

EXPECTATIONS & SAFETY BRIEF





ADMIN



Expectations

- ◎ 3-4 Day Program*
 - Day 1: Flight Training
 - Day 2: Flight Training
 - Day 3: Checkride / Back Up Training
 - Day 4: Back Up Checkride Date
- ◎ Student Performance
 - All flight training is focused on developing the student's proficiency in areas of operations prescribed in the Airman Certification Standards (ACS)
- ◎ Training Requirements
 - 2 flights minimum
 - Number of flights and flight hours will be dependent upon student performance and comfort level

*Training can be completed in as little as one day but can be spaced out to accommodate the student's schedule and comfort level



Billing Policy

⦿ Billing

- Hobbs meter
- Aircraft rental (Wet): \$400 per hour
- Flight Instruction: \$70 per hour

⦿ Discontinuance Policy

- If at anytime you decide to discontinue training, Pegasus Aviation Service reserves the right to bill the student all prior services rendered



What to bring

- ◎ Driver's License
- ◎ Pilot's Certificate
- ◎ Medical
- ◎ Passport
- ◎ Logbooks
- ◎ Completed Program Materials
 - Open Book Test
 - Closed Book Test
 - Performance Card
- ◎ FAA Tracking Number (FTN) from IACRA



Corvallis Municipal Airport (KCVO)

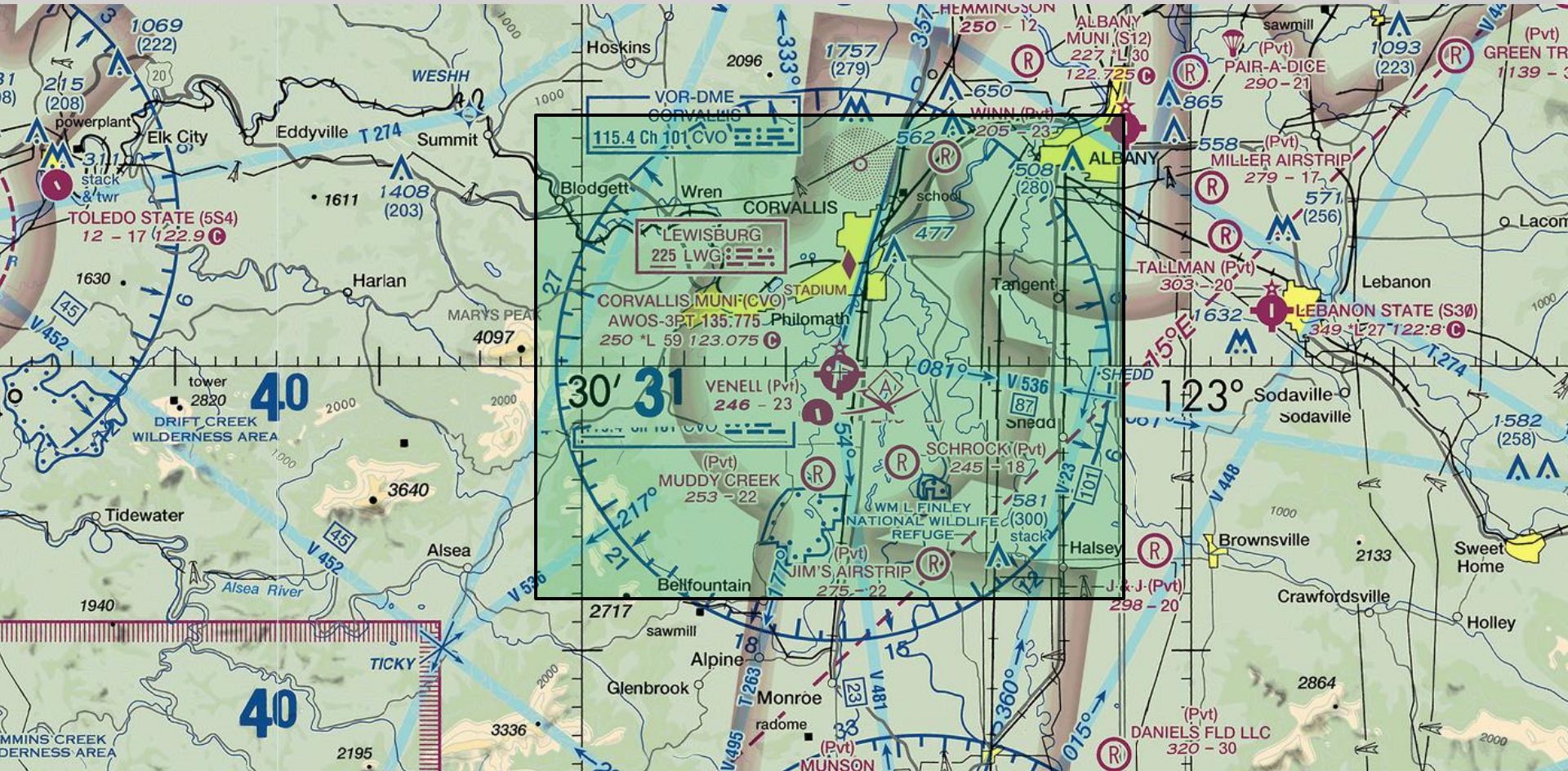




SAFETY



Training Area





3-way positive change of controls

- ① Any time controls are passed between the student and instructor it shall be done using 3-way positive change of controls
 - Student: “You have the flight controls”
 - Instructor: “I have the flight controls”
 - Student: “You have the flight controls”



View Limiting Device

- ◉ View Limiting Device will be used to simulate IMC
- ◉ They will be worn during
 - Instrument Approaches
 - Engine Failure Procedures





See and Avoid

- ◉ Instructor Responsibilities
 - Primary safety observer during the flight when the student is under simulated IMC
 - Responsible for any safety of flight calls while in the area and maneuvering for instrument approaches
- ◉ Student Responsibilities
 - Execute conduct within practical test standards
- ◉ Safety of flight takes priority over training objectives
- ◉ If students are paired up
 - The student riding in the back also plays the role of safety observer and should call out any traffic that is a factor



Cockpit Management

- ◎ Paper Checklist
 - Preflight
- ◎ Checklists on iPad in Foreflight
 - All on deck operations
 - Maneuvers
- ◎ Window Checklist
 - Instrument Approach Procedures



CRM

- ◉ Single pilot mindset
- ◉ Altitude and heading bugs
- ◉ Trim
- ◉ Autopilot use
 - Get plane stabilized on altitude prior to engaging autopilot
 - Verify the correct mode of the autopilot is engaged





Communications

- ◎ The instructor will have comm priority and responsibility for all radio calls with the exception of the following
 - Taxi when leaving the ramp
 - Crossing runways
 - Takeoff
 - Clear of the runway after landing
 - Responses to ATC (Instructor or actual ATC) during an instrument approach
 - The instructor will act as ATC over ICS
 - Priorities should always remain Aviate, Navigate, Communicate



Loss of Directional Control

- ⦿ All training will be conducted above V_{SSE} (92 MPH)
 - exception of stalls and V_{MC} demonstration
- ⦿ During times that airspeed is below V_{SSE}
 - Primary responsibility of pilot flying will be maintaining directional control
- ⦿ Loss of Directional Control
(Simultaneously)
 - Power: IDLE
 - Ailerons: NEUTRALIZE
 - Rudder: FULL AGAINST YAW/ROLL
 - Elevator: LOWER THE NOSE AND REDUCE AOA



Engine Failure Procedures

- ⦿ Engine failures shall not be conducted
 - Below 400 ft. AGL
 - Below 92 MPH
 - Above 40 MPH (prior to takeoff)
- ⦿ If the engine fails to restart during training or an actual engine failure occurs it will be treated as an emergency and you will land as soon as practical



EMERGENCIES



Ground Emergencies

- ◎ Fire on start
 - Continue cranking the engine while cutting the mixture and turning the fuel pumps to OFF to keep the fire contained
 - Shut the aircraft down and turn everything OFF then egress the airplane
- ◎ Brake Failure
 - No Copilot Brakes
 - Maintain directional control
 - Reduce Throttles to IDLE
 - Use rudder and asymmetric thrust to turn the aircraft in a circle and come to a stop
 - Avoid hitting other objects to the max extent possible
 - Have the airplane towed back
 - Prior to engine shutdown ensure that the nose wheel is chocked



Takeoff Emergencies

- ◎ Abort criteria is covered in the takeoff brief
 - Loss of directional control
 - Loss of thrust in one or both engines
 - Binding flight controls
 - Electrical failure if low IFR or night
- ◎ Abort Procedure
 - Throttles: IDLE
 - Brakes: AS REQUIRED
 - The Baron does NOT have anti-skid so smooth application of the brakes is required to prevent blowing a tire
- ◎ If airborne and engine failure occurs, the following criteria must be met in order to continue flying
 - Gear handle UP
 - Airspeed above 107 MPH (V_{YSE})
 - If **either** criteria not met gear will be put back down and landing made with directional control being the priority



In Flight Emergencies

- ⦿ The pilot flying will execute the appropriate procedure while the pilot not flying will break out the POH/Checklist and read the checklist
- ⦿ There will be no simulated emergencies during training with the exception of the precautionary engine shutdown of an engine at altitude in the training area and will be briefed accordingly
- ⦿ **NORDO/Lost Communications**
 - Troubleshoot to the max extent possible
 - Overfly the field above pattern altitude
 - Clear pattern visually, enter via downwind, and land



Landing Emergencies

- ⦿ Gear fails to extend
 - One pilot flies
 - Other pilot briefs checklist
- ⦿ Blown tire on landing
 - Maintain directional control and keep plane on runway
 - Get towed back
- ⦿ Brake loss on landing
 - Go Around
 - Execute a normal landing aiming for threshold
 - Get towed back after clearing the runway



GROUND OPERATIONS



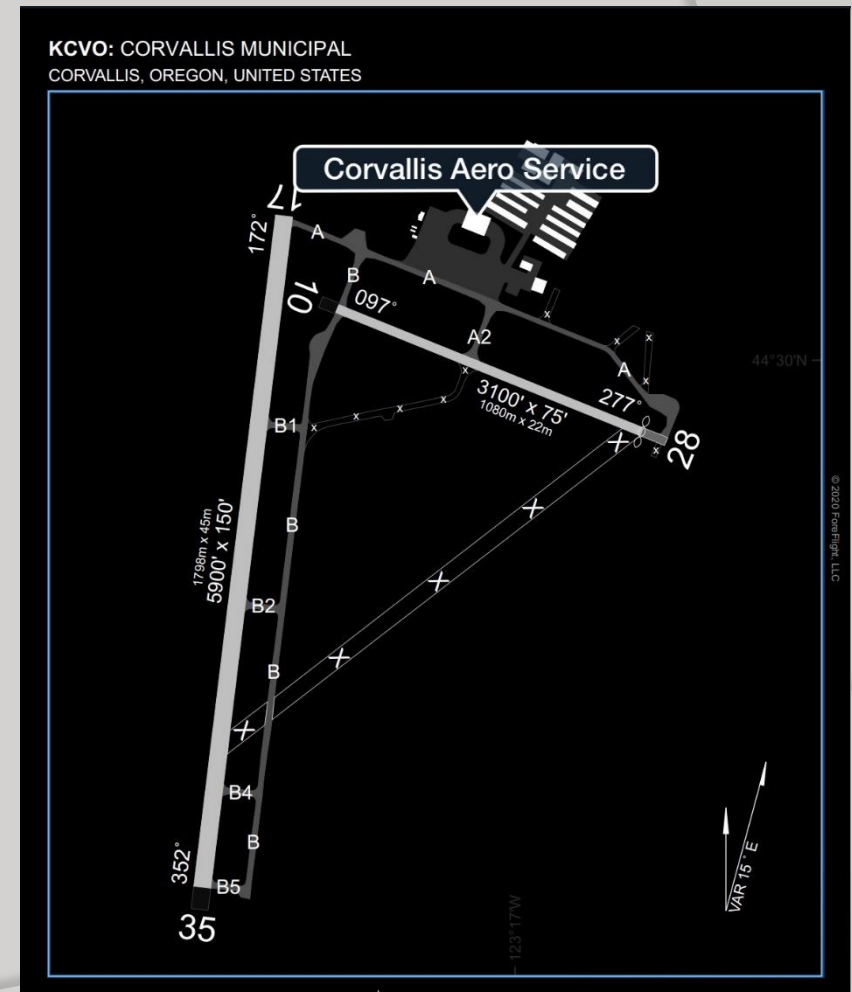
Preflight

- ◎ Should be done efficiently (10 minutes max)
 - Verify plane is airworthy
 - Consumables at proper levels
 - General integrity of the aircraft
- ◎ Before strapping in use the following to double check critical items
 - Tie downs removed
 - Fuel checked and caps closed
 - Oil checked, dipstick snug, panel secured
 - Doors closed (aft baggage closed but not locked)



Briefings

- Conduct the passenger and taxi brief per the checklist prior to starting the engines
- Passenger brief
 - Standard after 1st flight of the day
- Taxi brief
 - Use airport diagram in Foreflight
 - Keep Airport Diagram up during taxi





Engine Start

- Per the checklist in the smart pack
- “Clear Prop”
- Left hand on starter switch Right hand on mixture
- Set 1,000 RPMs once engine started
- Post start check
 - Oil pressure
 - Amps
 - Vacuum
- Starter limit: 10 Seconds





