



## AIRCRAFT FAMILIARIZATION AND REVIEW C-172

Name \_\_\_\_\_ Aircraft make and model \_\_\_\_\_

### V SPEEDS

Vx \_\_\_\_\_

Vs \_\_\_\_\_

Vy \_\_\_\_\_

Vso \_\_\_\_\_

Va \_\_\_\_\_

Vno \_\_\_\_\_

Vfe \_\_\_\_\_

Vne \_\_\_\_\_

### RECOMMENDED SPEEDS

Normal take off \_\_\_\_\_

Short field take off at 50' \_\_\_\_\_

Normal landing flaps 40 degrees \_\_\_\_\_

Short field landing flaps 40 degrees \_\_\_\_\_

Normal landing flaps up \_\_\_\_\_

Maximum cross wind take off or landing \_\_\_\_\_

Steep turn entry speed \_\_\_\_\_

Chandel or Lazy eight entry speed \_\_\_\_\_

Best glide speed and distance from 6000' \_\_\_\_\_

### WEIGHTS

Empty weight \_\_\_\_\_

Max takeoff weight \_\_\_\_\_

Max landing weight \_\_\_\_\_

Max useful load \_\_\_\_\_

C. G. range at max weight \_\_\_\_\_

Max baggage compartment weight \_\_\_\_\_

### AIRFRAME

Describe general type of construction \_\_\_\_\_

Describe how each of the following controls surfaces are operated

Rudder \_\_\_\_\_

Ailerons \_\_\_\_\_

Elevator \_\_\_\_\_

Flaps \_\_\_\_\_

Noise wheel \_\_\_\_\_



**ENGINE**

Make and model \_\_\_\_\_ Engine horsepower \_\_\_\_\_

Engine type \_\_\_\_\_

Oil capacity and type \_\_\_\_\_

Describe carburetor and priming system \_\_\_\_\_

**PROPELLER**

Make and model \_\_\_\_\_

Diameter \_\_\_\_\_

**BRAKE SYSTEM**

Describe the brake system \_\_\_\_\_

**FUEL SYSTEM**

Total fuel capacity \_\_\_\_\_ Usable fuel capacity \_\_\_\_\_

Fuel type \_\_\_\_\_ Fuel color \_\_\_\_\_

Describe the fuel system i.e. the number of drains, vents and how fuel is delivered to the engine.

\_\_\_\_\_

\_\_\_\_\_

Describe the proper leaning procedures. \_\_\_\_\_

\_\_\_\_\_

**ELECTRICAL SYSTEM**

What is the system voltage \_\_\_\_\_

Describe the major components of the electrical system \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Describe the engine starter and ignition system \_\_\_\_\_

\_\_\_\_\_

Describe the master switch and how it works. \_\_\_\_\_

\_\_\_\_\_



**ENVIRONMENTAL CONTROLS**

Describe how the airplane is heated and cooled. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**INSTRUMENTATION**

What instruments operate off the vacuum system \_\_\_\_\_  
\_\_\_\_\_  
What instruments operate off the Pitot- Static system \_\_\_\_\_  
\_\_\_\_\_

**AIRCRAFT PERFORMANCE**

Determine the take off distance, ground roll and over a 50' obstacle with the following conditions. PA 3000', Temp @ 25C and calm winds.

Ground roll \_\_\_\_\_ over 50' obstacle \_\_\_\_\_

Determine the landing distances for the same conditions as above.

Ground roll \_\_\_\_\_ over 50' obstacle \_\_\_\_\_

Compute the time, fuel burn and distance climbing to 8000' from sea level given the takeoff conditions above and the fuel burn @ 75% power after reaching 8000'

Time \_\_\_\_\_

Fuel \_\_\_\_\_

Distance \_\_\_\_\_

Fuel consumption @ 75% \_\_\_\_\_

**PERFORM A WEIGHT AND BALANCE COMPUTATION WITH**

Pilot 200 lbs

Front seat passenger 200 lbs

One back seat passenger at 170 lbs

Full Fuel

Baggage at 50 lbs in the forward baggage area

Are we below our max weight? \_\_\_\_\_

What is the center of gravity? \_\_\_\_\_

Is the center of gravity within limits? \_\_\_\_\_



## EMERGENCY PROCEDURES

What are the memory items for the following Emergency procedures?

### ENGINE FAILURE ON TAKEOFF

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

### ENGINE FAILURE AFTER TAKEOFF

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

### ENGINE FAILURE IN CRUISE

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

### ENGINE FIRE AT START

1. \_\_\_\_\_

If engine starts.

2. \_\_\_\_\_
3. \_\_\_\_\_

If engine fails to start.

4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

### EMERGENCY LANDING

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

### ENGINE FIRE IN FLIGHT

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

### ELECTRICAL FIRE IN FLIGHT

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

If fire is out and elec. power is required

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_



CABIN FIRE

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

WING FIRE

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

OVERVOLTAGE LIGHT ILLUMINATES

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

AMP METER SHOWS DISCHARGE

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

STATIC SOURCE BLOCKED

1. \_\_\_\_\_
2. \_\_\_\_\_

LANDING WITH A FLAT TIRE

1. \_\_\_\_\_
2. \_\_\_\_\_

INADVERTENT ICING

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_



What inspections are required for an aircraft to be considered airworthy and legal to fly?

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What documents must be in the airplane at all times?

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