

THE WIPAIRE WINDOW

A Special Newsletter Created for Everyone in the Aviation Industry



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10 Steps To Get The Most Out Of Sun 'n Fun

by Dan Gutz | Float Sales

Featured Articles

3



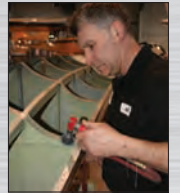
Recommended Products

4



Spring Cleaning

5



Float Annuals

Here we are again, spring is just around the corner for us up here in Minnesota. After surviving another season of below zero temperatures and piles of snow, it is nice to know that Sun 'n Fun is almost here. This is a true sign that winter is over! Sun 'n Fun is one of the first fly-ins Wipaire attends every year, it is the "unofficial" start to the float flying season.

Sun 'n Fun is a very large and exciting show with lots of new technology, products and opportunities to learn. A show of this magnitude can often be overwhelming and many attendees leave the show without accomplishing everything they intended to. The following 10 steps will help you get the most out of this year's show.

1. Visit the Sun 'n Fun Website at www.sun-n-fun.org. This is a great way to find out which companies and exhibitors are going to be there, what seminars and workshops are taking place, and what events are scheduled. Did you know that Sun 'n Fun also has a Splash-In?
2. Define your objectives and prioritize. Are you in the market for a new aircraft, new floats, avionics, or looking for a paint and upholstery shop? Are you trying to find a new maintenance facility to bring your aircraft to? Are you looking for a specific part for your aircraft, or are you just there to enjoy the show and have a good time with friends and family?
3. Identify the exhibitors that you want to visit based on your priorities. The Sun 'n Fun website exhibitor section includes a full listing of anticipated exhibitors and their locations.
4. Create a plan for the show. Use the convention map from Sun 'n Fun's website to map out your plan according to your priorities. Try to visit exhibitors located in the same areas, this way you spend less time walking around aimlessly from one end of the grounds to the other. If you plan on spending a lot of time with one exhibitor, make sure you visit that location in the morning before the air show starts. Plan out your breaks, lunch, and locate a great spot to find some shade to enjoy the air show. Also, be sure not to schedule your day too full. Leave yourself some time for unexpected booth visits, and some time to just enjoy the show!
5. Make sure you get enough rest before the show. It can become exhausting walking around in the sun all day. All the activities, discussions, and the information you obtain can be physically and emotionally exhausting. Starting out the day well rested will help you enjoy the show more.

continue on page 2

Visit Us At Sun 'n Fun
Booth #MD-001D
Enter The Garmin 496 Giveaway!



10 Steps To Get The Most Out Of Sun 'n Fun

by Dan Gutz | continued from page 1

6. Prepare each day before you leave your hotel (or tent). Make sure you apply sunscreen and also bring it with you to reapply throughout the day. Bring a backpack. You will be picking up lots of brochures and other items and this helps you carry it all. Also don't forget the essentials: tickets, watch, cell phone, camera, water, and once again sunscreen! Remember to take care of yourself while you are at the show, drink a lot of water and make sure to find time to eat and rest.
7. Find the latest map of the show as soon as you get there. This is where you can begin to refine your navigation through the sea of exhibitors. Locate the exhibitors that are high on your priority list.
8. Ask questions. This is your opportunity to learn about products and services, differences between companies and their products, and what they each have to offer. There are only a few large air shows per year, and what a great venue to shop all the options out there in one place.
9. Evaluate your accomplishments at the end of each day. Identify the things you didn't accomplish, and restructure your plan for the next day.
10. Allow yourself some down time at the end of the day to recharge and absorb everything you saw and the people you met. Organize any brochures, business cards, or product information you may have obtained throughout the day.

The Sun 'n Fun Fly-In is a great place to learn, compare, shop, or just sit back and enjoy. There are many great people, all together in the same place, who all have something in common... the love of aviation. During your visit to Sun 'n Fun please take the time to stop by and visit the Wipaire display at #MD-001D and see what is new.

