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VOLUME 22, ISSUE 10

THE <mark>SLIPSTREAM</mark>

 THE NEWSLETTER OF GREEN RIVER EAA CHAPTER 441 KENT, WA

 OCTOBER
 2020

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SPECIAL POINTS OF

INTEREST:

PHYSICAL GATHER-INGS TEMPORARILY ON HOLD UNTIL FUR-THER NOTICE

WE ARE GOING TO A VIRTUAL GATHERING THIS MONTH

PRESIDENTS COLUMN, MARK OWENS GLASAIR LANGING GEAR UPDATE:

Presidents Column:

Straight-In, Traffic Permitting

The topic of traffic pattern procedures is often debated.

14CFR 91.126 says pilots should make all turns to the left in the traffic pattern unless otherwise indicated.

The Aeronautical Information Manual (AIM) is not regulatory, but provides a set of consistent guidance for operations. Regarding airport traffic patterns, it says (4-3-3):

"Pilots are encouraged to use the standard traffic pattern. However, those pilots who choose to execute a straight-in approach, maneuvering for and execution of the approach should not disrupt the flow of arriving and departing traffic. Likewise, pilots operating in the traffic pattern should be alert at all times for aircraft executing straight-in approaches.

A few weeks ago, I was approaching to land at Auburn. As I was approaching the Commons mall, I heard a Cessna call on a 7-mile straight-in, traffic permitting. He did not use a call sign, nor was he required to, but at least he was making his position and intentions known. At that point, I reported over the mall, heading for the water tanks and the 45 to downwind. The Cessna reported "Cessna on a 5 mile straight-in, traffic permitting." Now on downwind, gear down, checklist done, I reported my position, and he said "Cessna on a 3 mile straight-in,

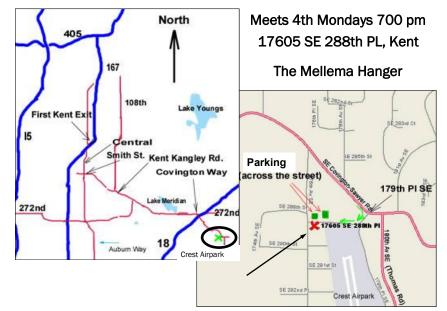
traffic permitting". I had fully expected to hear him report that he would break off his approach to join the downwind, but that's not what happened. I was about to turn base, gear down, flaps 10, when he reported "Cessna on a 1-mile straight-in, traffic permitting". Knowing that my final approach speed is a lot faster than his, I reported "The Twin Cessna is about to turn base...tell you what, I'll clean up, power up, and go back to the downwind". At that point, he apologized, and said he did not know I was in a twin (although I'd reported that fact 4 times at that point). He touched down about the time I passed the threshold on upwind, and went directly to a hangar, not stopping for fuel.

Even though this pilot knew there was traffic in the pattern, he just kept repeating "Cessna on straight-in, traffic permitting", and just kept on coming. It's almost like he didn't realize he was saying the words, he was going to land straight-in whether anyone else was there or not. Or maybe he considered the "traffic permitting" bit to be a command: traffic should permit me to do this.

A couple of weeks later, it happened again at Auburn, but I do not know if it was the same pilot. A Cessna pilot reported being South of the airport, on a long straight-in. In this case, another pilot extended his downwind to allow the straight-in to land.

Fly safe, be courteous.

WHERE DO WE MEET THIS MONTH?



OCTOBER

Virtual meeting with a round table discussion and sharing of photo's and ideas. Flybaby history

Program

Virtual Meeting information: Mondays meeting is again on Zoom: Here are the details: Monday October 26, 7pm-9pm Join Zoom Meeting

Password: 1234

Phone one-tap: US: +12532158782,,96365762624# or +13462487799,,96365762624#

Meeting URL: https://gettyimages.zoom.us/j/96365762624? pwd=OUtzUkw0OVpDR28wUkxJLzF1VGFzQT09

Join by Telephone

For higher quality, dial a number based on your current location.

