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**DIRECCION DE PERSONAL AERONAUTICO
DPTO. DE INSTRUCCION
PREGUNTAS Y OPCIONES POR TEMA**

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TEMA: 0622

ATP-RTC - Performance - Chap.4

COD PREG:	PREGUNTA:	RPTA:
PREG20097937	(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.	
PREG20097936	(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.	
PREG20097935	(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.	
PREG20097934	(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.	
PREG20097933	(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.	
PREG20097938	(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.	

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PREG20097961	(Refer to Figure 43.) What is the single-engine landing distance over a 50-foot obstacle? Gross weight 16,500 lb Pressure altitude 5,500 ft Temperature (OAT) -10°C	B
OPCION A:	1,700 feet	
OPCION B:	1,550 feet	
OPCION C:	1,600 feet	
PREG20097956	(Refer to Figure 42.) Given the following, what is the airspeed (VNE)? Gross weight 17,500 lb Pressure altitude 4,000 ft Temperature (OAT) +10°C	B
OPCION A:	114 KIAS	
OPCION B:	120 KIAS	
OPCION C:	130 KIAS	
PREG20097960	(Refer to Figure 42.) What is the single-engine landing distance over a 50 foot obstacle? Gross weight 12,500 lb Pressure altitude 3,500 ft Temperature (OAT) +30°C	C
OPCION A:	850 feet	
OPCION B:	900 feet	
OPCION C:	1,000 feet	
PREG20097959	(Refer to Figure 42.) What is the airspeed limit (VNE)? Gross weight 12,500 lb Pressure altitude 14,000 ft Temperature (OAT) -20°C	C
OPCION A:	99 KIAS	
OPCION B:	108 KIAS	
OPCION C:	103 KIAS	
PREG20097958	(Refer to Figure 42.) What is the airspeed limit (VNE)? Gross weight 14,000 lb Pressure altitude 8,000 ft Temperature (OAT) -15°C	A
OPCION A:	121 KIAS	
OPCION B:	123 KIAS	
OPCION C:	113 KIAS	

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PREG20097957	(Refer to Figure 42.) What is the airspeed limit (VNE)? Gross weight 15,000 lb Pressure altitude 6,000 ft Temperature (OAT) +0°C	A
OPCION A:	135 KIAS	
OPCION B:	127 KIAS	
OPCION C:	143 KIAS	
PREG20097953	(Refer to Figure 41.) Given the following, what is the single-engine climb or descent performance? Pressure altitude 9,500 ft Temperature (OAT) -10°C	C
OPCION A:	600 ft/min descent	
OPCION B:	840 ft/min descent	
OPCION C:	280 ft/min descent	
PREG20097979	Which is the correct symbol for design cruising speed?	A
OPCION A:	V _c	
OPCION B:	V _s	
OPCION C:	V _{ma}	
PREG20097952	(Refer to Figure 41.) Given the following, what is the single-engine climb or descent performance? Pressure altitude 4,700 ft Temperature (OAT) +20°C	B
OPCION A:	420 ft/min climb	
OPCION B:	60 ft/min climb	
OPCION C:	60 ft/min descent	
PREG20097951	(Refer to Figure 41.) Given the following, what is the single-engine climb or descent performance? Pressure altitude 3,000 ft Temperature (OAT) +35°C	C
OPCION A:	150 ft/min descent	
OPCION B:	350 ft/min climb	
OPCION C:	100 ft/min descent	

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PREG20097950	(Refer to Figure 41.) What is the single-engine climb or descent performance? Pressure altitude 7,500 ft Temperature (OAT)..... -0°C	A
OPCION A:	80 ft/min descent	
OPCION B:	10 ft/min climb	
OPCION C:	50 ft/min climb	
PREG20097962	(Refer to Figure 43.) What is the single-engine landing distance over a 50 foot obstacle? Gross weight 15,000 lb Pressure altitude 8,000 ft Temperature (OAT) +20°C	A
OPCION A:	1,900 feet	
OPCION B:	1,800 feet	
OPCION C:	2,000 feet	
PREG20097955	(Refer to Figure 42.) Given the following, what is the airspeed (VNE)? Gross weight 16,500 lb Pressure altitude 5,000 ft Temperature (OAT) -15°C	A
OPCION A:	128 KIAS	
OPCION B:	133 KIAS	
OPCION C:	126 KIAS	
PREG20097963	(Refer to Figure 43.) What is the single-engine landing distance over a 50 foot obstacle? Gross weight 14,000 lb Pressure altitude 1,000 ft Temperature (OAT) +10°C	B
OPCION A:	650 feet	
OPCION B:	920 feet	
OPCION C:	800 feet	
PREG20097973	Which type of compressor stall has the greatest potential for severe engine damage? OPCION A: Intermittent "backfire" stall OPCION B: Transient "backfire" stall OPCION C: Steady, continuous flow reversal stall	C

