

ADVANTAGE AVIATION INC. MULTI ENGINE CHECKOUT

Aircraft Make & Model: _____
Instructor: _____

Name: _____
Date: _____

AIRSPEEDS Knots/Miles per hour (circle one)

V_S: _____
V_{SO}: _____
V_{MCA}: _____
Rotate V_R: _____
V_Y: _____
V_{YSE}: _____
V_X: _____
V_{XSE}: _____
V_A: _____
V_{App}: _____
V_{App} (single engine): _____

Short field approach: _____
Go around: _____
Cruise climb: _____
V_{FE}: _____
V_{NO}: _____
V_{LE}: _____
V_{LO}: _____
V_{NE}: _____
Max crosswind: _____
Best glide: _____

ENGINE

Manufacturer: _____
Horsepower: _____

Model: _____
Type: _____

OIL

Absolute minimum: _____
Maximum: _____

Minimum for operation: _____
Grade: _____

FUEL

Grade: _____
Max Capacity (total): _____
Max Capacity (usable): _____

Color: _____
Max total cap. at tabs: _____
Max usable cap. at tabs: _____

WEIGHT AND BALANCE

Max ramp weight: _____
Max landing weight: _____
Useful load: _____

Max takeoff weight: _____
BEW: _____
Max payload w/full fuel: _____

	<u>WEIGHT</u>	<u>ARM</u>	<u>MOMENT</u>
BEW	_____	_____	_____
Front seats	_____	_____	_____
Rear seats	_____	_____	_____
Baggage	_____	_____	_____
Fuel	_____	_____	_____
<u>TOTAL</u>	_____	_____	_____

CG in/out: _____ Correction: _____
CG position after 3hrs flight: _____

MISC

1. During run-up, one of the magnetos on one engine is running rough. What is happening and what will you do about it? _____

2. When should the mixture be leaned? _____

3. Explain how you lean the mixture: _____

4. How do you detect carburetor/induction ice? _____
5. What can you do about it? _____

6. When should you use carburetor heat? _____

MALFUNCTIONS

1. You are on the takeoff roll, the airplane swerves to the right. What should you do and why? _____

2. You are at 100' on the upwind at Palo Alto, one engine quits. What are you going to do? _____

3. You are cruising along at 7500', the left engine runs rough and quits. What are you going to do? _____

ELECTRICAL SYSTEM

1. Describe the electrical system on this airplane: _____

2. If the low voltage warning light illuminates, what might have happened? _____

3. What can be done about it during flight? _____

4. What happens to the electrical system when one engine fails? _____

5. Describe your actions in the event of an electrical fire: _____

PROPELLER SYSTEM

1. When RPM is increased by the pilot, explain what happens to the propeller and how this occurs: _____

2. Describe how the propeller goes into the feather position: _____

3. What is the function of accumulators? _____

4. Is this airplane equipped with accumulators? _____
5. Can the propellers be feathered on the ground? Explain why/why not: _____

6. What happens when the RPM is decreased? _____

7. You initiate a climb, do you increase RPM first then manifold? Explain: _____

8. What causes propeller over-speed and what should you do if this should occur? _____

GEAR SYSTEM

1. What type of gear system is this airplane equipped with? _____
2. Explain the gear system: _____

3. While taxiing, you bring the gear lever to the up position. What might happen? _____

4. What are the unsafe gear indications? _____

5. What is the emergency gear extension procedure? _____

ENGINES

1. What is the definition of a critical engine? _____

2. What is the critical engine on this airplane? _____
3. What is the recommended use of cowl flaps? _____

PERFORMANCE

Service ceiling of this aircraft: _____

- TAKE-OFF DISTANCE: (max gross weight)
 - Max gross weight, sea level, standard temperature, 10 kts headwind:
 - Takeoff roll: _____
 - 50' obstacle: _____
 - Max gross weight, 6000' pressure altitude, 28°C, 5 kts headwind:

Takeoff roll: _____

50' obstacle: _____

- CLIMB PERFORMANCE: (no wind)

Max gross weight, sea level, standard temperature: _____

Max gross weight, 7000' pressure altitude, 25°C: _____

- CRUISE: (7000', 15°C, 65% power, full fuel)

Max flight duration with 45 minutes reserve: _____

How many gallons of fuel used: _____

- LANDING DISTANCE: (no wind)

Max gross weight, sea level, standard temperature, 10 kts headwind: _____

Max gross weight, 6000' pressure altitude, 28°C:

Landing roll: _____

50' obstacle: _____