Dial:

US: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 312 626 6799 or +1 646 876 9923 or +1 301 715 8592 or 833 548 0276 (Toll Free) or 833 548 0282 (Toll Free) or 877 853 5247 (Toll Free) or 888 788 0099 (Toll Free)

Meeting ID: 963 6576 2624

2020 **OFFICERS President: Brian Lee** (253)-639-0489 Vice-President: Mark Owens Secretary: Jake Schultz **Treasurer: Steve Crider Tech Counselors/ Flight** Advisors: **Brian Lee** (253)-639-0489 **Dave Nason** Jonathan Lee (253) 508-1376 **Newsletter Editor: Roger Schert** (206)713-9910windridershaman@gmail.com

PIETENPOL UPDATE, DARINS RV ADVENTURES:

Brian



Pietenpol update:

Hello 441,

Denise and I are getting more and more settled here in Oregon. The main project this month is not the Pietenpol exactly, but a staircase in the hangar so we can store long -term items in the attic. We'll have



10 steps, a landing, and then another 11 steps. (The only way we can currently access the area above the hangar now is with a 16' extension ladder so this should be significantly safer and more convenient.) We've "tucked" the staircase into the corner so it should be there when we need it yet still out of the way.

Still telecommuting for Boeing for the foreseeable future....

Having fun and learning a lot....

Jake

Darin's RV Adventures:

October 20, 2020:

Baffling

Actually I've been working on much more than the baffling but since the cowling and the baffling work together to keep the engine cool its a bit of a mixed bag of tricks. I'm paying extra attention to the baffling because these tightly cowled RV's run hot and I don't want to spend time chasing cooling leaks after I start flying.



As I mentioned in a previous post I had planned to split the lower cowling in half to ease the installation/removal of this huge hunk of fiberglass. This picture shows the "jig" I created with multiple strips of aluminum to hold the two halves in the exact position needed after I make the cut. In this picture the cut has been made and as the picture below shows the 5 layers of glass that will become the flange that the fasters attach to.



This is the inside of the cowling with the glass flange laid up and epoxy curing.

Much of the baffle work began with edge deburring, hole cutting, and as indicated by this picture...modifications. In this case two specific modifications are evident. First is the little square "patch" you see in the middle of the picture. This area of the Lycoming cylinder has no fins for cooling. That means if the baffling is flush against the cylinder no cooling air can pass in this

TECH COUNSELORS AND FLIGHT ADVISORS



Chapter 441 is fortu nate to have two Feel free to call Brian

(253)-369-0489, or Dave Nason any time. You don't need to wait for some significant milestone in your project. Remember, this is not an "inspection". The shop doesn't need to be cleaned for a visit. All are quite used to looking at pieces, parts, and assorted bits, and will be happy to answer questions, offer

advice, and generally talk about projects, building, flying, or whatever.





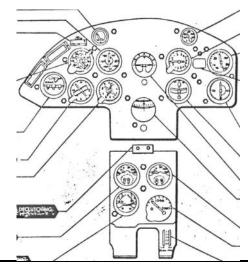


GUESS THAT AIRPLANE; GUESS THAT INSTRUMENT PANEL

This months entry: Go to Page 9 for September's airplane This months entry:

Go to Page 10 for September's Instrument Panel





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DARINS RV ADVENTURES CONTINUED, EAA NEWS:



area. If you look at the cylinder picture below you will see what I mean. My patch basically creates a small gap that will allow air flow past this area. The second modification is a little harder to see. On the far left side of the aluminum plate you will see a bracket with a bolt hole in it. The baffle kit that comes from Van's is for a wide deck engine, my engine is a narrow deck. They are similar but have a few differences such as the shape of the block and a few bolt holes. In this case the inside edge of the baffle needed to be cut and reshaped to fit. Along with that the bolt hole flange had to be fabricated to fit the new shape.

Ro Read more, Click Here

EAA News:

A Challenge to Members to Share the Gift of EAA

By: David Leiting, EAA Lifetime 579157

Vice President of EAA Chapter 252

EAA Membership Development Manager

The past 10 months have flipped the world upside down for many of us, but they have also allowed us to spend more time focusing on our families and our passions. For all of us, the shared passion is aviation. It is what brought us together, and has been the one constant we can look to when the days get rough.

The flying club I am a member of shut down operations for 90 days as we evaluated how we could safely operate amongst the COVID-19 pandemic. It pained me to stay out of the cockpit for more than three months. This was the first time since I passed my private pilot check ride that I was out of my 90day currency! Additionally, my local EAA chapter put all of our events on hold. Although we were able to conduct virtual gatherings and board meetings, it wasn't the same as our usual in-person events.

This lack of aviation activity caused me to reflect on my passion for aviation, and remind myself how easy it is to take for granted the aviation opportunities afforded by EAA. Like many of you, much of what I use to fuel my passion for aviation has come from EAA. EAA AirVenture Oshkosh, my Young Eagles flight, the relationships built through my local chapters, and the educational opportunities. Without EAA, I am not quite sure where I would find myself on my aviation journey.

One of the great pillars of EAA is the opportunity to give back, and pass the torch to future members. Perhaps you have given a Young Eagles flight that led to a career aviator, or lent a helping hand to a friend building their own aircraft. There is also a great chance that you have benefited from the generosity of a fellow EAAer. It is the lifeblood of our organization!

We all remember our mentor who introduced us to aviation and are forever grateful for the gift they gave us. That mentor may still be a close friend of yours within your EAA chapter. EAA is now asking you to join us in helping to preserve the legacy of EAA Founder Paul Poberezny, and of all our past and current members, by gifting an EAA membership to someone you feel will continue to carry on EAA's mission within The Spirit of Aviation.

It is EAA members such as yourself that can bring aboard the next generation of members. Your involvement in your local chapter is even a greater rea-

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EAA NEWS CONTINUED, ROBERT HALL:

son to introduce them to EAA. Chapter members are the most engaged and passionate members you'll find within EAA. There is no better group than a local chapter to welcome a newcomer to EAA.

Once you identify whom you'd like to sponsor, simply visit www.EAA.org/Legacy to register EAA's newest member. After you gift this membership, invite the individual to your chapter, and show them the opportunities and community that exist in their own backyard. By gifting a membership and becoming a Legacy sponsor, you will receive a Legacy sponsor pin and patch.

EAA cannot thank you enough for your continued support of the organization, and especially of your local chapter. Chapters are the lifeblood of EAA, and without them the impact of EAA would be fraction of what it is today. Enjoy your holiday season, and we hope to see you in Oshkosh this July!

David Leiting Jr., PPL ASEL, EAA Lifetime #579157,

EAA Warbirds #596249, EAA Vintage #724081

Membership Development Manager

EAA—The Spirit of Aviation

Phone: 920.426.6116

Fax: 920.426.6560

www.eaa.org

The Green Dot:

This time on EAA's The Green Dot, the crew sat down with Jason Capra, EAA 1024007 and president and founder of Vintage Wings Inc., who is currently working on the restoration of C-53 Beach City Baby. Topics include Jason's introduction to aviation and the incredible history of his C-53, including time spent in the military, airlines, and as a governor's transport.

