

Flight



ACROSS AMERICA

THE DAWN BRINGS OVERCAST SKIES with rain in the offing. A potentially dismal day but not much different from any other over the last two weeks here in the Pacific Northwest. The moisture-laden air flows in off the Pacific Ocean and is forced up the slopes of the Cascade Range to the east. Swollen clouds burst forth with precipitation. The sodden atmosphere begets ground-hugging tendrils of cloud that band together to form low-lying fog. An ugly state of affairs.

The weather prognosticators foretell a continuing gloomy forecast but offer a few short hours of hopeful respite before the rains return after noon. If I can just use that time to get to the rain shadow desert on the east side of the Cascades, the soothsayers are advertising beautiful crystal blue skies for every one of the subsequent 1,500 nautical miles to Oshkosh. The toll for this embarrassment of good fortune, however, will be paid in the first 50 miles.



Confirmed reports speak of snow above 8,000 feet in the mountains.

I have always enjoyed long-distance flights. I enjoy the planning. I enjoy the solitude. I enjoy the satisfaction of traversing a thousand miles or more of our country and seeing the many sights that present themselves along the way. I mostly enjoy the logistical challenges of weather and terrain that must be overcome by anyone contemplating a journey of such significance. When offered the chance to fly EAA's Sweepstakes RV-12 from Van's Aircraft in Oregon all the way to Oshkosh, I couldn't possibly turn it down.

CROSSING THE ROCKIES

There are many routes to take from the West Coast to the Plains. I count myself fortunate to have traveled them all at one time or another. Each one has its own idiosyncrasies with the common denominator being that sooner or later you must cross the great expanse of the Rocky Mountains.

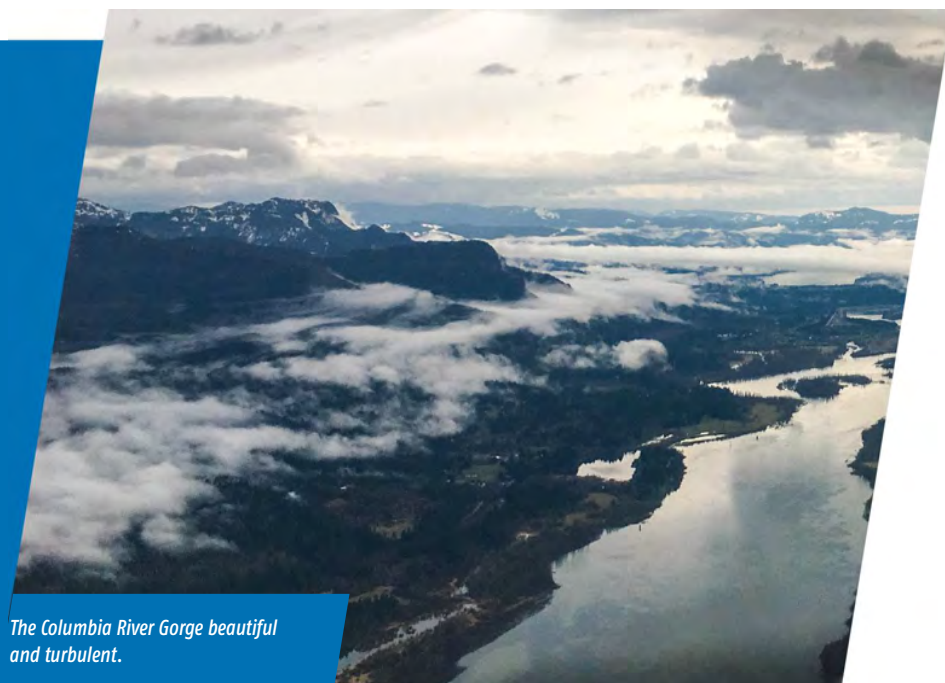
The southern route passes through Arizona and New Mexico depositing you on the high plains just east of Albuquerque. It is a common path that keeps you generally free of the confining mountain passes found farther to the north.

