



EAA Chapter 100

November 2015 Newsletter

<http://eaa100.org>

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EAA Chapter 100 is a nonprofit association involved in the promotion of aviation through adult and youth education, hands-on training, building and maintenance of experimental aircraft, and through community awareness programs.

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Reader submissions and comments are strongly encouraged.

The next Chapter 100 winter meeting will be 1900, November

13th. John Puent is hosting this meeting at his home which is at 22974 State Highway 30, Hayfield. From Rochester go south on 52 or county 8 past the airport to 30, then west 15 miles, or 2 miles past Oslo. Or go south of Kasson to Oslo, and then 2 miles west. John lives at the junction of highway 30 and 230th Avenue. It is a white house with separate garage on the north side of the road. I have satellite pictures and a map on our [website](#)

September 29th 2015 EAA Chapter 100 Business Meeting Minutes.

A Special Business Meeting of Chapter 100 was convened Thursday, Oct. 29th at 18:30 hrs. Nine members were present. The sole subject was our annual Pancake Breakfast (AKA "Father's Day Pancake Breakfast" or "Flight Breakfast"). We reviewed our Mission and our relationship with the greater Dodge Center community. We voted to return to the traditional Father's Day date. I shared this information this morning, with Larry Dobson, owner and editor of the Dodge Center Star Herald newspaper. He was pleased & said he would share the Father's Day date with other Dodge Center organizations. He also asked to join us at our next Membership meeting.

A second item was brought up for consideration; creating a Pilot's Lounge/resting area in the S.W. corner room of the A / D building. This would involve a single (twin) bed, bedside table with light, and bedding. Gordy and Stan said they would adapt the room and keep it up. Dick Fechter said he will provide the bed and bed frame but will need help moving it to TOB. We need donations for the other items.

Respectfully Submitted, Tom Hall Secretary / Treasurer

Live Webinar - "Flying Abnormally!" 2000 CST, Thursday, November 12, 2015. Topic: Developing and Using Abnormal Procedures Checklists for Small, General Aviation Airplanes. More information [here](#), or do a search for faasafety webinar.

FAA Updates Airman Testing Web Page

On October 5, the FAA's Regulatory Support Division published a number of updates to the Airman Testing web page (http://www.faa.gov/training_testing/testing/). These include:

New version of Airman Certification Standards Briefing (PDF) at http://www.faa.gov/training_testing/testing/

New version of Airman Certification Standards FAQ (PDF) at http://www.faa.gov/training_testing/testing/

Airman Certification Standards Information Brochure added at http://www.faa.gov/training_testing/testing/

New version of what's New and Upcoming in Airman Testing (PDF) at http://www.faa.gov/training_testing/testing/

New version of Frequently Asked Questions at http://www.faa.gov/training_testing/testing/

Updated versions of the Private Pilot Airplane ACS and the Instrument-Airplane ACS will be added to this page in the near future, so please check back often. Better still, consider subscribing to that page!

The Saga of My Class 3 Medical (by Dick Fechter)

Bottom line – I now have a Special Issuance (SI) medical and I'm enjoying flying as PIC again. I'm giving dual again and enjoying aerobatics and practicing getting proficient at IFR flying. An SI is just a restricted medical. Mine says I have to report back in a year – not 2 years.

So, how hard is it to get a class 3 medical after cancer, surgery and still on a type of chemo? It depends – but it sure helps to have the Mayo system and the fine people at Mayo in our back yard.....

I know 80% of you don't care about my detailed account and the other 20% don't want to know, so if you fit either of these categories, just skip down to "As the Gyro Spins".

It was a little over a year ago (October 2014) when Mayo doctors discovered a fairly good sized (or bad sized depending upon your point of view) cancerous tumor on my small intestine. Because of its location and size, they recommended I go on a relatively new targeted type of chemo pill (Gleevec) to shrink it before surgery. I was also told I would have to be on Gleevec for 3 years – even after the tumor's removal.

