

Higher Living

Welcome to 2025. As usual I am expecting an excellent year of flying. The exciting news for 2025 so far is that two additional aircraft are joining the fleet! Two Van's RV-12iS aircraft will be appearing on the field for you to fly. The RV-12iS aircraft qualify for light sport flying but any level of pilot certificate is welcome to fly them. We should be adding these airplanes soon. Something I am certainly looking forward to. In this issue I have included an introduction to the RV-12iS in an article.

At KTTA you have probably already noticed that the taxiway at the Runway 3 end has been modified to create what they call a bypass. Taxiway A1 and A2 are now very close together to allow for takeoff if another plane is using the other taxiway perhaps

waiting on an IFR clearance. I understand that the same modification will occur at the Runway 21 end later this year.

At KHRJ we have added a new engine heater for your use. This one uses <u>diesel</u> fuel for heating instead of propane. There is an article about how to use it in this issue.

The use of a QR code in the airplane flight log to check in our aircraft has been going very well. Thanks to all of you who have endeavored to change to the modified check in process.

I wish you all well for the coming year!

Come fly with us.

- David Williams, Editor

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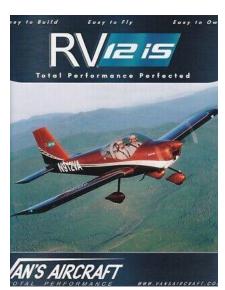
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An Intro to Vans RV-12iS

The RV-12iS is a light sport aircraft (LSA) designed and manufactured by Van's Aircraft; an American company well-known for producing kit planes. It is a variant of the RV-12, a two-seat, low-wing airplane that is popular among aviation enthusiasts and pilots due to its performance, ease of construction, and affordability.



Here are the key features of the RV-12iS:

Design and Structure:

The RV-12iS has a wingspan of approximately 27 feet, is about 24 feet long and weighs around 750 pounds empty. The RV-12iS is primarily made of aluminum, contributing to its lightweight and durable structure.

Powerplant:

The RV-12iS is powered by a Rotax 912iS engine, a 4-cylinder, 100-horsepower engine that is fuel-efficient and reliable. The "iS" in the name indicates the inclusion of an electronic fuel injection system, offering improved fuel economy and lower maintenance compared to older models. The planes will use 100LL aviation fuel.

Performance:

The RV-12iS can cruise at speeds of around 120 knots (approximately 138 mph). It can reach a top speed of about 137 knots (157 mph). The range is about 500 nautical miles, depending on fuel load and flight conditions. The climb rate is approximately 1,200 feet per minute, providing good performance for a light sport aircraft.

Cockpit and Seating:

The RV-12iS has side-by-side seating for two people. The cockpit is designed for comfort, featuring modern avionics and controls that are easy to manage, making it suitable for both experienced pilots and newcomers. The seats are adjustable to accommodate a variety of body sizes and offer a good amount of headroom and legroom.

Avionics:

The RV-12iS is typically equipped with advanced avionics including a Garmin G3X Touch flight display system, which provides comprehensive flight data and navigation.

Landing Gear:

The aircraft has tricycle landing gear designed for durability and provides a smooth landing experience.

Construction:

The RV-12iS is available both as a factory built or as a kit aircraft for homebuilders. Van's Aircraft provides a detailed construction manual and plans, allowing builders to assemble the aircraft at home. Ours are factory built.

Regulatory Status:

The RV-12iS is classified as a Light Sport Aircraft (LSA), meaning it is subject to the FAA's regulations for light sport aircraft. This allows it to be flown by pilots with a Sport Pilot Certificate. Of course, all other pilots can fly it as well.

Handling and Stability:
The RV-12iS is known for its
excellent handling
characteristics, with a
responsive flight control system
and stable performance in
various flight conditions. The
design emphasizes ease of
flying, making it popular among
sport pilots and flight schools.

In summary, the RV-12iS is a versatile, high-performance light sport aircraft that combines advanced technology, ease of construction, and excellent flying characteristics. It's ideal for recreational flying, training, and sport aviation.

See and Avoid...Some Thoughts Below 3000 Feet

We are supposed to be able to visually see and avoid other aircraft when VFR. In the area of our airports, KTTA and KHRJ, it is getting busier and more difficult to be able to see everything at once. Here are some suggestions that may help.



Don't totally depend on ADS-b as being a guarantee of staying clear of others, especially when on the ground and checking final for landing traffic. Look out the window! Listen to the radio! I often hear planes which do not appear on an ADS-b display. There is a TBM

at KTTA that I occasionally do not see on ADS-b.

We all know that below 3000 feet AGL we are released from the need to fly the altitudes based on heading. But everyone doesn't have to fly at 2000 or 2500 feet either. Maybe make it a habit to train at some other altitudes such as 2800 or 2200. It makes it a little less likely that you will meet someone in the same place.