Preparing for the Flight to Sun 'n Fun Cross-Country Adventures

Of course, that's aviation language for "Planning Your Cross-Country Flight To Sun 'n Fun." The event for 2009 will be held April 21st - 26th in sunny Lakeland, Florida—KLAL. If a seaplane is your method of transportation—and I assume it is—here are a few helpful hints before getting under way to the best spring break destination in Florida: Plan three separate days for your departure; plan A, B and C. This provides options to enable the pilot to live with the weather. Watch the weather systems two to three days before "plan A" day. Plan B or C might work out better after tracking the weather. Remember, spending one delay day at home is better than spending one "stuck" day in Cornwell, Tennessee. Thunderstorms will most likely be the largest weather concern in April. Again, pay attention to the weather systems. I can't help everyone with trip times and fuel costs, but here are a few selected one way routes considering fuel at \$6.00 per gallon and 120 knots average ground speed:



Brian Addis, Guest Contributor
Lake & Air Training

**For info about
becoming a pilot log onto
www.lakeandair.com
888.525.3247**

AVERAGE COST

Departure Point	Flight Time	Fuel Cost
Bangor, ME	10.0 hours	\$1,080
Chicago, IL	7.5 hours	\$810
Minneapolis, MN	9.5 hours	\$1,026
Atlanta, GA	3.0 hours	\$324
New York, NY	7.2 hours	\$778



Visit www.sun-n-fun.org for information on the "Fly-In NOTAM," arrival procedures, seaplane accommodations and FBO services. Bring your sun screen and have "sun and fun."

The Essential GPS Handheld

by Rick Wahlman | Avionics Manager



Garmin 696

Many pilots are now carrying a portable GPS as a standard tool in their flight bags. Garmin's GPSMAP series of handhelds has an impressive group of features at a reasonable price. The GPSMAP-396, 496 and the new 696 all have GPS with color moving map, terrain, simulated flight instruments and the extremely useful XM weather datalink. They revert to their internal battery if aircraft power is lost. They even include XM radio. These remarkable pieces of equipment can be mounted in many aircraft radio panels as a reference-only system using a panel dock; the XM radio interfaced with the intercom for your listening pleasure.

One thing to remember is that the XM features are not free. There is a one-time activation fee of \$175.00, a monthly subscription rate of about \$50.00 for weather and about \$13.00 for music. You should also figure the cost of data base updates into the budget. The 396 and 496 sport a high resolution 3.75 inch diagonal color display. The 696 has an enormous

7-inch diagonal display. The size of the 696 allows you to split the screen; for example, simulated flight instruments on top with the moving map below. The 696 is big enough that it doesn't easily fit into some cockpits. A yoke mount or knee mount may be the solution in these situations. With price tags of \$1,795.00, \$2,395.00 and \$3,295.00 respectively, they are a reasonably priced alternative to an on-board XM weather system that typically runs between \$5,000.00 and \$7,000.00 to install.



Garmin 496



PHOTO CONTEST

Congratulations to Patrick J. McCabe for winning the winter photo contest. This photograph was taken at Bradford Camps on beautiful Lake Munsungan, located in the Northern Maine wilderness. For the spring contest, show us the best destinations your seaplane has taken you. If there is a story behind your photo, we'd love to hear that, too. Remember photos with a 300 dpi or higher resolution are best. Prize: \$100 Lake & Air gift certificate (quarterly). Please include your name, address and phone number with submissions. By submitting your photograph, you acknowledge that Wipaire, Inc. may use your photograph for marketing purposes.