I knew I would be grounded after starting Gleevec but also read pilots could get waivers while on it. When I asked AOPA how to get the waiver, they said the cancer actually grounds me and the Mayo AME agreed. This was frustrating because the type I had wasn't going to affect me during flight – but that's our FAA.

Luckily I tolerated the Gleevec fine and waited for the tumor to shrink. By May it was done shrinking and was removed June 3rd. Besides having the best doctors in the world, living near Mayo meant I was able to have my surgery a month before the original schedule. They called me and asked if I could be there the next morning. That all went fine and I was told to expect to wait about 30 days before applying for my SI medical.

Then my surgeon called me to say they had analyzed my tumor and it had a somewhat rare additional exon mutation that probably won't succumb to Gleevec as easily as the normal mutation. This, in turn meant changing my Gleevec intake. So I cancelled my AME appointment and after a couple week delay, I went from 400 mg to 600 mg per day of Gleevec for a month – no big problems. So then it was bumped up to 800 mg per day for a month and I really didn't like the way I felt and it appeared my eye site was changing. I went back to 600 mg but they wanted to make sure nothing was wrong with my eyes.

Getting into Mayo Ophthalmology was going to be weeks, but because of my oncologist's persistence I got a call about noon and was asked if I could be there in the afternoon. I did and the check included a CAT scan of the back of my eyes and was accomplished in the same afternoon. All checked out ok.

So, 2.5 months after my aborted first AME appointment, I made it in to Dr. Steinkraus' office on September 15th. It was probably the second most thorough flight physical I ever had – the first being my first USAF flight physical. No problems, and the package was sent to the FAA. I was also scheduled by oncology to have another CAT scan in a few weeks but because of conversations between AME, Dr. Steinkraus, and my oncologist, it was moved up to September 24th so the FAA could have a very complete package. On October 8th Dr. Schall of the FAA signed my SI. That was only two weeks after my CAT scan.

I just can't say enough good things about the people at Mayo. Everyone had my get-back-on-flying-status interests at heart and worked well together to make it happen. Mayo's ability to tie all my records together certainly made everything easier for my AME – it was a very large stack. And I'm sure it didn't hurt anything that Dr. Steinkraus knows Dr. Schall.

As the Gyro Spins

In the era of glass cockpits, steam gauges can often be overlooked. But for many of us they are still our primary instrument system. Even for those with sparkling new glass cockpits there is likely still back up steam gauges. In his article "As the Gyro Spins," William Dubois examines the pressure and gyro systems, how they work and more importantly, how they can fail. The article is part of the September/October 2015 "All Things IFR" issue of the FAA Safety Briefing Magazine, available online at: http://www.faa.gov/news/safety_briefing/

Flight Testing Homebuilt Aircraft Book:

It's time to learn a whole new discipline: flight testing. The new Flight Testing Homebuilt Aircraft, an updated and improved version of the 1992 edition, is designed to give you the techniques and tools to help you flight test your creation. More information is at: <http://www.actechbooks.com/products/act205/>

Survival.....

It can happen quickly – One minute you're cruising along and the next you may find yourself on the ground in a survival situation. Coping successfully in times like these requires knowledge, discipline, and planning. Knowledge of your aircraft – even when it's unable to fly after a forced landing can be critical.

Here is one of the few things you need to consider before the accident happens:

Seatbelt orientation and operation – There is nothing like trying to figure out how when you need to get out NOW!

The nature of forced landings is such that we don't get to pick when and where they'll happen. If you're lucky you'll arrive on the ground intact with all your survival gear. You can set up camp and enjoy the great outdoors while waiting for rescue. We're not always lucky though and if your aircraft burns or sinks, your gear may be lost and you'll end up with what you're wearing...Are you physically and mentally prepared for that waiting period until someone starts looking for you?