Don't forget about the instrument approaches in use at the airports or the persons who are flying long straight in finals. Be aware of where you are and avoid the extended centerlines, approach and departure, of any airport for as much as 15 miles out. Also remember that aircraft flying IFR on instrument approaches may not even be listening to or speaking on, the CTAF yet.

Turn on all your lights to make yourself a more obvious target and make sure your transponder is set properly and sending your position.

Be aware that both KTTA and KHRJ have additional traffic pattern altitudes of 1700 feet for jet aircraft. So be sure you are above that if you are flying

over the field. Not everyone flies the pattern at 1200.

Are you in so much of a hurry that a teardrop style entry is just too slow? Remember that we don't expect to see airplanes coming from our left from over the runway. It is much more natural for us to expect them on 45-degree entries from our right onto downwind. If the pattern has planes in it I always fly a teardrop. Only if I am alone or know exactly where the single other traffic is do I cross at pattern and turn onto downwind directly. For you instructors, remember that what you do is what your students will do when solo.

When you are flying practice instrument approaches don't forget about all the folks in the pattern. Be sure to give position reports at 10 and 5 miles...closer in if the pattern is busy. Also be sure to say how far out you are in terms of miles, not the name of an approach fix. Non instrument students have no idea where IKTOW is. Also don't ignore people who have asked you to report on your position.

When you are in the pattern but someone else is flying instrument approaches don't blindly turn in front of them onto base or final. Never turn if you know they are 3 miles or less out. There won't be time for you to get in. Also remember that jets cover distance much quicker than Cessnas. If you don't see the other plane and they haven't reported position recently (see prior paragraph) ask them where they are and again don't turn in until you know.

What if you see someone on ADS-b close by. Go ahead and make an adjustment in your heading or altitude. Keep your eyes out the window. If they are near KTTA or KHRJ they are probably on the CTAF so say something to make your position, and intentions, known.

Finally, always remember the right of way rules. But as my father used to say, "Right of way only works when both play by the same rule." If you are approaching an airplane head on you are both supposed to turn to the right. If you are passing, or being passed by a faster plane, the faster plane, doing the passing, should do so to the right of the slower one. If you are on a roughly same speed converging path it is probably best to change altitude and watch the position of the other plane as you do so.

Fly nice. Say where you are and clearly state your intentions. Stay safe.

Engine Pre-Heater Use at KHRJ

On cold winter days, it becomes essential to use the pre-heater prior to starting the airplanes. There is a new heater for that purpose now located at KHRJ. The heater is a potential fire hazard, and you must stay with the airplane the whole time it is in use. When done make sure to return the heater to the storage place and don't leave it out on the ramp. The parts of the heater look like this.



To use the heater:

- 1. Place heater hose in engine intake opening.
- 2. Use the Manual Mode instead of the Long-term Timing function.



3. To start the heater, press the ON/Off button to start the fan and heater.



The temperature is now set and the fan will start. It will take 4-5 minutes to heat up showing the heat bars increasing. The temperature can be adjusted by pressing up or down arrows. The limits are 8C to 36C (48F – 97F).



4. To turn the heater off – press and hold the ON/Off button for 2-3 seconds. The fan will continue to run for 4-5 minutes to cool the heater down.



CAUTION: Do not leave the unit running while unattended.

Continue to monitor the operation of the heater while it is in use.

Preheating has proven to be essential on cold days to allow for easier engine starts and to reduce engine damage.

Flying Into and Out of an Airport in Class D Airspace

Usually, a Private Pilot student will first encounter a control tower at an airport located in Class D airspace. There are several near to KTTA. Airports in Class D airspace are a much quieter and calmer introduction to control towers for the beginner than are their Class C cousins. It is generally the case that approach and departure control does not exist at these airports so that won't be discussed here.

First here is a list of the nine airports in Class D airspace in NC. Perhaps you have already been to one of these or will go in the future.

KVUJ, Stanley County
KJQF, Concord Regional
KECG, Elizabeth City Regional
KHKY, Hickory Regional
KOAJ, Albert Ellis
KISO, Kinston Regional
KEWN, Coastal Carolina

KILM, Wilmington International KINT, Smith Reynolds

Here are the general steps to follow to arrive and land at an airport in Class D airspace.

- Look up the AWOS, tower and ground control frequencies before you arrive.
- 2. Listen to the AWOS
- 3. At least 10 miles out call the control tower and state your position and your intentions. In my experience these airports are quiet enough that the tower can offer touch and goes or stop and goes if you need them. Just ask.
- 4. Generally, there is no radar available at these airports so the tower will ask you to contact them again when you are in a certain position such as downwind or base or a certain distance out.
- 5. Contact the tower again when you have met the position requirement in the previous step. You will be told either to do something else or will be told "Clear to land". Repeat back the instruction and make sure you don't land before you hear those words.

