

TEMA: 0622 ATP-RTC - Performance - Chap.4

COD_PREG: PREGUNTA: **RPTA:**
PREG20097917 (8344) How can turbulent air cause an increase in stalling speed of an airfoil? A
OPCION A: An abrupt change in relative wind
OPCION B: A decrease in angle of attack
OPCION C: Sudden decrease in load factor
OPCION D:

PREG20097918 (8407) Which type of rotor system is more susceptible to ground resonance? A
OPCION A: Fully articulated rotor system.
OPCION B: Semi-rigid rotor system.
OPCION C: Rigid rotor system.
OPCION D:

PREG20097919 (8414) What type frequency vibration is associated with a defective transmission? C
OPCION A: Low frequency.
OPCION B: Medium frequency.
OPCION C: High frequency.
OPCION D:

PREG20097920 (8415) What type frequency vibration is associated with the main rotor system? A
OPCION A: Low frequency.
OPCION B: Medium frequency.
OPCION C: High frequency.
OPCION D:

PREG20097921 (8416) What type frequency vibration is indicative of a defective tail rotor system? B
OPCION A: Low frequency.
OPCION B: Medium frequency.
OPCION C: High frequency.
OPCION D:

PREG20097922 (8426) What is the primary purpose of the free-wheeling unit? B
OPCION A: To provide speed reduction between the engine, main rotor system, and the tail rotor system.
OPCION B: To provide disengagement of the engine from the rotor system for autorotation purposes.

OPCION C: To transmit engine power to the main rotor, tail rotor, generator/alternator, and other accessories.

OPCION D:

PREG20097923 (8427) The main rotor blades of a fully articulated rotor system can B

OPCION A: flap, drag, and feather collectively.

OPCION B: flap, drag, and feather independently of each other.

OPCION C: flap and drag individually, but can only feather collectively.

OPCION D:

PREG20097924 (8428) The main rotor blades of a semi-rigid system can A

OPCION A: flap and feather as a unit.

OPCION B: flap, drag, and feather independently.

OPCION C: flap and drag individually, but can only feather collectively.

OPCION D:

PREG20097925 (8533) (Refer to Figure 36.) Given the following conditions, what is the maximum allowable measured gas temperature (MGT) during the power assurance check? C
Engine Torque 57%
Pressure altitude2,500 ft.
Temperature (OAT).....+5°C

OPCION A: 810°C.

OPCION B: 815°C.

OPCION C: 828°C.

OPCION D:

PREG20097926 (8534) (Refer to Figure 36.) Given the following conditions, what is the maximum allowable measured gas temperature (MGT) during the power assurance check? A
Engine Torque 49%
Pressure altitude 5,500 ft.
Temperature (OAT) +25°C

OPCION A: 870°C.

OPCION B: 855°C.

OPCION C: 880°C.

OPCION D:

PREG20097927 (8535) (Refer to Figure 36.) Given the following conditions, what is the maximum allowable measured gas temperature (MGT) during the power assurance check? A
Engine torque 54%
Pressure altitude 500 ft.
Temperature (OAT) +25°C

OPCION A: 840°C.

OPCION B: 830°C.

OPCION C: 820°C.

OPCION D:

PREG20097928 (8536) (Refer to Figure 36.) Given the following conditions, what is the maximum allowable measured gas temperature (MGT) during the power assurance check? B
Engine torque 43%
Pressure altitude 9,000 ft.
Temperature (OAT) -15°C

OPCION A: 782°C.

OPCION B: 768°C.

OPCION C: 750°C.

OPCION D:

PREG20097929 (8537) (Refer to Figure 36.) Given the following conditions, what is the maximum allowable measured gas temperature (MGT) during the power assurance check? B
Engine torque 52%
Pressure altitude 1,500 ft.
Temperature (OAT) +35°C

OPCION A: 880°C.

OPCION B: 865°C.

OPCION C: 872°C.

