# THE WIPAIRE WINDOW

#### THE WINDOW Vol. 01 Num. 04 WINTER 2008

#### Wipline Airglide Skis...Making Winter Fun Again!



Ahh, ol' man winter is upon us again. If it isn't your cup 'o tea to risk frostbite on your hind quarters while perched atop a frozen sea awaiting a stray fish to fall prey to your frozen leech, perhaps cross-country skiing or snowshoeing a glacier has been on your list. For my kind of pilot, a heated seat with a bird's-eye view of the glistening ice-topped trees at dawn sounds a little more enticing. Either way, Wipline Airglide Skis can free you from what otherwise might be another boring hangar-bound winter to limitless winter exploration and recreation! (As for the heated seat, I'll have to check with our interiors department... but so far they've claimed that if you can contrive it, they can derive it!)

Needless to say, it's time to store the floats, and strap on the skis. For those of limited time or an unheated hangar, Wipaire can help with both of those

tasks. Our indoor storage facility accommodates all sizes of Wipline floats, stacking them as high as three deep with our special piggy-back racks.

To accommodate your rugged winter flying needs, we offer the complete line of Wipline Airglide skis. Wipaire owns and manufactures what were formerly known as the Federal Fluidyne skis, an already proven and reliable aircraft ski. As is our custom though, we designed several enhancements into the new skis. Some of the improvements include:

- 1. Aluminum fittings are now CNC milled as opposed to sand cast.
- 2. Sheet metal parts are laser cut formed and drilled using the latest tooling technology, ensuring a precision fit now, and for future replacement parts.
- 3. Aluminum parts are anodized and/or epoxy primed ensuring corrosion resistance.
- 4. The exterior surface of the skis is finished with a polyurethane paint system.
- 5. The ski tunnel brace (which was prone to cracking due to metal fatigue) has been doubled in thickness from .062 to .125.
- 6. 1/8" thick teflon bottom skins deliver high performance in slush and prevent freeze-down.
- The hydraulic system features a panel mounted selector-head for ski extension and retraction. The skis are operated by an 7. electric hydraulic pump with a manual hydraulic back-up pump.
- The ski hydraulic system is compatible with Wipline amphibious floats. Making the seasonal switch from skis to amphibious 8. floats less complicated and more cost-effective.

Also, Wipline Airglide skis do not compromise performance. When the skis are selected down, they are in fact, only a ski, and not a compromised penetration ski where the wheel and tire drag along with the ski. Wipline skis are the answer for the best performance off the runway in the winter weather.

At this writing, we have most current-production ski models (C2200, C3000, C3200, C3600) in stock and ready for installation. Wipaire's parts department stocks parts for these as well as CT3000 & CT2000 tail skis. Visit www.wipaire.com and follow the "Skis" link for a list of which model fits your aircraft. Call for parts availability on out-of-production models. And finally, don't forget to pack the gas stove for your shore lunch!

#### **Featured Articles**



Flight Entertainment



Flight Skills



Get Ready to Ski



Mark Mathisen, Aircraft Modifaction Sales

### **IN-FLIGHT ENTERTAINMENT**

In 1921, Aeromarine Airways offered the first in-flight movie, "Howdy Chicago," to its passengers as they flew around Chicago. Inflight entertainment has come a long way since then.

Now you can listen to your favorite music via your XM or Sirius radio through the stereo intercom or even wireless headsets. You can watch the latest release on your Blu-Ray DVD player and High Definition LCD monitors. You can call anywhere

in the world using your on-board Iridium Satellite Phone. Or you can simply plug your iPod into its dock and listen to music or watch the videos stored within it. Moving maps charting the aircraft flight plan, or video from on-board cameras can also be viewed. Soon



there will be an affordable satellite television available for you airplane.

By RICK WALHMAN, Avionics Manager

These systems are no longer just for cabin class aircraft, but can also fit nicely into a Skylane, Stationair or Caravan. LCD monitors are available in sizes ranging from 5 - 42 inches with HD available for monitors 17 inches and larger. They can be mounted on swivel arms, drop down from the ceiling or slide out of the arm rest. With Wipaire's avionics and interior shops working together, we can complete a seamless installation.



#### One Of Our Float & Aviation Experts: -Alaska Sales, Wipaire, Inc.



Think "Alaska" and one might envision expansive wilderness, world class sportfishing or Mt. McKinley ascents. Once one realizes Juneau is the only U.S. state capital with no road access beyond its borough boundary, they begin to understand why there are 'more pilots per capita' in Alaska than any other place on the planet. No surprise to those who live there; so many destinations across Alaska are accessible by only a) dogsled, or b) flying!

"I credit aviation for inviting me to the Last Frontier," smiles Melinda, "through my brother-in-law, a pilot." After visiting family in southeast Alaska, July 1993, she became a Juneau resident in April 1994. Her contact with airplanes (strictly as transportation) led to friendships with aircraft owners and projects in their hangars. "I quickly learned you don't just fix the airplane; the logbook must be made airworthy, too."