Colorado and Northern New Mexico are where the rocks are tallest. Crossing here entails flying one of the passes over the Front Range. Altitudes of 12,000 feet or higher are necessary to pass through to Denver. The rule of thumb I use is based on the upper level winds. If it's blowing more than 20 knots at 12,000 feet, find another way to go. You haven't really experienced turbulence until you are in a high mountain pass with a stiff breeze. The mountains on your wingtips can capture and funnel that wind often tripling its power. In a low-performance airplane at high altitude you quickly can wonder whether the experience is something that you will survive.

Further to the north, the terrain eases, and a broad plain extends from just west of Laramie for more than 100 miles to the Wind River Range. You'll fly at high altitude to be sure with surface elevations between 7,000 and 9,000 feet, but the route is largely free of the highest mountains and their associated effects.

From there to the Canadian border, the peaks top out lower in the seemingly doable 9,000-foot range, as opposed to the fourteeners in Colorado, but the terrain is isolated and rugged. Not a place to have to put down in an emergency at any time of the year.

Given the fact that it is March, and confirmed reports speak of snow above 8,000 feet in the mountains, I choose to shoot the gap north of Laramie at Medicine Bow.



The Columbia River Gorge beautiful and turbulent.



Idaho potato farms



Dusk gathers as I pass the last ridgelines of the Rockies.

THE JOURNEY BEGINS

Which brings me to Van's Aircraft at 7:30 a.m. on an overcast and exceedingly dreary day. I am impatient to get in the air and beat the weather as Jose Gutierrez, the RV-12 specialist at Van's Aircraft, leads me through the paperwork and preflight. Soon, however, it is 8:40 a.m., and I am rolling down the runway.

The rain has held off thus far, and the route ahead boasts of a 2,500-foot overcast and good visibility. Before departure, full of hope and exuberance, I had asked Jose if he thought I might go directly east over the Cascade Range and save myself the time of traversing the Columbia River Gorge. His advice, "If you can see Mount Hood, you can do it." Now though, I can only see a sliver of light between the ridgeline and the clouds, and only the lower slopes of Mount Hood are visible below the overcast. Discretion being the better part of valor, I resign myself to the Columbia River Gorge adding 30 miles to my flight.

TURBULENCE!

Rounding Mount Hood and heading into the breathtakingly beautiful gorge, I have cause to reflect on this decision and remember Jose's casual comment that it might be turbulent today. He is a sage of rare wisdom. Entering the gorge feels like hitting a wall. Even in these relatively light winds the turbulence in the gorge is staggering.

After 40 minutes of being violently thrown around I've made it to the eastern slopes of Mount Hood where the weather is improving rapidly but the turbulence downwind of the peak is, if anything, worse. I've been at the 90-knot maneuvering speed for what seems like forever and feel like I am making little progress. I feel like a fly lethargically crawling across a map of the world banging my head on the canopy with every bounce. Eventually however, I leave the Cascades in my wake and head out over the sparsely populated ridgelines of eastern Oregon. The air finally calms, and I am able to engage the autopilot and begin to play with its functions.

The RV-12 and I are headed for Ontario, on the very eastern border of the state where I have stopped for gas before. As in my past visits, the man who runs the FBO comes out to snap a photo for the local EAA chapter. I ask him to take one of me with my camera, too, and soon I am in the air. I want to get east of the Rockies before nightfall, and there is a very long way to go.

I dogleg around the controlled airspace at Boise before turning east for Twin Falls. This leg of the flight is in a broad 45-mile wide valley with terrain at a relatively modest 3,500 feet of altitude. There's nothing much to see except for what I assume are potato farms; it is Idaho after all. To the north lies the Sawtooth Range, and the report of snow at 8,000 feet seems to be accurate.

YELLOWSTONE?

I had held out hope of maybe taking a slight jog to the north up over Jackson and Yellowstone Park itself. If you have never done it, flying over Yellowstone should be a bucket-list item. It is on a high plateau at almost 9,000 feet in places, remote and beautiful. But the snow cover on the ground makes it a bad bet for me today with only basic survival equipment onboard. The road less traveled will have to wait for warmer days.