OPCION D:

PREG20097930 (8538) (Refer to Figure 37.) What is the maximum gross weight for hovering in ground effect at 3,000' pressure altitude and +25°C? A

OPCION A: 17,300 pounds.

OPCION B: 14,700 pounds.

OPCION C: 16,600 pounds.

OPCION D:

PREG20097931 (8539) (Refer to Figure 37.) What is the maximum gross weight for hovering in ground effect at 6,000' pressure altitude and +15°C? B

OPCION A: 17,200 pounds.

OPCION B: 16,600 pounds.

OPCION C: 14,200 pounds.

OPCION D:

PREG20097932 (8540) (Refer to Figure 37.) What is the maximum gross weight for hovering in ground effect at 7,000' pressure altitude and +35°C? A

OPCION A: 13,500 pounds.

OPCION B: 14,700 pounds.

OPCION C: 12,100 pounds.

OPCION D:

PREG20097933 (8541) (Refer to Figure 37.) What is the maximum gross weight for hovering in ground effect at 4,500' pressure altitude and +20°C? C

OPCION A: 14,500 pounds.
OPCION B: 16,500 pounds.
OPCION C: 17,000 pounds.
OPCION D:

PREG20097934 (8542) (Refer to Figure 37) What is the maximum gross weight for hovering in ground effect at 2,500' pressure altitude and 35°C? A

OPCION A: 16,200 pounds.
OPCION B: 16,600 pounds.
OPCION C: 14,600 pounds.
OPCION D:

PREG20097935 (8543) (Refer to Figure 38.) What is the maximum gross weight for hovering out of ground effect at 3,000' pressure altitude and +30°C? B

OPCION A: 17,500 pounds.
OPCION B: 14,300 pounds.
OPCION C: 13,400 pounds.
OPCION D:

PREG20097936 (8544) (Refer to Figure 38.) What is the maximum gross weight for hovering out of ground effect at 6,000' pressure altitude and +15°C? C

OPCION A: 16,800 pounds.
OPCION B: 13,500 pounds.
OPCION C: 14,400 pounds.
OPCION D:

PREG20097938 (8546) (Refer to Figure 38.) What is the maximum gross weight for hovering out of ground effect at 4,500' pressure altitude and 20°C? A

OPCION A: 14,500 pounds.
OPCION B: 14,000 pounds.
OPCION C: 17,000 pounds.
OPCION D:

PREG20097939 (8547) (Refer to Figure 38.) What is the maximum gross weight for hovering out of ground effect at 2,500' pressure altitude and +30°C? C

OPCION A: 17,400 pounds.
OPCION B: 15,000 pounds.
OPCION C: 14,500 pounds.
OPCION D:

PREG20097940 (8548)	(Refer to Figure 39.) What is the takeoff distance over a 50-foot obstacle? Pressure altitude 3,500 ft Temperature (OAT)+20°C Gross weight 15,000 lb.	A
OPCION A:	1,070 feet.	
OPCION B:	1,020 feet.	
OPCION C:	1,100 feet.	
OPCION D:		

PREG20097941 (8549)	(Refer to Figure 39.) What is the takeoff distance over a 50-foot obstacle? Pressure altitude 5,000 ft. Temperature (OAT) -10°C Gross weight 11,000 lb.	C
OPCION A:	1,000 feet.	
OPCION B:	920 feet.	
OPCION C:	870 feet.	
OPCION D:		

PREG20097942 (8550)	(Refer to Figure 39.) What is the takeoff distance over a 50-foot obstacle? Pressure altitude 6,500 ft. Temperature (OAT) 0°C Gross weight 13,500 lb.	B
OPCION A:	1,500 feet.	
OPCION B:	1,050 feet.	
OPCION C:	1,100 feet.	
OPCION D:		