Pursuing an A & P license, Melinda enrolled in the Aviation Maintenance Technology

certificate program at the University of Alaska Fairbanks. She returned to Juneau to complete her FAA exams, then on to work as a floatplane mechanic. "Southeast Alaska was my introduction to floatplanes. I logged my first ten hours on floats."

Since 1999 Melinda has applied her knowledge of aircraft and transportation in Alaska to a variety of solution-oriented roles in maintenance, inspection, operations, and sales. She earned her Inspection Authorization in 2003 and continues to participate in recurrent maintenance training. Her drive and can-do attitude has permitted her to work and experience Alaska from its three major hubs and many points in between.

Wipaire knows Alaskan flyers seek the best aviation products available. Melinda's professional approach for Alaska Sales is to listen and understand the concerns and desires of the customer, and guide him/her toward workable solutions. She is committed to developing lasting relationships, with consideration to the unique aviation challenges and flying environment of Alaska.

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### Another Flying Winter



Brian Addis Chief Flight Instructor -Lake&Air Pilot Shop

There is nothing better than taking off on a cool crisp winter morning in the northern parts of the USA. The airplane performs brilliantly. The summer thermals are gone. Density altitude is not a question. The sky isn't full of those "namby-pamby" summertime fliers. One can enjoy the sights of the winter wonderland; land on the ice with the trusty ski-plane in the coves of the backwater river bottoms. Start a campfire and pull out that previously prepared thermos of chili with those little pieces of chopped-up hot dog meat and enjoy a winter time lunch. Don't tell your doctor you just ate that. What about the tips on winter flying? Yes, I'm getting to that but I thought we would have a little fun first.

While you enjoy the campfire and a healthy lunch, remember the piston airplane doesn't like to get cold. If it gets too cold it will protest by not starting when you're ready to go. Just as your blanket retains your body heat, the engine blanket does the same and will serve well if the airplane must sit in temperatures below 20 degrees Fahrenheit for more than an hour. Most of the wear on an engine occurs at engine start. Pre-heaters and engine heaters are worth their weight in maintenance bills.

If you don't have skis on your Bonanza, you will probably depend

#### By Guest Contributor BRIAN ADDIS

on runways. The accident record still shows landings as the number one cause of non-fatal accidents. Planning, preparation and training will help the pilot through the winter landings with the largest consideration given to crosswind landings on icy runways. Proper technique is essential.

How cold is too cold to fly? Your operator's manual will probably be silent on this subject. The opinions and subjective expressions will range from one end of the thermometer to the other. If you're just a little "namby-pamby"—like me—you might think about zero degrees Fahrenheit as the "mixture cut-off and fireplace turn-on" temperature. Keep in mind that flying problems move in inverse proportion to temperatures.

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### PREP YOUR PLANE FOR WINTER FLYING

By JASON ERICKSON-Director of Maintenance -WipCaire

For some reason we like to get ready for summer more than we like to get ready for winter. It's time for winter so let's get ready: Hat, warm jacket, gloves, scarf, boots. Good, now that you're dressed thank you very much for that—time to get the airplane ready. Here's the "A" check list:



**Engine Oil:** Listen to all the experts, but check your operator's manual for the real deal. The best advice is usually within the care and servicing chapter of the manual. Most operators approve a multi-grade oil application.

Winter Fronts: Some aircraft have these; some don't. The operator's manual is interesting on this subject. In most cases, these covers must be removed above certain outside air temperatures—usually 20 degrees F. However, the manual probably says nothing about putting them on below a specific temperature. Some aircraft use an oil cooler block off plate deep in the cowling. When temps rise, don't forget about that pesky plate that is causing higher than normal temps.

**Oil Breather:** As air breather lines warm and cool with changes in engine temperature, moisture builds up, freezes and has the potential to block the breather. Whatever happens next is bad. Engine heaters and good pre-flight inspections are the best problem preventers in this case. Most have an "ice hole" about 3-4 inches up from the bottom for this very reason. Make sure you are starting off with a clear breather. I have come to the hangar to find the breather blocked with ice with only the "ice hole" open. This can pressurize your crankcase and cause damage, as well as oil loss.

**Cabin Heater:** A good inspection of the heater systems is the best defense against carbon monoxide poisoning. Each winter accident records show a few more tragedies as the result of defective aircraft cabin heaters. Some exhaust systems have 25-hour inspections that are ignored or forgotten about. These are crucial in the winter to stay safe. New G1000-equipped Cessna aircraft have CO2 detectors that have proven to find any signs of CO2,

more than the old 2"x2" cards on the panel. We have found leaks in the system that we would have otherwise not found without that indication.

**Battery:** If you think the battery will survive one more year, it probably won't. Gill and Concorde have one-year capacity checks, as well as 6-month checks thereafter. On that cold day when the airplane won't start, it's easy to turn one problem into two problems: A cold airplane, and a dead battery. A new healthy battery provides a sense of security and best chance for cold starts. Rapid charging rates can cause a battery to boil over with acid and cause a host of other airframe problems, as well as damage the paint.

Have a great winter flying season. Do you best to keep your family, yourself, and your airplane safe in some harsh flying conditions!

