

MAFC - **Archer PA28-181** Aircraft Checkout Rev. A

Pilot's Name _____
Medical Class _____ Medical Date _____
Certificate number _____ Class _____
Ratings _____
Flying time: total _____ last 90 days _____

Aircraft: Piper Archer II, PA28-181, 1976
Aircraft Manual: Piper Cherokee Archer II Information Manual
Handbook Part No. 761 624

Note: This is an open-book quiz. All pilots must have their own "Information Manual" covering the specific aircraft being checked out in. Some questions are based on information in the Manual or the applicable POH of the aircraft. However, some of the questions will require other sources information that the pilot will have to reference or be knowledgeable in. For answers requiring numbers, please use the units corresponding to the units used on the specific aircraft's flight instrument unless otherwise indicated.

- 1.) Tire inflation: mains: _____ psi; nose: _____ psi.
- 2.) How do you tell that the struts are properly inflated?

- 3.) The engine is make: _____ model: _____
Rated at _____ HP, at _____ rpm, at sea level.
- 4.) Usable fuel grades include _____ octane, _____ color & _____ octane, _____ color.
- 5.) The two fuel tanks have provisions for full or partial filling of:
Gallons each tank _____ (full) _____ usable
Gallons to tab _____, _____ usable
- 6.) Oil capacity is: _____ quarts, _____ minimum; fill to _____ qts.
- 7.) Maximum gross weight _____ pounds; useful load _____ pounds.
- 8.) Maximum baggage compartment weight is _____ pounds.
- 9.) Flaps: First notch _____ degrees; Second notch _____ degrees;
Third notch _____ degrees
- 10.) Enter the following speeds (indicate mph or knots):
Take off rotation speed _____
Vy Best Rate of Climb _____
Vx best Angle of Climb _____
Cruise Climb _____
Va Maneuvering Speed _____
Pattern Approach Speed _____
Final Approach Speed with Flaps _____
Max Demonstrated X-Wind _____
Vfe Max Flaps Extended speed _____
Vne Never Exceed speed _____
Vno Max structural cruising _____
Vs Stall speed clean _____

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Vso Stall in landing configuration _____

Best glide speed _____

- 11.) When is the electric fuel pump used? _____
- 12.) What are the steps for proper use of the EGT for leaning?

- 13.) Flaps up landings will increase landing distance by _____
- 14.) Can this plane safely take-off on a 2200 ft runway, at full gross weight on a 95 degree day with no wind? _____
- 15.) Cruising at 85% power at 5500 ft corresponds to _____ tas or _____ ias & _____ rpm consuming _____ gph.
- 16.) The electrical system is a _____ volt system.
- 17.) The alternator is rated at _____ amps.
- 18.) The battery is rated at _____ ampere-hours.
- 19.) The pitot heat should be used in the following conditions:

- 20.) What is the after-takeoff checklist (in order)?

- 21.) Suppose the front seat occupants weight 390 lbs total, the back seat occupants weigh 340 lbs total, and there is 35 lbs. of luggage total. How much fuel can be carried? _____
- 22.) ~~Emergency~~ Airspeeds:
Best glide speed? _____
Expeditious Descent? _____
Emergency Landing Approach? _____
- 23.) The most probable cause of engine failure is? _____
- 24.) Cabin air is turned off by: _____
- 25.) Engine failure during take-off ground roll: _____
- 26.) Engine failure in flight: _____
- 27.) Power off landing: _____
- 28.) Engine Roughness: _____
- 29.) In flight engine restart: _____

- 30.) Engine fire in flight: _____
- 31.) Electrical fire in flight: _____

- 32.) The Glide ratio is _____ to 1.
- 33.) Alternator failure: _____
- 33.) Unlatched Door in flight: _____
- 34.) Spin Recovery: _____
- 35.) List below your personal minimums for flight and discuss them with your instructor. These minimums should include the items below but may also include additional parameters for flight.

Ceiling & Visibility _____, _____

Surface Winds & Crosswind _____, _____

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Winds Aloft & Temperature _____, _____

Current Weather & Forecast _____

CROSS COUNTRY PLANNING - VFR

The remaining questions are based on the following takeoff and cross country scenario: Pilot: 200 lbs.; Copilot: 200 lbs.

Passenger #1: 170 lbs.; Passenger #2: 170 lbs.; Baggage: 50 lbs.

Wind: Calm at 70N surface. Surface Temperature at Departure Airport: 80 F. Altimeter setting: 29.92. Forecast Winds enroute: 3K - 20Kts at 060, 6K - 30Kts at 060, 9Kft - 40Kts at 060. Departing from: Spring Hill Airport (70N) / Sterling PA.

Destination: Nantucket (ACK); Cruise Power: 65%

Mission requirement: Develop a VFR flight plan that will accomplish the cross country mission taking into account all applicable performance and regulations.

37.) Optimum amount of fuel on board: _____ gal.

38.) Flap setting at takeoff: _____ notch.

39.) Expected takeoff ground roll: _____ feet, at which point you should have an airspeed of at least _____ ias.

40.) Procedure in case you have not achieved that speed by that point:

41.) Approximate margin for error in that case: _____ feet of runway length, which corresponds to _____ seconds of reaction time.

42.) In the case where you do get proper takeoff performance, the distance required to clear a 50-foot obstacle is: _____ feet.

43.) Provide a complete flight plan for review by your instructor.

Practical and Oral Examination

- _____ Knowledge Of Pilot's Handbook
- _____ Knowledge Of Operating Limitations
- _____ Knowledge Of Fuel, Electrical, And Hydraulic Systems
- _____ Knowledge Of Weight And Balance Computations
- _____ Knowledge Of Emergency Procedures
- _____ Knowledge Of Radio Procedures And Phraseology
- _____ Knowledge Of Radio Equipment
- _____ Knowledge Of Federal Aviation Regulation Part 91
- _____ Knowledge Of Local Flying Regulations
- _____ Knowledge Of Weather Facilities & Weather Reports
- _____ Practice Area & Airports To Be Used

Checked Out For:

Local Flights _____

Cross Country Flight _____

Night Flight _____

IFR Flight Other _____

Check-Out completed by:

Instructor _____

Date _____