PREG20097943 (8551)	(Refer to Figure 39.) What is the takeoff distance over a 50-foot obstacle? Pressure altitude 9,000 ft. Temperature (OAT) +20°C Gross weight 15,000 lb.	B
OPCION A:	1,300 feet.	
OPCION B:	1,350 feet.	
OPCION C:	1,250 feet.	
OPCION D:		

PREG20097944 (8552)	(Refer to Figure 39.) What is the takeoff distance over a 50-foot obstacle? Pressure altitude -1,000 ft. Temperature (OAT)..... +25°C Gross weight 14,000 lb.	B
OPCION A:	1,000 feet.	
OPCION B:	900 feet.	
OPCION C:	950 feet.	
OPCION D:		

PREG20097945 (8553) (Refer to Figure 40.) What is the climb performance with both engines operating? B
Pressure altitude 9,500 ft
Temperature (OAT) -5°C
Heater ON

OPCION A: 925 ft/min
OPCION B: 600 ft/min
OPCION C: 335 ft/min
OPCION D:

PREG20097946 (8554) (Refer to Figure 40.) What is the climb performance with both engines operating? B
Pressure altitude 7,500 ft
Temperature +5°C
Heater ON

OPCION A: 905 ft/min
OPCION B: 765 ft/min
OPCION C: 1,080 ft/min
OPCION D:

PREG20097947 (8555) (Refer to Figure 40.) What is the climb performance with both engines operating? B
Pressure altitude 6,500 ft.
Temperature (OAT) +25°C
Heater OFF

OPCION A: 285 ft/min
OPCION B: 600 ft/min
OPCION C: 400 ft/min
OPCION D:

PREG20097948 (8556) (Refer to Figure 40.) What is the climb performance with both engines operating? B
Pressure altitude11,500 ft
Temperature (OAT).....-15°C
Heater ON

OPCION A: 645 ft/min
OPCION B: 375 ft/min
OPCION C: 330 ft/min
OPCION D:

PREG20097949 (8557) (Refer to Figure 40.) What is the climb performance with both engines operating? A
Pressure altitude3,500 ft
Temperature (OAT).....-10°C
Heater ON

OPCION A: 985 ft/min

OPCION B: 1,300 ft/min

OPCION C: 1,360 ft/min

OPCION D:

PREG20097950 (8558) (Refer to Figure 41.) What is the single-engine climb or descent performance? A
Pressure altitude7,500 ft
Temperature (OAT).....-0°C

OPCION A: 80 ft/min descent

OPCION B: 10 ft/min climb

OPCION C: 50 ft/min climb

OPCION D:

PREG20097951 (8559) (Refer to Figure 41.) Given the following, what is the single-engine climb or descent performance? C
Pressure altitude 3,000 ft
Temperature (OAT)..... +35°C

OPCION A: 150 ft/min descent

OPCION B: 350 ft/min climb

OPCION C: 100 ft/min descent

OPCION D:

PREG20097952 (8560) (Refer to Figure 41.) Given the following, what is the single-engine climb or descent performance? B
Pressure altitude 4,700 ft
Temperature (OAT) +20°C

OPCION A: 420 ft/min climb

OPCION B: 60 ft/min climb

OPCION C: 60 ft/min descent

OPCION D:

PREG20097953 (8561) (Refer to Figure 41.) Given the following, what is the single-engine climb or descent performance? C
Pressure altitude 9,500 ft
Temperature (OAT) -10°C

OPCION A: 600 ft/min descent

OPCION B: 840 ft/min descent

OPCION C: 280 ft/min descent

OPCION D:

PREG20097954 (8562) (Refer to Figure 41.) Given the following, what is the single-engine climb or descent performance? A

Pressure altitude 1,500 ft
Temperature (OAT) +45°C

OPCION A: 100 ft/min descent

OPCION B: 360 ft/min climb

OPCION C: 200 ft/min descent

OPCION D:

PREG20097955 (8563) (Refer to Figure 42.) Given the following, what is the airspeed (VNE)? A