1. Are you dressed for the climate and conditions?

Dressing in layers is always a good idea. That way you can adjust as conditions change. Although goose down is a wonderful insulator when it's dry, it's not very good when soaked so synthetic insulation will serve you better when it's wet.

2. How close am I to civilization? Farmhouse? City? Highway?

Hopefully you chose a route that took you close to a highway. That's not possible for a lot of Alaska but it's relatively easy to do in most of the lower 48. No matter where you land, there are some things that must be done quickly.

Wherever you are there are limits to how long you can survive so let's take a simplistic look at human endurance limits. There have been some notable exceptions but most of us can:

1. Live up to 3 minutes without air.
2. Three hours is about the longest we can last in relatively harsh environments without shelter. Shelter, by the way, includes the clothes we're wearing.
3. We may not feel good about it but most of us can last up to three days without water. (we can last a whole lot longer than that without food)

In the first 5 MINUTES you must:

1. **Exit & Count noses**
2. **Check for breathing, bleeding & injuries**
3. **Activate Emergency Locator Trans** – If you do not know how, now is NOT the time find out.
4. **Activate PLB - Personal Locator Beacon**
5. **Make a phone call Cell or Satellite** - Tail Number, location, souls, injuries, survival time & call back time

In the first 5 HOURS you must:

1. **Create shelter**
2. **Reassess injuries**
3. **Inventory supplies**
4. **Build a fire**
5. **Organize camp site**
6. **Make another phone call**

In the first 5 DAYS you must:

1. **Stay busy**
2. **Assign work tasks**
3. **Stand watch**
4. **Carry water**
5. **Home improvement**
6. **Fish, hunt**

There is one item that tops every successful survivor's list. It's considered by experts to be the prime factor in determining whether one lives or dies. It weighs nothing and it's always available.

It is – of course...the Will to SURVIVE!

The volume of information you might find useful would take days to convey so, as we said in the beginning, we hope we've piqued your interest in the subject.

- **Basic Survival Skills for Aviation – Civil Aerospace Medical Institute OK-06-03**
http://www.faa.gov/pilots/training/airman_education
 - **Aviation Risk Management Handbook (FAA-H-8083-2)**
http://www.faa.gov/regulations_policies/handbooks_manuals/aviation/risk_management_handbook/
-

Angle of Attack (AOA) training video

<https://www.youtube.com/watch?v=8JcjWnAJGKQ&feature=youtu.be>

What will the weather do? (Another video)

The National Oceanic and Atmospheric Administration's Aviation Weather Center is an excellent source to get a complete weather picture before flying. Discover some of the many resources available at its revamped website, www.aviationweather.gov, with this three-minute video—the second in the AOPA Air Safety Institute's Weather Wise series focused on practical weather flying. [Watch Weather Wise: The AWC Website...](#)

FAA clarifies rules for logging instrument approaches

From AOPA pilot protection services news

“What constitutes a ‘loggable’ instrument approach?” is the question that the FAA addressed in [a recent InFo statement](#). The statement was issued after recent requests for clarification and legal interpretations concerning the six instrument approach procedures (IAPs) that an instrument-rated pilot must log every six months in order to maintain his or her IFR currency, as required by FAR 61.57(c): “Instrument Experience.”

Generally stated, FAR 61.57(c) provides that a person may act as pilot in command under IFR or weather conditions less than the minimums prescribed for VFR only if, within the six calendar months preceding the month of the flight, that person performed and logged at least six instrument approaches, holding procedures and tasks, and intercepting and tracking courses through the use of navigational electronic systems. Meeting the requirements of the FAR through the use of an aircraft, as opposed to a simulator or other trainer, requires that the flight be performed “in actual weather conditions, or under simulated conditions using a view-limiting device.”

According to the FAA, a pilot may log an IAP for currency or training when the pilot accomplishes the IAP in accordance with several conditions. The pilot must operate the aircraft solely by reference to instruments, in actual or simulated instrument meteorological conditions (IMC). To log the IAP, the pilot must be established on each required segment of the IAP to the minimum descent altitude (MDA) or decision altitude/decision height (DA/DH).