Email submissions to:
swiplinger@wipaire.com

Get Your Floats Ready for the Season



Jason Erickson
Director of Maintenance

As maintenance professionals we are challenged with keeping our customer's aircraft and floats in top condition. Periodically I run into an alarming situation regarding the installation of straight and amphibious floats on various aircraft: the floats were installed without an annual/100-hour inspection. Also, we see aircraft through our facility that go three to four years without the floats being inspected, yet the aircraft had received the required inspections during that timeframe. We all know your aircraft needs to be inspected yearly per FAR 91.409 which cites FAR43, Appendix D. What sometimes is forgotten is the very small notation in Paragraph E (10) of Appendix D: "Floats and skis – check for insecure attachment and obvious or apparent defects." The body of Appendix D also talks to all the systems you would find in amphibious floats such as brakes, tires, hydraulic lines, hardware, etc. The best source of information is found from the manufacturer or STC holder. Most of them have websites with free maintenance information, including service and parts manuals, bulletins, and any other service information that would be useful. Check out www.wipaire.com. Be sure you are compliant when signing off an aircraft annual when the floats are installed, as well as make sure you are reinstalling airworthy floats.

Recommended Products

Keeping Your Airplane In Tune



Water is everywhere. For seaplane operators that is a great thing. But when it comes to aircraft and float maintenance, that can create some special considerations. One of the most common questions we get on the phone or when customers stop in is "what products should I be using to care for my floats?" Be it grease and lubricants, sealants, or anti-corrosion products, we do have some recommendations for them. By no means is this list inclusive, but it covers the most common products we use and recommend, and is

a good starting point if you aren't already using a similar product.

Grease – HCF 605, or a high-quality marine grade grease with at least a 500-degree melting point. We use grease to lubricate the wheel bearings, main gear retract mechanisms, nose gear pivots, and rod ends. Grease should never be applied to the nose track itself, as the current nose trol-

ley blocks are made of impregnated nylon which are designed to operate smoothly without lubrication. Applying any sort of product to these will cause dirt, dust, and debris to collect, which impedes smooth operation of the nose gear and can lead to unnecessary wear.

Float Sealant – Sikaflex or Pro Seal, or RTV Silicone. For sealing dry areas of the float or applying patches to damaged areas, our manufacturing group uses Pro Seal 890. This is a great product, but requires a special gun to apply. Another option which also works well is Sikaflex 201 or 252. This can also be applied to dry areas to seal them. If the area is currently wet, an RTV Silicone can be applied to seal the area.

Hardware Lubrication and Protection Grease – LPS 2, or Boeshield T9.

Hardware should be lubricated before installation, either using grease and a brush applied to the hardware, or by spraying on LPS 2. Exposed



hardware can then either be protected with grease, which can have a tendency to collect dust, dirt, and run or rub off, or Boeshield T9, which forms a protective barrier on the exposed parts.

The service manuals for our floats also detail procedures for caring for the different systems on our floats and the products we recommend. A quick phone call to Customer Service is always welcome if you have other questions. We can provide some of these products, or help you locate them locally as well, and are always open to questions or suggestions if you are using a different product or have questions about whether your product is a suitable substitute.

Some grease, a small brush, and a few extra minutes can go a long way towards making sure everything runs smoothly on your floats.

Rachel Norman
Customer
Service Manager



Design Factor of Safety for Aerospace Structures

by Kyle Taylor | Aerospace Engineer/DER



Aircraft and rotorcraft airworthiness standards require, generally, that structural loading criteria are defined in terms of limit loads and ultimate loads. Limit loads are structural loads which could be expected in service. Ultimate loads are equal to limit loads multiplied by a prescribed factor of safety, typically 1.5, or 150%. By definition, aircraft and rotorcraft structures must be able to sustain limit loads without detrimental permanent deformation, and must be able to sustain ultimate loads without failure. Essentially, the structure may bend permanently at ultimate load, but must not break. Federal regulations often require a number of different factors of safety for certain components and structures, which often exceed the 150% factor. For example, certain critical hot air balloon structures must be designed to a 500% factor of safety! All Wipaire, Inc. FAA certified aerospace structures are either analyzed or tested considering the required factors of safety in order to show compliance with Federal airworthiness standards.

“The engine is the heart of an airplane, but the pilot is its soul.”