From Twin Falls I make for Rock Springs, maybe Rawlins if the winds are kind. Ahead, an area of north/south mountain ridges stands near Kemmerer, Wyoming, where my route directly crosses several in the 8,000-9,000 foot range.

WAVE ACTION

Approaching the ridges at Kemmerer I feel the undulations of wave action. With a fixed-pitch prop and the autopilot holding altitude, the engine is alternatively roaring at 5500 rpm or loafing at 4500 rpm as the speed fluctuates to maintain altitude. I get tired of constantly adjusting the power and take the RV-12 off autopilot so that I can let the altitude vary a couple hundred feet each way instead. The winds are under my previously mentioned 20-knot limit at altitude, but still the wave formations are pronounced. The RV-12 is but a gnat against such power. After an hour things die down, and the autopilot can be re-engaged.

It is now late afternoon, but I have been blessed with a sufficient tailwind to stretch the range to Rawlins. A quick fuel stop will put me back in the air with about 40 minutes until nightfall, just enough time to pass through the last of the mountains east of the Medicine Bow VOR. I want to clear the Front Range before darkness. Dusk settles quickly as I am spilled out onto the Great Plains and begin the long descent toward the twinkling lights of Scottsbluff, Nebraska, my stop for the evening.



AN AMAZING AIRCRAFT

The RV-12 is an amazing, well-thought-out aircraft with many interesting components, chief among them being the Rotax engine. The Rotax is a water-cooled, geared, turbocharged powerplant. Being water-cooled, there is a coolant tank just like in your car that should be viewed during the preflight inspection. Also, to check the oil you must “burp” the engine. The Rotax has an external oil tank instead of an oil sump. On the preflight the pilot removes the oil tank cap and pulls the prop through a number of compression strokes to pump any residual oil from the engine back into the tank. Eventually, and I really mean eventually, if the engine is cold, you will hear the plug, plug toilet bowl sound, and you can then check the oil level.

The engine will spin up to 5500 rpm at full throttle, and turbocharging allows you to climb right up to the suggested service ceiling of 12,000 feet. Once there you must throttle back significantly to keep the RV-12 humming along right at the bottom of the yellow on the arc of the airspeed indicator. I spent most of my trip home at 11,500 feet enjoying the tailwinds.

The combination of engine, fuel pump noise, and prop harmonics leads to sounds that are, at first, quite different than those of a Continental or Lycoming. After a few hours of flight, however, you become accustomed to the Rotax growl and don't give it another thought.

All of the engine parameters, flight instruments, and aircraft details are displayed on the Dynon SkyView HDX system. The Dynon SkyView in the EAA Sweepstakes RV-12 has all of the offered options with GPS navigation and both ADS-B “in” and “out” capacity. In fact, the EAA Sweepstakes RV-12 has two Dynon SkyViews. Each can be configured to show basic flight instruments, engine instruments, moving map display, or airport weather and data via the ADS-B “in” signal. The Dynon SkyView also has synthetic vision and displays a single cue (bat-wing) flight director signal.

Best of all, the Dynon SkyView HDX drives an autopilot with nav, track, heading, altitude hold, vertical speed, IAS hold, and VNAV capability. There is also a prominent level button that will command level flight in an instant for inadvertent IFR excursions by VFR pilots.

The pitot-static system is standard with static ports on the side of the aircraft, but the pitot tube itself is in the prop spinner. I'm not quite sure how that works out mechanically, but it must be a marvel.

The RV-12 uses a stick rather than a yoke, and the controls are quite sensitive. You may initially over control a bit, but soon you learn to hold the stick with your fingers and not your fist, and all comes quickly into perspective.

The cabin of the RV-12 is wide and comfortable, and the seats are equipped with a five-point harness system. It boasts a cavernous baggage compartment — limited to 50 pounds of luggage — that is also home to the 19.8-gallon fuel tank. If you ever worry whether the digital fuel-remaining readout on the SkyView is accurate, you can glance over your shoulder and read the fuel gauge right on top the tank.

