

AMS FLIGHT SCHOOL



Be Pilot In Command

Piper Arrow Aircraft Exam

Name: _____ Date: _____

Instructor: _____ CFI #: _____ Exp: _____

Aircraft Make: PIPER Model: PA-28R-200
Aircraft Engine: LYCOMING Model: IO-360-C1

1. SPEEDS:

Vr _____ Max Headwind Component @ AMS _____

Vx _____ Max Crosswind Component @AMS _____

Vy _____ Max Demonstrated Crosswind Component _____

Vfe _____ Oil Capacity _____

Va _____ @ 2600 lbs (Max Gross Weight) Minimum Oil _____

Vle _____ retraction _____ Total Usable Fuel _____

Vno _____ Minimum Fuel Grade _____

Vne _____ Fuel Color _____

Vso _____ Maximum Baggage _____

Vs1 _____

2. HOW MUCH FUEL DOES THE AIRCRAFT HAVE IF THE TANKS ARE FILLED TO THE TABS?

3. EXPLAIN WHAT THE ELECTRICAL FUEL PUMP IS AND WHEN IT IS USED.

4. THE LANDING GEAR IS _____ ACTIVATED AND _____ ACTUATED.

5. WHAT ARE THE CONDITIONS THAT ACTIVATE THE GEAR UNSAFE WARNING HORN?

6. PRIMARY ELECTRICAL POWER IS SUPPLIED BY THE _____ AND SECONDARY ELECTRICAL POWER IS PROVIDED BY A _____.

7. THE ARROW IS EQUIPPED WITH A _____ SPEED _____ PITCH PROPELLER.

8. WHAT IS THE GOVERNOR AND HOW DOES IT WORK?

9. WHAT IS MANIFOLD PRESSURE AND HOW IS IT CONTROLLED?

10. COMPUTE WEIGHT AND BALANCE:

Pilot weighs 185 lbs and co-pilot weighs 210 lbs, there are two passengers in the rear seats that weigh 45 lbs and 85 lbs. You plan to depart with full fuel and 120 lbs of baggage. (Use actual aircraft empty weight, arm, and moment).

Item	Weight	Arm	Moment
Empty Weight			
Pilot & Front Pax			
Rear Passengers			
Fuel			
Baggage			
Total			

IS THIS AIRCRAFT WITHIN WEIGHT AND BALANCE LIMITATIONS? _____

11. TAKE-OFF AND LANDING DISTANCE:

Given the following conditions

*Pressure Altitude: 2500 ft.
Current temperature: 10 C*

*Weight: 2550
Wind: 5 kt headwind*

What will be the normal ground roll distance on take-off with no flaps? _____

How much runway will be left at Milton (2R4) _____

What will be the landing distance over a 50 ft. obstacle? _____

12. CROSSWIND COMPONENT:

You are departing runway 36, the wind is 290 at 18 kts. Have you exceeded the manufacturers demonstrated crosswind component? _____

13. ACCORDING TO THE POWER SETTING TABLE, WHAT ARE THE TWO COMBINATIONS OF RPM AND MANIFOLD PRESSURE FOR 65% POWER AT 4000 FT PRESSURE ALTITUDE?

EMERGENCY PROCEDURES

14. EXPLAIN THE PROCEDURE FOR ENGINE POWER LOSS IN-FLIGHT.

15. WHAT MUST BE DONE IN THE EVENT OF A PROPELLER OVERSPEED CONDITION?

16. EXPLAIN IN DETAIL THE PROCEDURE FOR EMERGENCY LANDING GEAR EXTENSION.

17. DISCUSS THE LANDING GEAR AUTO EXTENSION AND HOW TO OVERRIDE IT IN FLIGHT.

18. EXPLAIN THE RED RANGE ON THE TACHOMETER AND WHY IT SHOULD BE AVOIDED DURING NORMAL FLIGHT OPERATIONS.

FOR INSTRUCTOR USE ONLY

PILOT MEETS CHECKOUT REQUIREMENTS? _____

PILOT TOTAL HOURS _____ **(TT 100 hours)**

COMPLEX HOURS _____ **(10 Min)** **PA-28R-200 HOURS** _____

PILOT MEETS CURRENT INSURANCE POLICY MINIMUMS FOR RENTAL? _____