Gross weight 16,500 lb
Pressure altitude 5,000 ft
Temperature (OAT) -15°C

OPCION A: 128 KIAS

OPCION B: 133 KIAS

OPCION C: 126 KIAS

OPCION D:

PREG20097956 (8564) (Refer to Figure 42.) Given the following, what is the airspeed (VNE)? B

Gross weight 17,500 lb
Pressure altitude 4,000 ft
Temperature (OAT) +10°C

OPCION A: 114 KIAS

OPCION B: 120 KIAS

OPCION C: 130 KIAS

OPCION D:

PREG20097957 (8565) (Refer to Figure 42.) What is the airspeed limit (VNE)? A

Gross weight 15,000 lb
Pressure altitude 6,000 ft
Temperature (OAT) +0°C

OPCION A: 135 KIAS

OPCION B: 127 KIAS

OPCION C: 143 KIAS

OPCION D:

PREG20097958 (8566) (Refer to Figure 42.) What is the airspeed limit (VNE)? A

Gross weight 14,000 lb
Pressure altitude 8,000 ft
Temperature (OAT) -15°C

OPCION A: 121 KIAS

OPCION B: 123 KIAS

OPCION C: 113 KIAS

OPCION D:

PREG20097959 (8567) (Refer to Figure 42.) What is the airspeed limit (VNE)? C
Gross weight 12,500 lb
Pressure altitude 14,000 ft
Temperature (OAT) -20°C

OPCION A: 99 KIAS

OPCION B: 108 KIAS

OPCION C: 103 KIAS

OPCION D:

PREG20097960 (8568) (Refer to Figure 42.) What is the single-engine landing distance over a 50 foot obstacle? C
Gross weight 12,500 lb
Pressure altitude 3,500 ft
Temperature (OAT) +30°C

OPCION A: 850 feet

OPCION B: 900 feet

OPCION C: 1,000 feet

OPCION D:

PREG20097961 (8569) (Refer to Figure 43.) What is the single-engine landing distance over a 50-foot obstacle? B
Gross weight 16,500 lb
Pressure altitude 5,500 ft
Temperature (OAT) -10°C

OPCION A: 1,700 feet

OPCION B: 1,550 feet

OPCION C: 1,600 feet

OPCION D:

PREG20097962 (8570) (Refer to Figure 43.) What is the single-engine landing distance over a 50 foot obstacle? A
Gross weight 15,000 lb
Pressure altitude 8,000 ft
Temperature (OAT) +20°C

OPCION A: 1,900 feet

OPCION B: 1,800 feet

OPCION C: 2,000 feet

OPCION D:

PREG20097963 (8571) (Refer to Figure 43.) What is the single-engine landing distance over a 50 foot obstacle? B
Gross weight 14,000 lb
Pressure altitude 1,000 ft
Temperature (OAT) +10°C

- OPCION A:** 650 feet
OPCION B: 920 feet
OPCION C: 800 feet
OPCION D:
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PREG20097964 (8572) (Refer to Figure 43.) What is the single-engine landing distance over a 50-foot obstacle? C
Gross weight 17,000 lb
Pressure altitude 4,000 ft
Temperature (OAT) +40°C

- OPCION A:** 1,850 feet
OPCION B: 2,200 feet
OPCION C: 2,000 feet
OPCION D:
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PREG20097937 (8545) (Refer to Figure 38.) What is the maximum gross weight for hovering out of ground effect at 7,000' pressure altitude and +35°C? B

- OPCION A:** 14,000 pounds.
OPCION B: 11,600 pounds.
OPCION C: 12,500 pounds.
OPCION D:
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PREG20097965 (9058) Which place in the turbojet engine is subjected to the highest temperature? C

- OPCION A:** Compressor discharge
OPCION B: Fuel spray nozzles
OPCION C: Turbine inlet
OPCION D:
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PREG20097966 (9059) What effect would a change in ambient temperature or air density have on gas-turbine-engine performance? C