Typically, to log the IAP pilots must execute the entire IAP commencing at an initial approach fix or associated feeder route and fly the initial segment, the intermediate segment, and the final segment of an IAP. However, the pilot may receive actual or simulated radar vectors to the final approach course or be otherwise directed through an appropriate air traffic control clearance to a specific IAP and still log the approach. The missed-approach segment does not have to be flown for the IAP to be logged, although the FAA encourages doing so for proficiency purposes.

The FAA does not require the ceiling to be at MDA or DA/DH during a flight in IMC. The approach may still be logged if an aircraft maneuvering in IMC transitions from IMC to visual meteorological conditions (VMC) on the final approach segment of the IAP prior to or upon reaching MDA or DA/DH.

If the operations are conducted in simulated IMC, the simulated IMC must continue to MDA or DA/DH. The FAA noted that if a flight in simulated IMC deviates from the final approach segment for safety reasons such as traffic avoidance, the pilot may still log the IAP as long as the aircraft has passed the final approach fix. The FAA further noted that simulated instrument conditions require that the other control seat be occupied by a safety pilot with a current medical certificate who is appropriately rated in the aircraft, and the pilot operating under the simulated instrument conditions must also log the name of the safety pilot.

Area forecasts to be discontinued during 2016

More information at: http://www.aopa.org/News-and-Video/All-News/2015/October/06/Area-forecasts-to-be-discontinued-during-2016?WT.mc_id=151009epilot&WT.mc_sect=adv

Here is a link you might want to keep handy: <http://www.boldmethod.com/>

The Mag Check: https://gallery.mailchimp.com/dfd69bf8f8fec1b9da00eedbd/files/The_Mag_Check.pdf

Operating Superstitions – part two: <http://www.avweb.com/news/features/Operating-SuperstitionsPart-Two-225018-1.html>

- Never Lean the Mixture Below (Insert Your Favorite Altitude) Feet
- The Engine is Most Likely to Fail at the First Power Reduction
- In a Turn, the Fuel Flows Toward the Inside of the Turn
- Aviation-Grade Oxygen Has Less Moisture Than Other Kinds
- Operating an Engine Beyond TBO is Illegal, Immoral and Fattening

- The Step
- Turning Into a Dead Engine
- If You Ditch In a Fixed-Gear Airplane, You're Doomed

Plastic Window Care

By LPM Staff

Editor's note: We wish to thank the folks at LP Aero Plastics, www.lpaeroplastics.com, phone (800) 957-2376 for much of the following information and recommendations on how to properly care for your aircraft windows.

They have been around for many years and we suggest if you have any acrylic needs that you check them out. That includes many care products as well as a great number of STCs for a number of different aircraft for those folks wishing a thicker windshield or side windows. Not all aircraft have thicker windshield capability with the current STCs we checked, but doubling the side windows to 1/4 inch is generally available via STC.

Why would you want that? Our experience is limited to Bonanzas, but the difference is quite noticeable with thicker windshields. It's even measurable with a decibel meter with the 3/8-inch thick version of the windshield. You can even go up to 1/2 inch on a Bonanza.

Most other aircraft are limited to 1/4 inch, but we did not do extensive studies on available STCs for thicker acrylic.

Acrylic plastics are known by the trade names of Lucite or Plexiglas and by the British as Perspex and meet the military specifications of MIL-P-5425 for regular acrylic, MIL-P-8184 for craze-resistant acrylic. There is also a great deal of information in AC 43:13-1b.

There are two important notes with respect to aircraft windows. The first is that there is no reason they cannot be serviceable for 20-25 years or more with reasonable care and a little luck—especially with a hangar. We've seen plenty of windows that are older, but are unequivocally dangerous since they are so hazy and discolored. Also, for repairs we are limiting this article to non-pressurized aircraft.