6. After landing you can taxi off the runway, cross the holding line, and then call ground control and state your position on the ground. Ground control will acknowledge you and often it will be the same person who is running the tower.

That is the whole procedure for landing. Now let's turn it around and head out.

- 1. Listen to the AWOS
- 2. While on the ramp contact ground control and tell that person you are ready to taxi. Tell the ground person if you want to stay in the pattern or if you are leaving to fly elsewhere.
- 3. Ground control will respond with instructions for you to follow. You should repeat those instructions back and then you are ready to taxi.
- 4. Upon arriving at the runway do not cross the holding line to takeoff. First call the tower to say you are ready to go. The tower will either tell you to hold and not go or will say Clear for takeoff. Whatever they say you must repeat it back.

- 5. If you are cleared to takeoff you should move onto the runway and takeoff. Do not do that until you hear the words Cleared for Takeoff.
- The tower will give you further instructions after you takeoff if you are planning to stay in the pattern or are leaving.

That is it. When you make your first trip to one of these airports the procedure will become even easier than it may sound here. Of course, make sure to discuss this trip with your instructor and make yourself aware of any sitespecific rules.

The Tailwheel Endorsement



Perhaps some of you have an interest in tailwheel airplanes, some of which date back to World War I or II. There are also modern aircraft constructed with a tailwheel.

If you want to fly one of these, you will need an endorsement from an instructor skilled in

tailwheel flying in your logbook. It normally goes like this.

Your first meeting or two is a ground instruction session explaining the quirks of how a tailwheel airplane handles during landing, takeoff and taxiing. They are very different from a tricycle gear airplane, with a front wheel, because the wind can easily shove the tail around and make maneuvering tricky.

The next lesson will probably be normal and crosswind takeoffs and landings. Crosswinds are not your friend for these, and you must understand how the plane will behave and how to safely correct any unexpected excursions.

The next step is learning how to perform what are called wheel landings. Your first landings will probably be three-point landings which have you touch all three wheels to the ground simultaneously. But sometimes the conditions demand that you land only on the main wheels first and then lower the tail to the ground.

Some additional skills you could be taught are safely performing go arounds and aborted takeoffs or bounced landings. Depending on where you train you may get to land on the grass.



Remember that this is for an endorsement in your logbook. There is no written test or checkride. There are also no set number of hours required to finish. Your instructor will be the one to decide when you are able to safely fly and will then sign your tailwheel endorsement in the back of your logbook.

See the regulations for tailwheel training in 61.31(i) for the details.

CFI Certificates No Longer Have Expiration Dates

Any CFI knows that every two years they must apply through IACRA for a new CFI certificate. When it arrives in the mail it has a new issue date and a new expiration date for 24 months in the future. That changed as of December 1 of 2024. Going forward from there CFI certificates will no longer have an expiration date. This doesn't mean that a CFI doesn't

have to do anything though.
Instead of renewing, a CFI will still need to meet recent experience requirements every 24 months. How do you do that? Here are the requirements.

Unless you became a CFI for the first time last month then you are like most of the rest of us with an expiration date. You need to renew that certificate again like you always have in the past and you will be issued one last certificate, the same as before, but with no future expiration date.

Going forward though you are not off the hook and will have to show "recency of experience" to the FAA every 24 months to keep the CFI certificate valid. The rule for how to do that is in 61.197 and is explained below. Do one of the following.

Complete a Flight Instructor
Refresher Course (FIRC). This is
how I have always renewed my
CFI certificate, and it will still
work. There are numerous
online versions of this and still
some in-person weekend
classroom versions. You can
complete a FIRC up to 3 months
prior to the 24-month end of
your recency of experience.

Pass a practical test. It can be for any rating you hold on your CFI certificate or for a new instructor rating.

Show a record of active instructing by endorsing at least 5 students for any checkride and have at least an 80% first time pass rate.

You can work as a Part 121 or Part 135 check pilot or chief instructor.

You can use WINGS to renew as well. Complete a level of WINGS in addition to conducting at least 15 flight activities, during which you evaluated at least 5 different pilots with appropriate logbook endorsements.

So, assuming you have completed one of those things you still have to prove to the FAA, every 24 months, that you have met the requirements. Normally you will do this through IACRA via an 8710 form. If you attend an in-person FIRC or most of the online FIRCs the provider will handle that for you.

So, since there won't be an expiration date on your certificate will it be easier for you to mess up and miss the 24-month deadline to submit the information? There is now a three-month grace period for you to get the submission done. However, you can't instruct any during those three months.

A final note regarding endorsements you put in a

student logbook. Currently you use something like:

Date, Name, Number, Exp Date

The recommended new notation is:

Date, Name, Number, RE Date

Make sure you read the official regulations at 14 CFR 61.197 to make sure that what you have just read is accurate.

Question of the Quarter

Who was the first person selected as Time Magazine's Man of the Year?

Answer: Charles Lindbergh in 1927.



You just learned something new.