The view out the big overhead canopy is, of course, beyond compare, and the canopy shade can be extended forward to cover your head. A very welcome feature for those of us who are — ahem — follically challenged.

One interesting feature that I was unaware of is that the wings fold on the RV-12 making it trailerable. An important part of the preflight is making sure that the wing connection pins and controls are properly engaged. Both the pin position and the canopy latch are also monitored by the Dynon SkyView for safety.

What's the bottom line in all this? The RV-12 gets off the ground quickly and climbs at 900 fpm right up to its estimated service ceiling of 12,000 feet where you will be developing a true airspeed of 115 knots on only a bit more than 4 gallons of avgas an hour. It is equipped with all the latest gee-whiz gadgets — even an autopilot. And, it has remarkably light control pressures and a complete lack of bad manners. The RV-12 is truly a marvel of modern aircraft design. The best part for you is that one of you readers out there will be taking this one home. Support aviation's future with a donation to EAA and get your sweepstakes tickets at www.EAA.org/sweepstakes.



DAWN OF A NEW DAY

The sun is barely over the horizon as I lift off and point the nose for Oshkosh. Just 40 miles to the northeast, and directly along my path, is Alliance, Nebraska. In the almost forgotten past I flew Aero Commanders carrying the U.S. mail out of Alliance, and I haven't been back in 36 years. The familiar World War II triangle of runways still stands, but the big wooden hangars are gone. Alliance was a paratrooper-training base during the war. Now, though, the structures have been razed to the ground and replaced with neat lines of metal T-hangars. Disappointed, I do a touch-and-go and fly over town. Here things have changed as well. No more Arctic Circle drive-in, no Tastee Freez place. I guess you never really can go home.

As the high plains slowly ebb away the challenges of mountain flying are all in the past. Yet, there is still surprisingly unfriendly looking territory below. Miles and miles of what looks like pothole lakes and sand dunes untouched by human habitation. I'm sure there's a more descriptive term for this geography but "a whole lotta nothin'" seems to fit the bill for me.

Over eastern Nebraska I continuously calculate and recalculate my fuel as the wealth of available landing fields now allows me to safely stretch my range with an hour reserve. Ultimately, I decide that I can make Oshkosh with one stop in Spencer, Iowa.



"A whole lotta nuthin" in western Nebraska.



The Sweepstakes RV-12 has made its way home to Oshkosh.

COLD AND SNOW

When I left Wisconsin it was spring, but in the intervening three days a winter storm has swept the area dumping snow and now arctic cold on the land. The landscape seems barely recognizable as I plow through small fingerlike snowdrifts across the Spencer taxiways. The line attendant looks more than dressed for arctic conditions, but once it becomes obvious that I'd like to fill the tank myself he abandons me to scuttle for the warmth of the FBO. With the gas paid for I quickly shut and latch the expansive canopy against the whistling chill outside. Next stop Oshkosh, albeit at the end of a two-and-a-half hour flight.

The minutes pass quickly as I fly over ever more familiar territory, though. Snow-covered farms. The broad Mississippi. And, soon I am on downwind for Runway 27 at Oshkosh with all the multi-colored landing dots in view. Almost 1,600 miles in 15 hours of flying, the EAA Sweepstakes RV-12 has made its way home. **EAA**

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TRANSITION TRAINING

The RV-12, like any aircraft, has its own unique attributes that make a thorough checkout prior to solo flight a valuable endeavor. In my case I knew that my return flight to Oshkosh would be a full two days of hard flying, and any aircraft familiarization on the front end would most probably add another day to my trip. So, well before the flight I had an aircraft checkout from John Palese, EAA 532762, who rents and instructs in his RV-12 through Side by Side Aviation LLC in Waukesha, Wisconsin. After 1.7 hours in the airplane, and some excellent instruction from John, I felt right at home.

