

TEMA: 0156 COMMERCIAL PILOT - (CH. 2) AIRCRAFT SYSTEMS

COD_PREG:	PREGUNTA:	RPTA:
PREG20080216	Before shutdown, while at idle, the ignition key is momentarily turned OFF. The engine continues to run with no interruption; this	B
OPCION A:	is normal because the engine is usually stopped by moving the mixture to idle cut-off.	
OPCION B:	should not normally happen. Indicates a magneto not grounding in Off position	
OPCION C:	is an undesirable practice, but indicates that nothing is wrong.	
OPCION D:		
PREG20080217	Leaving the carburetor heat on while taking off	C
OPCION A:	leans the mixture for more power on takeoff.	
OPCION B:	will decrease the takeoff distance.	
OPCION C:	will increase the ground roll.	
OPCION D:		
PREG20080218	A way to detect a broken magneto primary grounding lead is to	A
OPCION A:	idle the engine and momentarily turn the ignition off.	
OPCION B:	add full power, while holding the brakes, and momentarily turn off the ignition.	
OPCION C:	run on one magneto, lean the mixture, and look for a rise in manifold pressure.	
OPCION D:		
PREG20080219	Fouling of spark plugs is more apt to occur if the aircraft	A
OPCION A:	gains altitude with no mixture adjustment.	
OPCION B:	descends from altitude with no mixture adjustment.	
OPCION C:	throttle is advanced very abruptly.	
OPCION D:		
PREG20080220	The most probable reason an engine continues to run after the ignition switch has been turned off is	C
OPCION A:	carbon deposits glowing on the spark plugs.	
OPCION B:	a magneto ground wire is in contact with the engine casing.	
OPCION C:	a broken magneto ground wire.	
OPCION D:		
PREG20080221	If the ground wire between the magneto and the ignition switch becomes disconnected, the engine	C
OPCION A:	will not operate on one magneto.	
OPCION B:	cannot be started with the switch in the BOTH position.	
OPCION C:	could accidentally start if the propeller is moved with fuel in the cylinder.	

OPCION D:

PREG20080222 For internal cooling, reciprocating aircraft engines are especially dependent on B

OPCION A: a properly functioning cowl flap augments.

OPCION B: the circulation of lubricating oil.

OPCION C: the proper freon/compressor output ratio.

OPCION D:

PREG20080223 The pilot controls the air/fuel ratio with the C

OPCION A: throttle.

OPCION B: manifold pressure.

OPCION C: mixture control.

OPCION D:

PREG20080224 Which statement best describes the operating principle of a constant-speed propeller? C

OPCION A: As throttle setting is changed by the pilot, the prop governor causes pitch angle of the propeller blades to remain unchanged.

OPCION B: A high blade angle, or increased pitch, reduces the propeller drag and allows more engine power for takeoffs.

OPCION C: The propeller control regulates the engine RPM and in turn the propeller RPM.

OPCION D:

PREG20080225 In aircraft equipped with constant-speed propellers and normally-aspirated engines, which procedure should be used to avoid placing undue stress on the engine components? When power is being B

OPCION A: decreased, reduce the RPM before reducing the manifold pressure.

OPCION B: increased, increase the RPM before increasing the manifold pressure.

OPCION C: increased or decreased, the RPM should be adjusted before the manifold pressure.

OPCION D:

PREG20080226 5185-1 Detonation may occur at high-power settings when A

OPCION A: the fuel mixture instantaneously ignites instead of burning progressively and evenly.

OPCION B: an excessively rich fuel mixture causes an explosive gain in power.

OPCION C: the fuel mixture is ignited too early by hot carbon deposits in the cylinder.

OPCION D:

PREG20080227 The uncontrolled firing of the fuel/air charge in advance of normal spark ignition is known as C

OPCION A: instantaneous combustion.

OPCION B: detonation.

OPCION C: pre-ignition.

OPCION D:

PREG20080228 Fuel/air ratio is the ratio between the **B**
OPCION A: volume of fuel and volume of air entering the cylinder.
OPCION B: weight of fuel and weight of air entering the cylinder.
OPCION C: weight of fuel and weight of air entering the carburetor.
OPCION D:

PREG20080229 The mixture control can be adjusted, which **A**
OPCION A: prevents the fuel/air combination from becoming too rich at higher altitudes.
OPCION B: regulates the amount of air flow through the carburetor's venturi.
OPCION C: prevents the fuel/air combination from becoming lean as the airplane climbs.
OPCION D:

PREG20080230 Which statement is true concerning the effect of the application of carburetor **A**
heat?
OPCION A: It enriches the fuel/air mixture.
OPCION B: It leans the fuel/air mixture.
OPCION C: It has no effect on the fuel/air mixture.
OPCION D:

PREG20080231 Detonation occurs in a reciprocating aircraft engine when **C**
OPCION A: there is an explosive increase of fuel caused by too rich a fuel/air mixture.
OPCION B: the spark plugs receive an electrical jolt caused by a short in the wiring.
OPCION C: the unburned fuel/air charge in the cylinders is subjected to instantaneous
combustion.
OPCION D:

PREG20080232 Propeller efficiency is the **A**
OPCION A: ratio of thrust horsepower to brake horsepower.
OPCION B: actual distance a propeller advances in one revolution.
OPCION C: ratio of geometric pitch to effective pitch.
OPCION D:

PREG20080233 A fixed-pitch propeller is designed for best efficiency only at a given **B**
combination of
OPCION A: altitude and RPM.
OPCION B: airspeed and RPM.
OPCION C: airspeed and altitude.
OPCION D:

PREG20080234 The reason for variations in geometric pitch (twisting) along a propeller blade **C**
is that it

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- OPCION A:** permits a relatively constant angle of incidence along its length when in cruising flight.
- OPCION B:** prevents the portion of the blade near the hub from stalling during cruising flight.
- OPCION C:** permits a relatively constant angle of attack along its length when in cruising flight.
- OPCION D:**
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PREG20080235 A detuning of engine crankshaft counterweights is a source of overstress that may be caused by **A**

- OPCION A:** rapid opening and closing of the throttle.
- OPCION B:** carburetor ice forming on the throttle valve.
- OPCION C:** operating with an excessively rich fuel/air mixture.
- OPCION D:**
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PREG20080236 The best power mixture is that fuel/air ratio at which **B**

- OPCION A:** cylinder head temperatures are the coolest.
- OPCION B:** the most power can be obtained for any given throttle setting.
- OPCION C:** a given power can be obtained with the highest manifold pressure or throttle setting.
- OPCION D:**
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PREG20080237 Detonation can be caused by **C**

- OPCION A:** A rich mixture
- OPCION B:** low engine temperatures.
- OPCION C:** using a lower grade fuel than recommended.
- OPCION D:**
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PREG20080238 Applying carburetor heat will **C**

- OPCION A:** not affect the mixture.
- OPCION B:** lean the fuel/air mixture.
- OPCION C:** enrich the fuel/air mixture.
- OPCION D:**
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PREG20080239 An abnormally high engine oil temperature indication may be caused by **B**

- OPCION A:** a defective bearing.
- OPCION B:** the oil level being too low.
- OPCION C:** operating with an excessively rich mixture.
- OPCION D:**
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PREG20080240 What will occur if no leaning is made with the mixture control as flight altitude increases? **C**

- OPCION A:** The volume of air entering the carburetor decreases and the amount of fuel decreases.

OPCION B: The density of air entering the carburetor decreases and the amount of fuel increases.

OPCION C: The density of air entering the carburetor decreases and the amount of fuel remains constant.

OPCION D:

PREG20080241 Unless adjusted, the fuel/air mixture becomes richer with an increase in altitude because the amount of fuel C

OPCION A: decreases while the volume of air decreases.

OPCION B: remains constant while the volume of air decreases.

OPCION C: remains constant while the density of air decreases.

OPCION D:

PREG20080242 The basic purpose of adjusting the fuel/air mixture control at altitude is to A

OPCION A: decrease the fuel flow to compensate for decreased air density.

OPCION B: decrease the amount of fuel in the mixture to compensate for increased air density.

OPCION C: increase the amount of fuel in the mixture to compensate for the decrease in pressure and density of the air.

OPCION D:

PREG20080243 At high altitudes, an excessively rich mixture will cause the B

OPCION A: engine to overheat.

OPCION B: fouling of spark plugs.

OPCION C: engine to operate smoother even though fuel consumption is increased.

OPCION D:

PREG20080244 Frequent inspections should be made of aircraft exhaust manifold-type heating systems to minimize the possibility of A

OPCION A: exhaust gases leaking into the cockpit.

OPCION B: a power loss due to back pressure in the exhaust system.

OPCION C: a cold-running engine due to the heat withdrawn by the heater.

OPCION D:

PREG20080245 To establish a climb after takeoff in an aircraft equipped with a constant-speed propeller, the output of the engine is reduced to climb power by decreasing manifold pressure and C

OPCION A: increasing RPM by decreasing propeller blade angle.

OPCION B: decreasing RPM by decreasing propeller blade angle.

OPCION C: decreasing RPM by increasing propeller blade angle.

OPCION D:

PREG20080246 To develop maximum power and thrust, a constant-speed propeller should be set to a blade angle that will produce a B

OPCION A: large angle of attack and low RPM.

- OPCION B:** small angle of attack and high RPM.
OPCION C: large angle of attack and high RPM.
OPCION D:
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- PREG20080247 For takeoff, the blade angle of a controllable-pitch propeller should be set at a A
OPCION A: small angle of attack and high RPM.
OPCION B: large angle of attack and low RPM.
OPCION C: large angle of attack and high RPM.
OPCION D:
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- PREG20080248 During preflight in cold weather, crankcase breather lines should receive C
special attention because they are susceptible to being clogged by
OPCION A: congealed oil from the crankcase.
OPCION B: moisture from the outside air which has frozen.
OPCION C: ice from crankcase vapors that have condensed and subsequently frozen.
OPCION D:
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- PREG20080249 Which is true regarding preheating an aircraft during cold weather A
operations?
OPCION A: The cabin area as well as the engine should be preheated.
OPCION B: The cabin area should not be preheated with portable heaters.
OPCION C: Hot air should be blown directly at the engine through the air intakes.
OPCION D:
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