It also matters greatly where you keep your plane if it's outside. Both the sun and industrial fallout can do great harm and accelerate aging of the windows.

The second point is how you care for your windows. If you let line personnel clean them, it's generally going to scratch them. If you use the wrong cleaning techniques or products, again it will scratch as well as possibly make them hazy. Ironically, placing covers over them can do more harm than good. More below.



And, believe it or not the FAA believes it comes under preventative maintenance for an owner to replace the side windows on their own, but not the windshield. You may want to think twice before changing windows without consulting with an A&P.

Some planes are easier than others, but all need to be done by the book if you don't want to end up with leaks, making corrosion and mold and noise a very real possibility. The same goes for opting for installing thicker plastic. Going too thick where thicker windshields are an option makes the process more difficult.

Tales on Wives

Contrary to popular belief most aircraft windows are acrylic plastic not Lexan or polycarbonate. Acrylic plastic is eminently "scratchable" so the first line of defense is to prevent the scratches in the first place.

The second line of defense is to deal with any scratches that do happen in a manner that helps, not worsens the situation. Sometimes doing nothing is the best you can do, although a pro may be able to help. In some cases a new window is the “right” choice.

Per LP Aero, “another consideration, especially on light aircraft, is the feasibility of trying to repair some windows. The windshield on the Cessna 150, for instance, is .125 (or 1/8”) thick, and some Piper Cherokee rear windows are only .080 (or 5/64”) thick. So when you start to remove material, you have to be aware of what you will have left structurally.”

“Keep in mind that most repairable windows, such as those found on pressurized air liners, have published specifications for minimum allowable thickness. Most light aircraft have no such specification. Sometimes, labor spent on a repair attempt would probably be better spent installing a new window.”

Cleaning Up

The fewer things that touch the windows the better. The first step in cleaning is to remove as much dirt or debris as possible by simply flushing the surface with water. LP Aero Plastics recommends adding a little mild Woolite to the water as an emulsifying agent. (Do not use any dishwasher type detergents. or household cleaners like 409).

It’s not a good idea to blast windows with a high-pressure washer unless it’s been significantly reduced in pressure. The pressure alone against dirt could cause high amounts of micro scratches depending on the quantity and type of dirt and the angles the water strikes to remove it. (High-pressure water and cleaner can also be forced under aircraft skins to cause future corrosion issues.)



If a little rubbing is needed, caress the windows lightly with your bare, clean and unencumbered hand i.e. no jewelry or watchbands to inadvertently scratch. Also, depending on the position of your body in the cleaning process, be sure there are no belt buckles, tools or the like that can come in contact with the windows.

For example, a Bonanza windshield is big enough to require draping part of your body over it to get all the nooks and crannies if approached from the wing walk. A belt buckle or even a metal button or zipper tab can do terrible things.

Dry It Carefully

Continuing with the pampering treatment, use a clean, soft cloth to dry the windows. The new microfiber cloths are good providing you keep them clean. Follow this with any good cleaner/polish that is specifically designed for acrylic windows.

It’s probably best to stick with aviation type products, and read the label for the proper procedures before applying anything. Products used on acrylics need to be looked at more closely since there are many folks out there who may think anything intended as a glass cleaner or furniture polish will save a buck and do just as good a job. It won’t and may lead to premature replacement.

For example, glass cleaners often have ammonia as an ingredient, and ammonia is anathema to acrylics. Ammonia tends to cause crazing, which is the formation of shallow microscopic cracks.

While Pledge furniture polish has been on our personal use list for decades as a cheapskate approach, LP Aero Plastics is less sanguine about its use. There is certainly no question that it was never designed for use outside or on aircraft. There is some question about it building up a film that may not be so easy to remove.

We are not fans of Rain-X. Nothing on the label or Web site or any other site we checked says it’s safe for acrylic plastic, Again, we believe this is an off-label use and could have a detrimental long-term effect on soft acrylic.