To listen to the Podcast: Click Here

http://www.darinanderson.com/

IAC President Jim Bourke, EAA Lifetime 857603, is leading a team to recreate the distinctive Hall Bulldog, an air racer with a short-lived career. Built in 1932 by ex-Granville Brothers designer Robert Hall, the Bulldog is a striking open cockpit monoplane with an inverted gull wing, powered by a massive radial engine. Using period photos, film, and drawings, the Hall Bulldog Project, which also includes designer and fabricator Tony Horvath and historian Mathew Lawlor, will revive the iconic design with a full-scale flying recreation To Read More: <u>Click Here</u>



Robert L. Hall

Robert L. Hall was born in Taunton, Massachusetts in 1905. After graduating in 1927 from the University of Michigan, with a degree in Mechanical Engineering, he joined the Granville Brothers Aircraft, where he was the chief engineer. He designed the Gee Bee Model Z racer, the "City of Springfield," which swept the competition in every contest in the National Air Races of 1931. On September 5th, Hall flew the Gee Bee Z to victory in the General Tire and Rubber Trophy race. Lowell Bayles flew the aircraft the next day to victory in the free-for-all event.

Hall then left the Granville Brothers to form Hall Aircraft. There he designed the Bulldog racing aircraft, which he went on to race at the 1932 National Air Races, finished sixth at a speed of 215.5 mph. Afterwards there was speculation that its experimental Hamilton Standard propeller prevented the Wasp engine from running at full power. Hall was so disappointed with its performance that he dismantled and scrapped the plane after that race. He also designed the Cicada racer, which was scheduled to race at the 1932 National Air Races by owner Frank Lynch but did not start the race due to engine problems.

To Read More: Wikipedia:<u>Click Here</u> Air Racing: <u>Click Here</u> WAAAM: <u>Click Here</u>

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EDITORS CORNER:

Editors Corner:

How are you doing in this tough time? I hope you are taking care of your immune system and enjoying life. Hopefully you are also getting some flying in. Ron has agreed to give a talk on the Flybaby history on Monday night. He has done a great job with the Flybaby website. I really like what he has done on the Flybaby re-boot. To visit the site: Click Here.

I have mostly been working on getting enough vitamin d, studying Spanish and annoying the spouse. I had let the workbench get re-inundated with things as we do a little bit of clean-out of the house. So I am planning to clear off the workbench next week.

Here are the meeting details for Monday:

Join Zoom Meeting

Password: 1234

Phone one-tap: US: +12532158782,,96365762624# or +13462487799,,96365762624#

Meeting URL: https://gettyimages.zoom.us/ j/96365762624? pwd=OUtzUkw0OVpDR28wUkxJLzF1VGFzQT09

Join by Telephone

For higher quality, dial a number based on your current location.

Dial:

US: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 312 626 6799 or +1 646 876 9923 or +1 301 715 8592 or 833 548 0276 (Toll Free) or 833 548 0282 (Toll Free) or 877 853 5247 (Toll Free) or 888 788 0099 (Toll Free)

Meeting ID: 963 6576 2624

We have a new member Ian Isherwood. He is moving to Kent and I hope that he can join our meeting on Monday.

I am thinking about doing some changes to the Newsletter. What would you like to see more of, or is there something new that I just haven't seen to include?

I am creating a several year pdf compilation of Guess that airplane. I will make them available to the Membership as they become available. Once I am done with that I plan to do the same for Guess that Engine and one for Guess that Instrument Panel. I have purchased several pilot and operational manuals for the Guess that Instrument panel section. It is interesting to read through the manuals and you can see the progression in how and what was important to the manufacturer.

I went outside last night to move my car so that I could charge it overnight and discovered that the temperature was 35 degrees. That implies that the winter weather at altitude is shortly on the way. Brian wrote an article in 2013 about our weather system in the PNW. I have removed references to websites (url's and easter-egg) that no longer exist and added it as an addendum to this newsletter. This may be a good time to have another article on the PNW weather systems with references to the current FAA and Weather forecasting systems.

Build Straight

Roger

September 2020 Meeting Minutes

James H: Has a lot of western hats from Oshgosh, all free. Rocky 3 4months old new member of the family. His T18 is almost ready for flight. Then he can begin working on his other project. Ray Allen servo not good for the T-18. Went to a jack screw for the server.

Doug H. Suggested a pipe bender to use getting a track on the prop. Flew done to San Diego. Picked up a 20 knot tailwind. Above the smoke at 16 K. Stopped in Reading, left canopy open, cockpit full of ash during the lunch time. Shared a couple of his videos for aerobatics. His buddies first aileron roll ever.

Ron W. Gave a talk to the Sequim group, about 8 people. When he was doing Young Eagles had the "Charlie" cards. Looking for a better mount for the Go Pro to take in-flight videos. Cannot Dynamic balance the prop, needs a full spinner, only has the mini cap. The GoPro does take a good still photo's, but the vibration is affecting the video of the GP5. Andy offered his GP 8. Zoom presentation on the Flybaby history. Agreed to give the presentation on the Flybaby by history.

Andy K: about three months for registration response. Last outings before the smoke. Run from Crest, to Silverdale, APEX, Sequim Valley and Port Angeles, seque, Tacoma, Narrows, Auburn, then Ranger Creek, back to Crest for the stamps State

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SEPTEMBER MEETING MINUTES CONTINUED:

Aviation DOT have a stamp pass. Has a friend that accomplished the whole state. Went through two sets of tires and brakes.

Herman P. Planning on building an RV. New member.

Bruce: Instrument Panel rebuilt and in the airplane. Hasn't been able to fly. Very though preflight. Found no mixture cable. Dr. has restrictions, needs 6 weeks. Getting antsy to fly again.

Mark O: working on fairings to close some of the gaps as the metal gear is smaller than the previous. Easier to control and line up Grove sells gear for most homebuilts. Flying with the new gear, Tracy went along, about 10 times now.

Norm: Nothing to report.

Tim: Got nothing this month.

Tom O: can't get the video to work on his laptop. The Luscombe Got the registration in the mail the other day. N71346 Finally got his video working.

Carl: Went through Wings to get Biannual Review. Had to get a new instructor after the previous instructor quite. Took three flights. There are ground credits through a website. Instructor portal to see the results. Had taken a 32 year break from flying.

Brian: Waited 3 months for his airplane Certificate from the FAA. The Tinkertot and FAA have an issue because Hilmer did not register the trust as the owner.

More photos of the Hall Bulldog airplane





The above photos are of a German giant scale Hall Bull Dog Racer. That engine could power my homebuilt. To watch the video: <u>Click Here</u>



Hall takes time out to pose beside the "Bulldog" after qualifying at 243.717 mph for the 1932 Thompson Trophy Race. Final tail configuration shown.

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GUESS THAT AIRPLANE:

Petlyakov Pe-2

The Petlyakov Pe-2 (Russian: Петляков Пе-2) was a Soviet twin-engined dive bomber used during World War II. One of the outstanding tactical attack aircraft of the war, it also proved successful as a heavy fighter, as a night fighter (Pe-3 variant) and as a reconnaissance aircraft. In many respects it resembled the wooden British de Havilland Mosquito. The Soviets manufactured Pe-2s in greater numbers (11,430 built) during the war than any other twinengined combat aircraft except for the German Junkers Ju 88 and the British Vickers Wellington. The Pe-2 was fast, maneuverable and durable. Several Communist air forces flew the type after the war, when it became known by the NATO reporting name Buck. The Germans transferred six captured Pe-2s to the Finnish Air Force during the Continuation War of 1941-1944; the Finns gave them the serial code prefix PE- and the unofficial nickname Pekka-Eemeli (equivalent to "Peter-Emil"). Design and Development:

The Pe-2 was designed in a prison design bureau (sharashka); Vladimir Petlyakov had been arrested and imprisoned in 1937 for allegedly delaying design work on the Tupolev ANT-42 bomber. In the sharashka, Petlyakov was put in charge of a team to develop a high-altitude fighter escort for the ANT-42 under the designation VI-100. The first of two prototypes flew on 22 December 1939 and was a sophisticated aircraft for its time, featuring a pressurized cabin, all-metal construction, superchargers and many electrically actuated systems. It is said that Petlyakov and his team could see the VI-100 prototype from their prison as it was put through its paces for the crowds watching the annual May Day parade in 1940.

