps you or some other poor sod) flying it next summer could have a power plant problem from previous cold wx. "impatient" preflight action, (or inaction). Also, if an engine TBO's - say 500 hours early due to improper cold wx. preflight ops, we lose approximately \$4,000 in engine life, not to mention the \$32,500 in association gross revenue that was projected on that 500 hours, as well as the reduced availability and subsequent inconvenience to members. This all factors into the annual rate review the Board does for hourly cost of aircraft operations, and throws the budget out of whack. It can come back to haunt all of us one way or the other. At the least be sure to "pull the prop through" several times to "break loose" or "limber" the oil, thus conserving battery energy. Ensure mags are "off" of course when doing this.

We have 3 primary methods of pre-heating "cold soaked" engines, if needed:

**1). Propane heat cart.** The propane heat cart is located in the hangar. Unfortunately we only have one. If the hangar is not already open, the Staff or a CFI (particularly a Citabria CFI or pilot) can open the door if it's locked and the Staff is not present. It's fairly easy to use but there are a few things to watch out for, so guidance is required (check-out) from someone familiar with it prior to operation. The directions for the pre-heat cart ops are with the machine. Please leave directions there; they have a habit of disappearing. NOTE: YOU MUST REMAIN IN THE AREA OF THE PREHEAT CART TO MONITOR ALL THE TIME THAT IT IS IN OPERATION. A CHECK OUT IS REQUIRED PRIOR TO OPERATIONS BY SOMEONE WHO IS FAMILIAR WITH IT. **Call me or your favorite CFI for a checkout on the preheat cart and any other cold wx ops, we'll be happy to help. NO fueling operations while pre- heat cart is in use!**

**2). Pre heat hoses that are placed over your car exhaust, then the outflow is directed to the base of the engine and oil sump.** This is the only time automobiles are allowed on the ramp. We have gate proximity cards in the office for car access. Drive slowly and try to use a newer model car to avoid excessive pollutants in engine compartment. With the new security measures, see Staff for key card to the gate or call me at home. This must be kept locked at all times.

**3). Hangar heat, which can take awhile depending on how cold soaked the engine is and how warm the hangar is. If**

you have an early morning flight, give us a call and we may be able to arrange storage in the hangar overnight for you, depending on availability. If it's available, we're happy to do so and you'll have a nice warm plane ready.

The appropriate red nose plugs, (generously made by Maynard Winchester and wife), should be fitted into the two nose holes of the airplane to keep the heat in when using the cart or the hoses from the car. These are located with the hoses and de-ice fluid in the closet next to the stairwell in the pop room, along with the rest of the de-ice equipment. They are clearly marked for either C-150's or C-172's. **REMOVE BEFORE FLIGHT!!!** I'm very disturbed when I find the cord holding the plugs together is broken in two! **At least a minimum of 15 to 20 minutes of preheat is required, and longer if it's below 20 to 25 degrees F (-6.6 C to -3.8 C) or so.** Extreme cold soaked engines may require a fairly long preheat time. After the preheat is concluded, you want to **REMOVE NOSE PLUGS**, get the preheat equipment stowed and **start engine as soon as you can**. Remember to "pull the prop through" prior to start (**mags off**). Referring to the manufacturer's cold wx. start procedures may be necessary, but be very careful not to over prime the engine, as it may be warmer than what the cold wx. start ops are meant for. Also, have a "spotter" standing outside for stack fires. **If you have a stack fire, continue to "crank" the engine (throttle idle, mixture off), to suck the flames down the carburetor until the fire is out.** It should be pretty cold out to use "cold start procedures". I've seen many an over primed/flooded engine, and the subsequent dead battery that results when over cranking a flooded engine, please do your best to avoid it. **Wait 5 to 6 minutes for the fuel to evaporate before trying to crank the engine again. Keep the Master Switch off as much as possible to avoid battery drain.**

Once a plane has been flown, the engine does not need preheat unless there was a fairly long period of sub freezing temperatures prior to its next flight. As you can see, the first person to fly on a sub-freezing day needs to get to the airport earlier than normal, and we all owe a big thanks to the "early birds" prepping the planes. As always, the CFI's and myself are here to help you get safely underway, and don't hesitate to ask us for assistance.

AT RNT, COLD WX. EQUIPMENT IS LOCATED IN THE CLOSET IN THE POP MACHINE ROOM. BEFA IS PRIMARILY A SELF-DISPATCHING OPERATION. YOU ARE THE OWNER. YOU USE THE EQUIPMENT AT YOUR OWN RISK AND ARE RESPONSIBLE FOR ITS USE - PLEASE RETURN THE EQUIPMENT BACK TO ITS PROPER LOCATION FOR THE NEXT MEMBER TO USE. It can be very frustrating to your fellow pilots to search all over for equipment that is not properly returned, or is non-functional due to abuse or improper care. Your fellow member/pilots who are "downstream" rely on your care and consideration.

BULK DEICE FLUID is in the hangar, in a 55 gallon blue drum marked "Deice Fluid", Proplene Glycol. CAUTION: We have oil in blue drums too, make sure it's the right one. Use gloves and eyewear, note oil is in blue drums. Use the drum to fill spray bottles only.

CHECK WITH PAE FOR COLD WX OPS SPECIFIC TO EVERETT OPERATIONS. PROCEDURES WILL ALSO BE POSTED IN THE HANGAR.

Warm clothing and survival gear increase in importance in winter flight ops. You will be thankful even if you're just stuck at another airport.

Lastly, if you live around either of BEFA's operations, please stop in and check the fleet after or during snow or windstorms to see if help is needed. Both the Ops Officer and I live a fair ways away and accessibility to the airport may be a problem. Snow may need to be removed from the horizontal stabilizer to keep the nose wheel on the ground, and any wind can cause the plane to rock up and down banging the tiedown points and nose wheel until the snow is removed. Please notify me (Operations Manager), or the Operations Officer if you stop by the airport to check on things.

This may at first glance seem like a bit of a hassle, but once you're familiar with the routine, you'll see it's not that bad. The bit of extra time involved for first flights in freezing/snowy conditions is more than made up for in the beauty and performance of a winter flight. It is really spectacular. Some of my fondest flight memories took place on a crisp uncrowded winter morning, or a clear winter night with the moon reflecting on the snow below. You won't regret it.

Wes McKechnie