We shouldn't need to mention the dangers of aromatic solvents, but the level of destructiveness to acrylic is about on a par with their degree of volatility. Things such as methyl ethyl ketone (MEK) are murder. Acetone and lacquer thinner are also bad. Gasoline is not good either, and the key to avoiding harm from gas is to flush it off immediately.



Paint stripper is probably one of the more common things that may come in contact with acrylic, and it, too, is disastrous on acrylic. That's why you see painstaking applications of aluminum tape and foil to protect the acrylics when a plane is in for painting. We don't know the degree of potential harm with the new "safe" strippers, but we suggest that you don't try it to see unless it's on scrap material for educational purposes.

If you have a situation where you have used the incorrect masking tape or left it on too long when doing some painting and you have a sticky residue to deal with, the safest solvents are 100 percent mineral spirits (odorless is the best bet) or kerosene. Some types of alcohol are safe, isopropyl alcohol being one example. WD-40 also works but we don't know exactly what's in it.

Polishing it Off

Probably the best products for polishing is 100 percent cotton flannel, readily available at any yard goods store, or in a well-stocked closet. The second choice for the penny pincher is a clean cotton T-shirt. The new microfiber cloths will also work fine but are expensive.

It is LP Aero Plastics position that they have never seen a paper product that is safe on acrylic, including those advertised as safe for acrylic. We concur. Who to believe but the folks who make the acrylics?

Paper on acrylic causes micro scratches and abrasions that build up over time into a form of haziness. Fly into the sun to see just how bad it can be with crazing and haziness.

LP Aero Plastics categorizes polishing products into three categories:

1. Non-abrasive liquid sprays, in pumps or aerosols that may or may not have scratch filling properties.
2. Non-abrasive creams that have scratch filling properties.
3. Mildly abrasive creams that have scratch removing properties.

Micro-scratches—the type that you cannot feel with a fingernail do accumulate over time. That said, the aircraft owner has a great deal of influence on the rate and degree of scratch accumulation of any type.

The non-abrasive scratch filling creams are fine to be used on a regular basis. Their benefit should be noticed most readily when flying toward the setting sun.

If you still want better vision flying toward the sun, go ahead and use the mildly abrasive creams with scratch filling properties. But be aware this should be used sparingly, and does

take elbow grease—not a polishing wheel on an electric drill, which an amateur simply cannot control without the likelihood of doing far more damage to the finish.

If you read the directions on the abrasive polishes, a follow-up application of the scratch-filling product is also a recommended procedure.

The Fingernail Test

If you can feel a scratch with a fingernail, you have to face the limited likelihood of a totally scratch free outcome. That's because there is no way to remove such a scratch without removing material.

You remove material around the scratch to the depth of the scratch and then polish it back to clarity. It is both tricky and time consuming. The most common problems come with impatience or lack of understanding and removing material with a too coarse grit.

This is a step-by-step process. The most likely route to a successful outcome is to buy a product that comes as an all-inclusive, progressive system. Then stick with all the steps outlined in the directions.

Skipping steps to save time is a path to being worse off than before as you will have a larger area that is no longer clear. Sometimes, even if you get back the clarity, you may find that you have introduced an optical distortion.

Moreover, as thin as windshields are (commonly 1/8 inch or less) you have to consider the amount of material, location of the damage and area affected. You don't want to weaken an already thin windshield, so use the guidelines furnished in the abrasive products, and the advice of a trusted mechanic—or two.

There are some conditions that are best left alone or the acrylic replaced. But that's not necessarily bad other than for the wallet. So many times we have seen people respond to new windows, squealing with glee at how much nicer it is to be able to see the world again—notwithstanding the enhanced safety aspect of new acrylic.

Moreover, if you go with a thicker windshield, very noticeable reductions in cabin noise will result. That's because the prop is the single biggest noisemaker by far with the hammering pulses of air on the windshield.