To Read More:

Wikipedia: Click Here Military Wiki: Click Here Military Factory: Click Here Airvectors: Click Here

Specifications:

General characteristics

Crew: 3 Length: 12.66 m (41 ft 6 in) Wingspan: 17.16 m (56 ft 4 in)



Height: 3.5 m (11 ft 6 in) Wing area: 40.5 m2 (436 sq ft) Airfoil: NACA 23012[15] Empty weight: 5,875 kg (12,952 lb) Gross weight: 7,563 kg (16,674 lb) Max takeoff weight: 8,495 kg (18,728 lb) Powerplant: 2 × Klimov M-105PF V-12 liquid-cooled piston engines, 903 kW (1,211 hp) each Propellers: 3-bladed variable-pitch propellers

Performance

Maximum speed: 580 km/h (360 mph, 310 kn) Range: 1,160 km (720 mi, 630 nmi) Service ceiling: 8,800 m (28,900 ft) Rate of climb: 7.2 m/s (1,420 ft/min) Wing loading: 186 kg/m2 (38 lb/sq ft) Power/mass: 0.250 kW/kg (0.152 hp/lb)

Armament Guns:

2 7.62 mm (0.3 in) fixed ShKAS machine guns in the nose, one replaced by a 12.7 mm (0.5 in) Berezin UB on later versions.

2 rearward firing 7.62 mm (0.3 in) ShKAS machine guns.

From the middle of 1942 defensive armament included 1 Berezin UB machine gun in the upper bombardier's turret, 1 Berezin UB in gunner's ventral hatch and 1 ShKAS which could be fired by a gunner from port, starboard or upper mountings[16] Some planes were also equipped with a DAG-10 launcher, firing AG-2 parachute timed grenades. Bombs: 1,000 kg (2,205 lb) of bombs

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GUESS THAT INSTRUMENT PANEL

P-38G-13-LO Lightning Instrument Panel 43-2285



19.

20.

21.



 18
 FLUORESCENT INSTRUMENT LIGHT

 19
 DUAL ENGINE PRIMER

 20
 RUDDER TAB CONTROL

 21
 CANNON CASE FJECTION DOOR

 21
 CANNON CASE FJECTION DOOR

 22
 ARMAMENT MASTER SWITCH

 23
 MACHINE GUNS CONTROL SWITCH

 24
 CANNON CONTROL SWITCH

 25
 GUN CAMEBA CONTROL SWITCH

 26
 GUN CAMEBA CONTROL SWITCH

 27
 COMPASS LIGHT RHEOSTAT SWITCH

 28
 GUN SIGHT LIGHT RHEOSTAT SWITCH

 29
 FLAP CONTROL LYVER

 30
 FLAP CONTROL LYVER

 31
 FLUORESCENT INSTRUMENT LIGHT

 32
 PILOTS CONTROL WITCON

 33
 MACHINE GUNS TRIGGER BUTTON

 34
 ALLERON TAB CONTROL

 35
 PILOTS CONTROL WHEEL

 36
 CANNON TRIGGER BUTTON

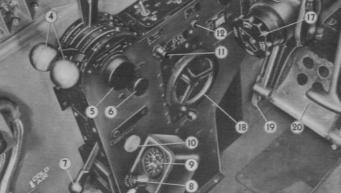
 37
 MICROPHONE BUTTON
 FLUORESCENT INSTRUMENT LIGHT

To visit Flight Manuals Online Click Here



SUCTION GAGE SELECTOR VALVE SUCTION GAGE

COMPASS CORRECTION CARD HOLDER



Technical Photos from Pilots Flight Operating Instructions for Army Models P-38 Series