Can the magic of flight ever be carried by words? I think not. -Michael Parfit

## Prime Time For Shine



By DAVE UTSCH-Paint and Interior Manager -WipCaire

It's that time of year again, and as winter rapidly approaches there are some things that can be addressed in the off-season. As your airplane waits for glimpses of fair weather, you can do some little things that will make a big difference. A simple as polishing and waxing, or touching up those areas that bothered you all summer will give your plane a new sheen.

Choosing a good wax is important for its ease of application and also its longevity...not to mention how it looks in the end. Carnuba waxes are great for darker colors and give them depth and gloss. But polymer sealants are the most durable, usually about six months. Amount of use, conditions and care will affect these waxes either way.

Whatever you decide, there is one thing you can do to make them

all look good. When you are applying your wax, hand or orbital, load your pad in an area that is free from seams and rivets so you don't get build-up around them and have that awful white mess everyone points out. Once your pad has a sufficient amount of wax, you would be surprised how much area you can do without adding more. A soft toothbrush and a clean terry-cloth towel can usually take care of those areas that you have applied to much.

Perhaps it's time to altogether replace that faded paint scheme that just doesn't express how good she handles in the air. If you tend to fly less in the winter, you won't miss her while she's in for the makeover. The WipCaire team is glad to answer questions helping you accomplish the small tasks yourself, or to help you make your aircraft as beautiful on the outside as you know it is on the inside.

## **Attention Business Owners!**

The 2008 Economic Stimulus Package May Help you Reduce Your Tax Bill and Bring Home a new set of floats!

> For more information Visit www.wipaire.com/esp

### Are Your Skis Ready to Fly?



Winter flying, and specifically ski flying, can be a whole lot of fun, but it also poses some significant issues for pilots and mechanics. Year round, but especially as we head into winter in the northern areas, we get questions from pilots and mechanics about parts and maintenance for various ski models. Frequently, the question arises whether we have a particular part in stock. The answer is often yes, but depending on the model, it can sometimes be a little more difficult to answer. We are able to provide parts for all of our current production model skis, and we do have some parts for out-ofproduction skis, but in any case, we will do what we can to find the parts if they are available.

As with many things in aviation, significant repairs can often be avoided with thorough ongoing maintenance, and operating practices. While your skis or floats may not be mounted on the aircraft at the time, they too require an annual inspection. The annual inspection includes examining for corrosion, lubricating bearings, replacing worn components, frayed cables, or stretched bungees, and replacing the LDR ski bottoms if necessary. Inspecting the ski arms and other components for cracks or damage should also be done at this time. Every year we have customers that lose the data tags for their skis, and making sure they are securely attached is a lot easier than trying to replace one if it gets lost. If your skis are hydraulic wheel-skis, make sure all the hydraulic lines and fittings are secure and in good condition. Service the hydraulic powerpack and/or hand pump prior to ski installation, and remember to check hydraulic fluid level periodically throughout the season.

Pilots can also do much to keep their skis and aircraft in good working order. Making gentle, broad turns on snow when operating with the skis down helps to minimize side-loading on the skis. This is both gentler for the skis and safer for the pilot and passengers. A review of Section 8 in the Pilot's Operating Handbook titled "Handling, Service, and Maintenance" will provide some information for winter operations. A review of the ski flight manual supplement or ski section of the pilot's operating handbook is a good refresher on procedures and considerations for ski operations. Some pilots don't live in an area where they have the opportunity to experience flying with skis, but for those who do, there are many opportunities that open up during the colder months with some careful planning, preparation, and care.



Rachel Norman, *Customer Service Manager* 



Single Point Fueling System

#### Wipaire Acquires Rights For Caravan Single Point Fueling System

Wripaire has been providing the Caravan Single Point Fueling System for several years and has now acquired ownership of the STC from Aviadesign, Inc. The acquisition was made in hopes that Wipaire's reputation for excellent customer service and comprehensive product menu for Cessna Caravans will provide added value to its customers.

The Wipaire Single Point Refueling Modification allows for quick and easy refueling of the 208 without over-the-wing access. Fueling is accomplished at the left main gear fairing assembly. Intermediate fueling as well as top-off is available with this STC.

One of the desired improvements for the system is to modify the design to be compatible with the new Garmin 1000 installation that is standard with the new 208 Caravans. Wipaire's R&D department already has a preliminary design in pursuit of this improvement and they hope to roll it out in 2009.





by Gary Plummer, Fall photo winner

Thanks to all who submitted photos - it's hard to pick just one winner from all of your gorgeous photos! Congratulations to Gary Plummer of Burlington Ontario, winner of this edition's contest with this photo of his Husky A-1 on Wipline 2100 Amphibs! A \$100 Lake & Air gift certificate is on its way to his mailbox!

For this quarter's contest, show us your sense of winter adventure. We want to see your best winter shots that show your Wipline Ski-plane in action! If there is a story behind your photo, we'd love to hear that too. Remember that photos with a 300dpi or higher resolution are best. Prize: \$100 Lake & Air Gift Certificate (quarterly). Please include your name, address and phone number with submissions.

Email submissions to: npone@wipaire.com



This is a Special Newsletter Created for Everyone in the Aviation Industry!

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