A ½ inch windshield may be too much in our opinion, and it's only available for the Bonanza as far as we know. It's expensive to buy and installation can be a bear since it's so much thicker than the original aircraft design.

Plastic sheets should be stored with the masking paper in place, in bins that are tilted at a ten-degree angle from the vertical. This will prevent their buckling. If the sheets are stored horizontally, take care to avoid getting dirt and chips between them.

Stacks of sheets must never be over 18 inches high, with the smallest sheets stacked on top of the larger ones so there will be no unsupported overhang. Leave the masking paper on the sheets as long as possible, and take care not to scratch or gouge the sheets by sliding them against each other or across rough or dirty tables.

Formed sections should be stored with ample support so they will not lose their shape. Vertical nesting should be avoided. Protect formed parts from temperatures higher than 120 °F (49 °C), and leave their protective coating in place until they are installed on the aircraft.

Scratch Removal Kits

Meguiars, 3M, Micro-Surface (Micro-Mesh, one of the longest aviation popular products), and others supply scratch removal kits. The kits consist of many progressively finer abrasive sheets or creams that are used in sequence to remove defects and to polish the acrylic back to clarity.

What you supply is lots of elbow grease and an equal amount of patience and intelligence to not skip steps or exceed the recommended maximum area or depth of the damage for which these kits are designed. These kits run about \$20 for the small kit. They are much different than simply ultra fine sandpaper. It takes about ½ hour for a small side window.

LP Aero Plastics recommends the Satinal pad made by Transelco. This onetime-use pad is dipped in water to make a 5-micron slurry that will remove fine scratches and polish back to clarity in one step. For deeper scratches, it can be used in conjunction with 600, 1500, or 2000 grit wet sandpaper. It would be best to practice on scrap material until you feel very confident before the "real deal."

Homebuilt Issues

Some homebuilts use Lexan, a brand name for polycarbonate instead of acrylic. There is no good way to remove scratches on this type of material, because it is so soft. Ironical that it finds applications in ballistic "glass."

Even the hard-coated versions of Lexan do not do well for scratch removal as the scratch removal process only removes the hard coating. About the only option in scratch removal is to use scratch filling polishes, which may help depending on the size, location and depth of the scratch.

Covers, Inside and Out

Occasionally, there are reports of canopy covers and sun shields that do damage in surprising ways. It's obvious the material that faces the windows with external canopy covers must be soft. But the cover must also be capable of tight attachment and be attached very tightly.

If they can flutter in the wind and allow dust from the blowing winds to get inside, then you have a perfect formula for abrasion. Bottom line; cinch them down and check them frequently for any signs of damage while it can still be fixed.

Sunshields can be made in a variety of ways, some of which may involve sharp edges or frames that can scratch acrylic. They generally are not put in or removed with the greatest of care. This potential scratching issue is particularly true where the product is of the homemade variety.

There is also the potential for harm from chemical attack from covers. Namely the plasticizers used in some vinyls, which can attack acrylics.

When you combine the close proximity of the cover to the acrylic and add the blazing heat that the sun can build up, it's a mixture for a problem. The covers can stick to the inside of the windows over time.

With brand-name products expressly designed to be used as an aviation cover it's less likely to be an issue (though it doesn't hurt to read the details carefully). More likely candidates are the homemade covers made from some type of vinyl or similar flexible material with unknown properties.

You certainly do not want to trade cooler avionics for ruined windows

Pilot's Bill of Rights II

According to: <http://www.aopa.org/Advocacy/Legislative-Affairs/Pilots-Bill-of-Rights-2>, only 4 of the Minnesota house members have signed up as a co-sponsor (and Tim Walz is not one of them). Neither Minnesota senator has co-sponsored this bill.

Call, email, fax, and write -- Each of them also has an office in Rochester. Klobuchar's usually has Chuck Ackman there on Mondays and Fridays. Take your letters to the second floor of 1130 1/2 7th Street NW for all 3. That building is near "Everything Hobby".

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