Taxi

- ⦿ Nose wheel steering and brake check
 - Student check the nose wheel steering and brakes while leaving the parking spot
 - Make radio call prior to exiting ramp
- ⦿ Clear all intersections by slowing down, checking visually and verbalizing check over ICS
 - “Clear left, center, right”
- ⦿ Crosswind control inputs technique
 - Once on taxiway parallel to runway note winds and deflect yoke
 - Deflect aileron into the wind



Run-Up

- ⦿ Center nose wheel before coming to a stop in run-up area
- ⦿ Governor check at 2200 RPM is no longer executed
- ⦿ Mag Check
 - Check both mags for each engine
- ⦿ Feather Check
 - Smoothly place each prop lever individually to the feather position (past the detent) and quickly back to High RPM while looking outside at the respective prop for oil leaks
 - Try to minimize load on the engine by allowing no more than a 500 RPM drop on the tachometer



Take Off

- ⦿ Take Off Brief per checklist
- ⦿ Run-up only required for first takeoff of each flight
- ⦿ Areas of Emphasis
 - Smooth power addition to FULL Throttle
 - Heels on deck
 - Crosswind input
 - Hands on throttle and yoke below 1000' AGL



Piston Engine Techniques

- Advance/Retard throttles smoothly
 - Should be between 15-25" MP unless in extremis
- Use a throttle setting below 1,000 RPMs before applying brakes to manage taxi speed
- Taxi turning technique: Start turn with full rudder deflection, add some outboard throttle, then apply brake as necessary (in that order)
- Heels on the floor when releasing brakes for takeoff
- Throttles and Props
 - Keep RPMs always greater than Manifold Pressure
 - Throttles then props when reducing power and vice versa when adding power ("Props on Top")
- Max angle of bank is 30° except unless executing steep turns
- Keep hands on throttles and yoke anytime below 1,000' AGL



Engine Failure Procedures

- ⦿ Execute each engine failure same way by going to and actually placing prop lever to feather
- ⦿ Engine Failure evolutions
 - High Work
 - Engine Failure Procedures, Secure, Airstart
 - Fuel selector used
 - In the pattern
 - No lower than 400' AGL
 - Throttle used
 - Vectors on approach
 - Mixture used



Landing Checklist

- ⦿ **Gas** – Fuel Selector Fullest Tank / Fuel Pumps - ON
- ⦿ **Undercarriage** – Down (3 Green)
- ⦿ **Mixtures** – Rich
- ⦿ **Props** – 2500 RPMs
- ⦿ **Flaps** – ½ or FULL (UP if Single Engine)



Simulated Single Engine Approach

- Will be executed with simulated single engine power setting (set by instructor/examiner)
- Engine failure will be initiated PRIOR to the Final Approach Fix
- After completing engine failure procedures you do **not** need to do secure checklist
- Recommended not to trim rudder on approach
- Gear Down and Flaps UP on approach
- Don't forget to reduce power on operative engine to 19" MP for 120 KIAS on approach
- Transition to 100 MPH and Flaps to ½ once you break out and landing is assured
- Work hard on keeping nose aligned on landing with rudder



Pattern

- ⦿ Flown at 1000 ft. AGL
- ⦿ Landing gear checks
- ⦿ Landings to be accomplished
 - Normal
 - Short-Field
 - Single Engine (Simulated)
- ⦿ All landings will be touch and go during training
 - The instructor will be responsible for raising flaps Go Around
- ⦿ Always be prepared to go around



Last Landing and Parking

- ⦿ Smoothly apply brakes during rollout
- ⦿ Ensure that the entire aircraft is beyond the hold short before making the clear of runway radio call
- ⦿ Execute all checklist items at a complete stop per the checklist
- ⦿ Park in the spot designated by the instructor



TRAINING OBJECTIVES



Flight 1 Training Objectives

- ⦿ Takeoffs
 - Normal Takeoff
 - Short-Field Takeoff
- ⦿ Maneuvers
 - Slow Flight
 - Steep Turns
 - Approach to Stalls (3)
 - V_{MC} Demo
 - Emergency Descent
- ⦿ Engine Failure Practice
- ⦿ Instrument Approaches
 - Both engines operating
- ⦿ VFR Pattern Entry
- ⦿ Landings
 - Normal



Flight 2 Training Objectives

- ⦿ Aborted Takeoff
- ⦿ Maneuvers Review
- ⦿ Engine Failure
 - Simulated PAR
 - Engine shutdown, secure, and restart
 - Engine fail on approach
 - Engine fail in pattern
- ⦿ Instrument Approaches
 - Sim Single Engine
 - Sim Single Engine Missed Approach
 - Not required on checkride
- ⦿ Landings
 - Normal
 - Short-Field
 - Sim Single Engine