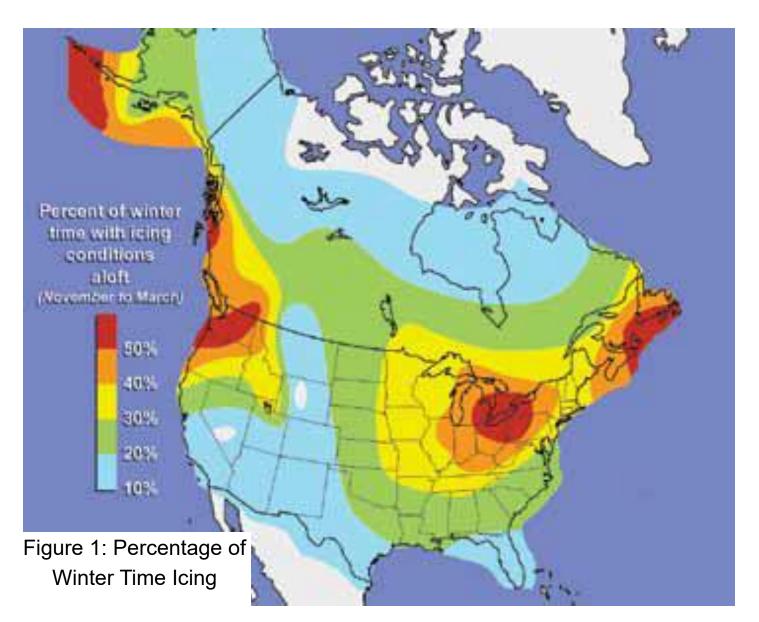
ALTIMETER AIRSPEED INDICATOR

65)

BANK AND TURN INDICATOR

... RATE OF CLIMB INDICATOR

ADDENDUM: WINTER FLYING IN THE PACIFIC NW



This is an Excerpt from the February 2013 newsletter. The majority of the information is still relevant.

Winter flying in the Northwest is not always easy; and this year it seems the weather has not been kind at all. If you want to stay VFR and just fly around the Sound, that's usually possible, below a 2000 foot overcast, but we've had unusually long bouts with fog this year. Forget about trying to go anywhere, clear days (or at least days when we can see the tops of the mountains) are pretty few and far between. So then we're tempted to say "I'll get my instrument rating -- then I can just file IFR and go anyway.". Well, Northwest weather holds some surprises for that, too. Usually in the form of ICE. That's short for "I Can't Escape". Remember that 2000 foot overcast? And that the lowest MEA East is 8000? And to the South it's more like 5000 (7000 up the gorge)? This time of year, the freezing level is typically 3000-4000 feet. Sure, some days it might be at 7000, but those are few like clear days are.

Our friends at FAA publish a great magazine called FAA Safety Briefing. I used to get a print copy each time they came out, but I think they charge for them now. Anyway, they're available on the web, and offer some really good reading (for those days when it's

ADENDUM: WINTER FLYING IN THE PACIFIC NW



Figure 2: Seattle Center's Most likely Areas for Freezing Rain

too icky to go flying). Figure 1 was borrowed from an issue of that publication from last summer. It shows areas of most probable icing for the period from November-March of the year. Note the big red area over the Northwest (Cascades).

So you might say, "Well, I'll go South, stay VFR below the clouds, and go up the Columbia.". Figure 2 shows in red, the most favorable areas of freezing rain in Seattle Center's airspace. All those valleys (including the Columbia gorge), can trap cold air, and when the rain falls into that colder air, it can freeze. Not a pretty picture, particularly in terrain that's all "brown and wrinkly" on the chart.

One of the frustrations I've had in trying to get a good mental picture of the Northwest weather is the scale of the weather forecasts and the local nature of our weather (it's dominated by local geography).

Brian

Editors note: This article has been shortened, the websites and services have evolved from 2013 when this was originally written.