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PREG20097965	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	
PREG20097949	(Refer to Figure 40.) What is the climb performance with both engines operating? Pressure altitude 3,500 ft Temperature (OAT)..... -10°C Heater ON	A
OPCION A:	985 ft/min	
OPCION B:	1,300 ft/min	
OPCION C:	1,360 ft/min	
PREG20097978	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	
PREG20097977	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	
PREG20097976	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	
PREG20097975	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	
PREG20097974	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	

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OPCION C: Reduce throttle, reduce airspeed, and increase angle of attack

PREG20097972 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

PREG20097971 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

PREG20097970 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

PREG20097969 What effect will an increase in altitude have upon the available equivalent shaft horsepower (ESH) 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 (ESH) and thrust

OPCION C: Power will remain the same but propeller efficiency will decrease

PREG20097968 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

PREG20097967 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

PREG20097966 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

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OPCION C: As temperature increases, thrust decreases

PREG20097964 (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

PREG20097948 (Refer to Figure 40.) What is the climb performance with both engines operating? B
Pressure altitude 11,500 ft
Temperature (OAT).....-15°C
Heater ON

OPCION A: 645 ft/min

OPCION B: 375 ft/min

OPCION C: 330 ft/min

PREG20097954 (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

PREG20097946 (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

PREG20097928 (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.

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-
- OPCION B:** 768°C.
OPCION C: 750°C.
-

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

- OPCION A:** 870°C.
OPCION B: 855°C.
OPCION C: 880°C.
-

- PREG20097925 (Refer to Figure 36.) Given the following conditions, what is the maximum allowable measured gas temperature (MGT) during the power assurance check?
Engine Torque 57%
Pressure altitude 2,500 ft.
Temperature (OAT).....+5°C
- C

- OPCION A:** 810°C.
OPCION B: 815°C.
OPCION C: 828°C.
-

- PREG20097924 The main rotor blades of a semi-rigid system can flap and feather as a unit.
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.
- A

- PREG20097923 The main rotor blades of a fully articulated rotor system can flap, drag, and feather collectively.
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.
- B

- PREG20097929 (Refer to Figure 36.) Given the following conditions, what is the maximum allowable measured gas temperature (MGT) during the power assurance check?
Engine torque 52%
Pressure altitude 1,500 ft.
Temperature (OAT) +35°C
- OPCION A:** 880°C.
OPCION B: 865°C.
OPCION C: 872°C.
-

- PREG20097922 What is the primary purpose of the free-wheeling unit?
OPCION A: To provide speed reduction between the engine, main rotor system, and the tail rotor system.
- B

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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.

PREG20097920 What type frequency vibration is associated with the main rotor system? A

OPCION A: Low frequency.

OPCION B: Medium frequency.

OPCION C: High frequency.

PREG20097919 What type frequency vibration is associated with a defective transmission? C

OPCION A: Low frequency.

OPCION B: Medium frequency.

OPCION C: High frequency.

PREG20097918 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.

PREG20097917 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

PREG20097947 (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

PREG20097921 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.

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PREG20097930	(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.	
PREG20097927	(Refer to Figure 36.) Given the following conditions, what is the maximum allowable measured gas temperature (MGT) during the power assurance check? Engine torque 54% Pressure altitude 500 ft. Temperature (OAT) +25°C	A
OPCION A:	840°C.	
OPCION B:	830°C.	
OPCION C:	820°C.	
PREG20097932	(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.	
PREG20097945	(Refer to Figure 40.) What is the climb performance with both engines operating? Pressure altitude 9,500 ft Temperature (OAT) -5°C Heater ON	B
OPCION A:	925 ft/min	
OPCION B:	600 ft/min	
OPCION C:	335 ft/min	
PREG20097944	(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.	
PREG20097943	(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.	

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OPCION C: 1,250 feet.

PREG20097931 (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.
-

PREG20097941 (Refer to Figure 39.) What is the takeoff distance over a 50-foot obstacle? C

Pressure altitude 5,000 ft.
Temperature (OAT) -10°C
Gross weight 11,000 lb.

- OPCION A:** 1,000 feet.
OPCION B: 920 feet.
OPCION C: 870 feet.
-

PREG20097940 (Refer to Figure 39.) What is the takeoff distance over a 50-foot obstacle? A

Pressure altitude 3,500 ft
Temperature (OAT) +20°C
Gross weight 15,000 lb.

- OPCION A:** 1,070 feet.
OPCION B: 1,020 feet.
OPCION C: 1,100 feet.
-

PREG20097939 (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.
-

PREG20097942 (Refer to Figure 39.) What is the takeoff distance over a 50-foot obstacle? B

Pressure altitude 6,500 ft.
Temperature (OAT) 0°C
Gross weight 13,500 lb.

- OPCION A:** 1,500 feet.
OPCION B: 1,050 feet.
OPCION C: 1,100 feet.
-