- OPCION A:** As air density decreases, thrust increases
OPCION B: As temperature increases, thrust increases
OPCION C: As temperature increases, thrust decreases
OPCION D:
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PREG20097967 (9060) The most important restriction to the operation of turbojet or turboprop engines is B

- OPCION A:** limiting compressor speed
OPCION B: limiting exhaust gas temperature
OPCION C: limiting torque
OPCION D:

PREG20097968 (9061) An outside air pressure decreases, thrust output will C

- OPCION A:** increase due to greater efficiency of jet aircraft in thin air
OPCION B: remain the same since compression of inlet air will compensate for any decrease in air pressure
OPCION C: decrease due to higher density altitude
OPCION D:

PREG20097969 (9062) What effect will an increase in altitude have upon the available equivalent shaft horsepower (ESHP) of a turboprop engine? A

- OPCION A:** Lower air density and engine mass flow will cause a decrease in power
OPCION B: Higher propeller efficiency will cause an increase in usable power (ESHP) and thrust
OPCION C: Power will remain the same but propeller efficiency will decrease
OPCION D:

PREG20097970 (9063) What effect, if any, does high ambient temperature have upon the thrust output of a turbine engine? A

- OPCION A:** Thrust will be reduced due to the decrease in air density
OPCION B: Thrust will remain the same, but turbine temperature will be higher
OPCION C: Thrust will be higher because more heat energy is extracted from the hotter air
OPCION D:

PREG20097971 (9064) What characterizes a transient compressor stall? C

- OPCION A:** Loud, steady roar accompanied by heavy shuddering
OPCION B: Sudden loss of thrust accompanied by a loud whine
OPCION C: Intermittent "bang", as backfires and flow reversals take place
OPCION D:

PREG20097972 (9065) What indicates that a compressor stall has developed and become steady? A

- OPCION A:** Strong vibrations and loud roar
OPCION B: Occasional loud "bang" and flow reversal
OPCION C: Complete loss of power with severe reduction in airspeed
OPCION D:

PREG20097973 (9066) Which type of compressor stall has the greatest potential for severe engine damage? C

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- OPCION A:** Intermittent "backfire" stall
OPCION B: Transient "backfire" stall
OPCION C: Steady, continuous flow reversal stall
OPCION D:
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PREG20097974 (9067) What recovery would be appropriate in the event of compressor stall? A

- OPCION A:** Reduce fuel flow, reduce angle of attack, and increase airspeed
OPCION B: Advance throttle, lower angle of attack, and reduce airspeed
OPCION C: Reduce throttle, reduce airspeed, and increase angle of attack
OPCION D:
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PREG20097975 (9068) Under normal operating conditions, which combination of MAP and RPM produce the most severe wear, fatigue, and damage to high performance reciprocating engines? A

- OPCION A:** High RPM and low MAP
OPCION B: Low RPM and high MAP
OPCION C: High RPM and high MAP
OPCION D:
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PREG20097976 (9069) What effect does high relative humidity have upon the maximum power output of modern aircraft engines? B

- OPCION A:** Neither turbojet nor reciprocating engines are affected
OPCION B: Reciprocating engines will experience a significant loss of BHP
OPCION C: Turbojet engines will experience a significant loss of thrust
OPCION D:
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PREG20097977 (9071) Minimum specific fuel consumption of the turbo-prop engine is normally available in which altitude range? B

- OPCION A:** 10,000 feet to 25,000 feet
OPCION B: 25,000 feet to the tropopause
OPCION C: The tropopause to 45,000 feet
OPCION D:
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PREG20097978 (9129) If severe turbulence is encountered, which procedure is recommended? B

- OPCION A:** Maintain a constant altitude
OPCION B: Maintain a constant attitude
OPCION C: Maintain constant airspeed and altitude
OPCION D:
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PREG20097979 (9321) Which is the correct symbol for design cruising speed? A

OPCION A: Vc
OPCION B: Vs
OPCION C: Vma
OPCION D:
