**A picture containing clipart

Description automatically generated ROTAX AND BRISTELL QUIZ-27’ wing July 24 2023 Louis Mancuso**

**Please study the POH and visit Rotax-Owners.com and** [**www.thelandingdoctor.com**](http://www.thelandingdoctor.com) **before taking the quiz.**

**The Bristell POH (AOI) states that spins are PROHIBITED. T F**

**The pilot must burp the engine by turning the prop the same way it normally runs for an accurate oil check. T F**

**The correct coolant is GM Dexcool 50/50 mixture and the coolant bottle should be two thirds full. T F**

**A mixture of 80% distilled water and 20% Dexcool concentrate will make the engine run cooler. T F**

**On hot days: You may need to taxi faster or turn into the wind, stop, and use 2500 RPM to cool the engine. T F**

**The correct tire pressure for the main tires is 26 pounds and the nose wheel 18-20 pounds. T F**

**Use the back up EFIS green switch prior to using the master to set up your avionics. T F**

**The pilot must select the left tank first because unused fuel is returned to the left tank. T F**

**When starting the Rotax 912 ULS, the throttle must CLOSED and choke open to start properly? T F**

**When starting 912 iS & 915 iS, the throttle must be open 3/4th inch to start properly? T F**

**The starter must be held until 1500 RPM is reached before letting go? T F**

**After start, set the throttle to 2200 RPM to avoid slapping in the gear box and to warm engine. T F**

**Oil temperature must be 120 degrees F or 50 degrees C prior to takeoff. T F**

**The Rotax should idle between 1750 and 1850 RPM to avoid slapping in the gear box and to obtain TBO. T F**

**The 1400 rpm lowest allowable idle as per Rotax, is limited to one minute and used for sea planes only. T F**

**Use brakes periodically to manage taxi speed. Riding the brakes can cause reduced brake life & effectiveness. T F**

**Takeoff: Set Brake, Full Throttle, verify minimum of 5000 RPM, release brake, use lots of right rudder. T F**

**If you let an LSA get air born on takeoff below 45 knots, you may lose control after a sudden gust of wind. T F**

**65 kts is Vx-best angle of climb-10 degrees flap. 75 KIAS is Vy, best rate of climb. 82 KIAS Mcs. T F**

**Climb at 85 knots for good visibility over the nose and good engine cooling. T F**

**Before making any turns in the traffic pattern, lower the nose to gain a little more energy. T F**

**During hot days, a 90 KIAS climb and reduced throttle may be required to keep CHT & oil temps below 230 F, T F**

**An oil temperature of 212 degrees is required for about 10 minutes to evaporate the water in the oil. T F**

**The Aux fuel pump stays on until reaching cruise altitude and the main fuel pump stays on all the time. T F**

**If you use a max of 5200 RPM for cruise, you will probably not exceed the max 5500 RPM engine RPM. T F**

**The pilot should try to keep the EGT’S below 1550 degrees F by using less or more power? T F**

**When using 100LL fuel, a minimum 5000 rpm cruise setting will help prevent lead build up. T F**

**The gear box reduces prop speed by 2.43-1, so a 5200 RPM cruise is 2140 for the propeller. T F**

**ROUGH AIR Maneuvering speed (Va) is 96 knots. Va 89 kts for a long wing Bristell. T F**

**In rough air, if you correct a dipped wing with ailerons alone you will induce adverse yaw and be uncomfortable. T F**

**Descending with 4000 RPM will prevent shock cooling the engine and extend the engine life. T F**

**Level flight at 3800-4000 RPM will help slow the aircraft down and get you to Vfe Flap speed of 75 knots. T F**

**If you are at 500 feet AGL one mile out on final at 65 knots you should have a stabilized approach. T F**

**A good pilot will go around if his/her approach is not stabilized within 200 feet AGL, we call this DFGAP. T F**

**When landing on runways less than 3000 feet, use full flaps and an approach speed of 55 knots over the fence. T F**

**Good pilots always land within 400 feet of the desired touch down spot and beyond the numbers. T F**

**Good pilots always land on the main wheels, on the centerline and with no side drift. T F**

**Upon touchdown, verify the throttle is closed to prevent unexpected ballooning after touchdown. T F**

**After touchdown, hold the nose off for a few seconds and then fly the nose wheel gently onto the runway. T F**

**When landing in a crosswind, touch down on the upwind main wheel first. T F**

**You should add 5 knots to your approach speed on gusty days. Max wind is 25 kts. T F**

**When applying rudder pressure during crosswind landings, the nose wheel is turned. T F**

**The demonstrated crosswind component is 15 knots, but most pilots should limit themselves to less. T F**

**A 30-degree crosswind of 12 knots equals a 6 knots crosswind component. T F**

**Your PLC should have a 6 kts crosswind limit for the first 10 hrs and have your CFI confirm higher limits. T F**

**When shutting down the engine, a low idle will lessen vibration and keep from breaking the exhaust springs. T F**

**Facing the plane into the wind before pre-flight and shutting down will protect the canopy from damage. T F**

**Closing the canopy before removing the top cowling will protect the canopy Plexiglass from damage. T F**

**The best shut down technique is to verify the engine is at idle, turn off one Lane/mag and then the other. T F**

**You can secure the nose by tying a rope to the engine mount. T F**

**Put the cover on the pitot tube to prevent bugs from clogging the pilot tube. Remove before flight. T F**

**You can learn about the Garmin G3X Touch by visiting** [**www.thelandingdoctor.com/videos**](http://www.thelandingdoctor.com/videos)**. T F**

**Preheat is required below 10 degrees F and helpful to reduce wear and tear below 32 degrees F. T F**

**Set the flaps to 20 degrees before shut down, to help protect the flaps from being stepped on. T F**

**The 915iS Turbo requires 2 minutes at idle before shutting down to allow the turbo to cool. T F**