Keep Your De-Ice Boots in Top Condition

With WipCaires New FBO Services

by Matt Carter | FBO Services Manager

A new addition to the WipCaire family, FBO Services will offer a full line of detailing and fueling services, as well as coordinating your aircraft's movement while at Wipaire. Even a basic detailing can bring new life to your aircraft's appearance. With a full line of specialty aviation detailing products and equipment, WipCaire's FBO Services can remove that stubborn exhaust streak, take out those coffee "incidents" in your upholstery, and get rid of those bugs on your leading edges.



For those aircraft with de-ice boots, FBO Services offers a variety of treatments to both protect and improve, your de-ice boots' appearance and performance:

Shine: With Goodrich's Shinemaster Prep and Gloss, your boots will match the shine of a newly detailed airframe.

Performance: With Goodrich's Icx, your boots will shed ice more efficiently by giving the rubber a more slippery surface that denies ice the ability to build up.

Life Extension: Goodrich's AgeMaster will protect and extend the life of your boots by protecting them from weathering and hardening, and penetrating to keep the rubber supple for the life of your aircraft.

Keeping your aircraft properly detailed will keep it easier to clean and extend the life of your finish while keeping your aircraft looking showroom new. Call, e-mail, or stop in to see what Wipaire's FBO Services can do for your aircraft.

Spring Cleaning For Your Aircraft

by Dave Utsch | Refinishing and Interior Manager



Does the warming weather have you antsy to wake your airplane from its

winter slumber? After not having seen your plane for a few months, a few new nicks and chips in your paint might be jumping out at you. These nicks and chips happen, but they are not as difficult to handle as you might think. The best way to cure these little paint imperfections is to clean the area very well and then use a touch-up brush with the same paint that is on your airplane. It is a good idea to use a catalyst in the paint so it fully dries for long durability. After you have all the areas touched up, apply a Carnauba base wax. This wax is very easy to apply and will protect your aircraft finish for years to come. Be careful not to apply wax in your static ports, nor to apply direct water spray

into them.

Now that you have the outside of your airplane looking shiny and new, you might also notice that the interior could use a little care. You can purchase all the products that you need to touchup your aircraft interior at Lake & Air, Inc. Always test any product in an inconspicuous area to ensure that the product will not change the look of your material. If you have leather, be sure to treat it with a conditioner to add moisture back into it. This will lengthen the life span of your leather interior by keeping it soft and supple. Feel free to contact us with any questions you might have on caring for your paint or interiors, we are here to help you preserve your investment.

[Spring Show Schedule]

Week	Show	Location
April 21-26	Sun 'n Fun	Lakeland, FL
May 1-3	MN Seaplane Seminar	Brainerd, MN
May 2-3	Canadian Aviation Expo	Hamilton, Ontario
May 2-3	Alaska Airmen's Association Meet-	Anchorage, AK
June 12-14	Golden West Fly-In	Marysville, CA



Check out our new website!

My Aircraft Navigation: Find out what Wipaire can do for your aircraft using the new drop down feature.

Photo Galleries: View examples of Interiors, Avionics and Refinishing by WipCaire.

More Information: Read more articles by our expert staff on a range of aviation topics.

Sign up for our newsletter at www.wipaire.com

Wipaire Believes In Making Our Community A Better Place!



Special Olympics Polar Plunge

The Minnesota Special Olympics held their annual Polar Bear Plunge fundraiser on January 31st at White Bear Lake, St. Paul, MN. The Wipaire Puddle Jumpers, consisting of Dave Meech, Matt Carter, Trish Amberg, Anne-Marie Burgoyne, Roxanne Bolinske and Ellen Parker, raised nearly \$1000 and braved the icy waters. The outside temperature was an unseasonably warm 45 °F, but the water remained a frigid 32 °F. The White Bear Lake Polar Bear Plunge raised more than \$135,000 for Special Olympics and broke a record for Plunge participants with over 800 Plungers.