AIRCRAFT FAMILIARIZATION AND REVIEW SENECA

Name _____ Aircraft make and model _____

V SPEEDS

Vx _____
Vy _____
Va _____
Vfe _____
Vle _____
Vmc_____

Vs _____
Vso _____
Vno _____
Vne _____
Vlo _____

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 takeoff or landing _____
Steep turn entry speed _____
Chandel or Lazy eight entry speed_____
Best glide speed and distance from 6000' _____
Max. Landing Gear Extension Speed_____
Max. Landing Gear Retraction Speed_____

GENERAL

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

_____
_____
_____
_____
_____
_____

What documents must be in the airplane at all times?

_____
_____
_____
_____

WEIGHTS

Empty weight_____
Max landing weight_____
C. G. range at max weight_____

Max takeoff weight_____
Max useful load_____
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 fuel injection and priming system_____

_____

PROPELLER

Make and model _____

Diameter _____

Normal Operating Procedures:_____

BRAKE SYSTEM

Describe the brake system _____

_____

FUEL SYSTEM

Total fuel capacity _____ Usable fuel capacity _____

Fuel type _____ Fuel color _____

Describe Cross-Feed _____

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._____

_____

LANDING GEAR

Describe Normal Landing Gear Extension Procedures:_____

_____

Describe Normal Landing Gear Retraction Procedures:_____

_____

NORMAL POWER SETTINGS

Take Off:	Manifold: _____	RPM:_____
Climb:	Manifold:_____	RPM:_____
Cruise:	Manifold:_____	RPM:_____

ENVIRONMENTAL CONTROLS

Describe how the airplane is heated and cooled _____

_____

ICE PROTECTION SYSTEM

Are we equipped to enter known icing _____

Describe the components of the ice system _____

_____

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?

Detecting A Dead Engine

1._____
2._____

Feathering Procedure

1._____
2._____
3._____
4._____
5._____
6._____
7._____
8._____
9._____
10._____
11._____
12._____
13._____
14._____
15._____
16._____
17._____
18._____
19._____
20._____
21._____
22._____

Troubleshoot

1._____
2._____
3._____
4._____
5._____

Unfeathering Procedure

1._____
2._____
3._____
4._____
5._____

Landing

1._____
2._____
3._____

Engine Fire During Start

1._____

2. _____

3._____

4. _____

5._____

6. _____

7. _____

Single Engine Landing

1._____

2._____

3._____

Single Engine Go-Around

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

Manual Gear Extend

check before manual extend

1._____

2._____

3._____

4._____

Engine Power Loss During Takeoff

1._____

2. _____

3._____

4. _____

5._____

If gear up and negative runway

1._____

2._____

a._____

b._____

c._____

Power Off Landing

When Committed to Landing:

1._____

2. _____

3._____

4. _____

5._____

6._____

7._____

Manual Extend

1._____

2._____

3._____

4._____

5._____

Fire In Flight

1._____

Electrical Fire

1._____

2. _____

3._____

4. _____

Engine Fire

1._____

2. _____

3._____

4. _____

5. _____

6._____

7. _____

Engine Roughness

1._____

If Roughness Continues After 1 min:

_____

ALT Annunciator Light Illuminated

1._____

2._____

3._____

4._____

5._____

6._____

7._____

Loss of Oil Pressure

1._____

2._____

Loss of Fuel Pressure

1._____

2._____

High Oil Temperature

1._____

2._____

Spin Recovery

1._____

_____

Open Door

1._____

2._____

3._____

Propeller Overspeed

1._____

2._____

3._____

4._____

5._____

6._____

Electrical Failures

_____

_____

ALT Annunciator Light Illuminated

1._____

_____

If ammeter shows zero

1._____

_____

Reduce Electrical Loads to Min:

1._____

2. _____

If Power not Restored

1._____

2. _____

Electrical Overload

1._____

2. _____

If Alternator Loads are Reduced:

1._____

2. _____

If Alternator Loads are <u>Not</u> Reduced

1._____

2. _____

3. _____

Landing Gear Extension

1._____

2._____

3._____

4._____

If landing gear does not check down and locked:

1._____

2._____

3._____

4._____

5._____

If the nose gear will not lock down after the above procedures:

_____

_____

1._____

2._____

If Green Lights are not eluminated after gear lever in the down position, what is the first thing you should check is

1. _____

_____