

Ground Lesson 3 – Aircraft and Systems

Objective:

For the student to have an understanding of the PPC airframe , wing, engine and systems.

Content:

Airframe

___ Fuselage ___ Wing/lines ___ Flight controls ___ Landing gear
___ Engine ___ Reduction drive ___ Propeller

Systems

___ Electrical ___ Communications ___ Flight Instruments ___ Emergency systems

Engine

___ Description and principles ___ Four-stroke or two-stroke engine cycles
___ Throttle ___ Instruments
___ Fuel system ___ Oil system ___ Air induction system
___ Cooling system ___ Ignition ___ Starter ___ Exhaust system ___ Carburetor
___ Fuel/air mixture control or jetting

Abnormal combustion

___ Detonation ___ Pre-ignition

Carburetor ice

___ Impact ice ___ Fuel ice ___ Throttle ice
___ Carburetor heat (if appropriate) ___ Fuel injection systems

Engine operation

___ Starting the engine ___ Stopping the engine ___ Engine handling ___ Rough running
___ Cross-checking engine instruments ___ Taxiing ___ Engine failure in flight
___ Engine fire in flight ___ Engine fire on startup

Flight instruments

Pressure Instruments

___ Altimeter ___ Vertical speed indicator

Direction and heading indicators

___ Magnetic compass ___ GPS

Completion Standards: This lesson is complete when the student has successfully completed all reading and understands the systems and systems operations listed in this lesson.

Assignment for this lesson:

- Read *Pilots Operating Handbook/Flight manual* Sections “1. General”, “2 Limitations”, and “7. Systems Description”
- Read *FAA Powered Parachute Flying Handbook Chapters 3 and 4.*

Lesson Results:

Date of completion _____ Instructor Signature/ID _____

Student Signature _____ Ground Time _____

Instructor remarks: