**Patuxent River Navy Flying Club**

Piper Model PA-28-161, Warrior II, Aircraft Open Book Exam

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| **Name:** |  | **Date:** |  |
| **Aircraft:** |  | **Initial Exam Grade:** |  |
| **Instructor:** |  | **Date reviewed & Upgraded to 100%:** |  |

Print this page then complete the exam using the PA-28-161, Warrior II Pilots Operating Handbook.  Give the completed exam (hard copy) to a PRNFC CFI for review and correction.  After the exam has been reviewed, upgraded to 100% and signed off by the CFI then turn it in to the office to be placed in your training folder. This exam must be completed annually per BUPERSINST 1710.22.

1. The maximum gross weight is \_\_\_\_\_\_\_\_ lbs. (POH “Specifications”)
2. When the right flap is to used as a step, make sure the flaps are in the \_\_\_\_\_\_\_\_\_\_\_\_ position. The flaps have three extended positions, \_\_\_\_\_\_\_, \_\_\_\_\_\_\_, and \_\_\_\_\_\_ degrees. (POH “Control System”)
3. The auxiliary electric fuel pump should be on for all \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ and when \_\_\_\_\_\_\_\_\_\_\_\_\_ tanks. (POH “Fuel System”)
4. A \_\_\_\_\_\_\_\_\_\_\_ switch on the \_\_\_\_\_\_\_\_ side of the switch panel controls the \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ and the radio lights. (POH “Electrical System”)
5. The PA-28-161 is powered by a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_engine rated at \_\_\_\_\_\_\_\_ HP at \_\_\_\_\_\_\_\_\_\_RPM. (POH “Specifications”)
6. An emergency bus switch is also provided to supply auxiliary power to the avionics bus in event of a radio master switch circuit failure. The emergency bus switch is located behind the lower right \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_, left of the \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ panel. (POH “Instrument Panel")
7. Both the pitot and static lines can be drained through separate drain valves located on the \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ side of the fuselage interior. (POH “Pitot Static System”)
8. After engine start, advance the throttle to \_\_\_\_\_\_\_\_\_\_ RPM. If oil pressure is not indicated within \_\_\_\_\_\_\_ seconds, stop the engine. *(In cold weather (below 25 deg F) it may take a few seconds longer to get an oil pressure indication.)* (POH “Starting Engine”)
9. Starter limits are \_\_\_\_\_\_ seconds on, followed by a \_\_\_\_\_\_ minute rest period before the next start attempt. (POH “Starting Engine”)
10. Warm up the engine at \_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_ RPM. (POH “Warm-Up”)
11. The engine is warmed-up sufficiently if the throttle may be opened fully without \_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_, and without reduction in engine \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_. (POH “Warm-Up)
12. Normal takeoffs are performed by accelerating to \_\_\_\_\_ to \_\_\_\_\_\_ KIAS depending on the weight of the aircraft. (POH “Take-Off”)
13. Best angle of climb airspeed (Vx) is \_\_\_\_\_\_\_ KIAS

Best rate of climb airspeed (Vy) is \_\_\_\_\_\_\_\_ KIAS

Enroute climb airspeed is \_\_\_\_\_\_\_\_ KIAS (POH “Climb”)

1. The stall warning horn comes on between \_\_\_\_ and \_\_\_\_ KIAS above stall speed. (POH “Stalls”)
2. Gross weight stall speed with power off and full flaps is \_\_\_\_\_ KTS. With flaps up the speed is \_\_\_\_\_\_\_\_\_\_\_\_. (POH “Stall Speed Table”)
3. Prolonged operation at powers above 75% with a leaned mixture can result in engine damage. Above \_\_\_\_\_\_\_\_ feet the engine is incapable of generating more than 75% . (POH “Cruising”)
4. Normal cruising power is \_\_\_\_\_ to \_\_\_\_\_% of the rated horsepower. On a standard day at 6000 feet pressure altitude and 65% power, what is the engine speed? \_\_\_\_\_\_ \_\_ RPM. (POH “Cruising” and “Engine Performance” Chart)
5. The airplane should be trimmed to an approach speed of about \_\_\_\_\_\_ KIAS, with a final approach speed of \_\_\_\_\_\_ KIAS with flaps extended to 40 degrees. (POH “Approach and Landing”)
6. Flaps may be lowered at airspeeds up to \_\_\_\_\_\_ KIAS. (POH “Approach and Landing”)
7. When stopping the engine, the throttle should be left full aft to avoid engine \_\_\_\_\_\_\_\_\_. (POH “Stopping Engine”)
8. Before attempting to re-set a circuit breaker, allow a \_\_\_\_\_ to \_\_\_\_\_ minute cooling off period. (POH “Operating Tips”)
9. The pilot should become familiar with the proper positioning of his/her feet on the rudder pedals so as to avoid interference with the \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ when moving the rudder pedals or operating the toe brakes. *(Aircraft mishaps have occurred because of pilots’ feet being raised too high on the pedal assembly and attempted pilot rudder pedal inputs being ineffectual!)* (POH “Operating Tips”)
10. Partial carburetor heat may be worse than no heat at all, since it may melt part of the ice, which will \_\_\_\_\_\_\_\_ in the intake system. (POH “Emergency Procedures-Engine Roughness”)
11. If loss of power occurs at altitude, trim the aircraft for best gliding angle ( \_\_\_\_\_ KIAS) and look for a suitable field. (POH “Emergency Procedures- Power Off Landing”)
12. You wish to fly with the following loading in the Normal Category:

Pilot: 110 lbs.

Co-pilot: 175 lbs.

Rear seat passenger: 200 lbs.

Baggage in the baggage area: 150 lbs.

Fuel: Full at engine start

Is the baggage area over weight?

Is the aircraft over weight?

Is the aircraft within allowable C.G. limits?