

# Free AME Practice Questions — Sky Licence

## Question 1

### CARs — Regulations

According to CAR 571.02, which of the following circumstances requires a maintenance release (MR) to be completed before the aircraft is returned to service?

- A. Replacement of a landing gear tire with a serviceable tire of the same part number
- B. Performance of a scheduled 50-hour inspection as specified in the approved maintenance schedule
- C. Addition of engine oil between scheduled changes when the quantity is within limits
- D. Installation of an Auxiliary Power Unit (APU) that has already been certified as serviceable by the manufacturer

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### Correct: B

Under CAR 571.02, a maintenance release is required after any maintenance that is not a minor scheduled servicing task. A scheduled 50-hour inspection is a maintenance task performed in accordance with an approved maintenance schedule (CAR 571.06) and requires an MR certifying that the work was completed in accordance with the applicable standards. Options A, C, and D are considered elementary work or minor servicing that does not require an MR per CAR 571.02(2).

Ref: CAR 571.02, CAR 571.06

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## Question 2

### CARs — Regulations

Under CAR Part II, Subpart 2 (Aircraft Registration), an aircraft that is operated in Canada must be registered in the name of the owner. Which of the following is a condition under which a certificate of registration ceases to be valid?

- A. The aircraft undergoes a major repair to a primary structure
- B. The aircraft is operated outside of Canada for more than 30 consecutive days
- C. The registration certificate expires 12 months after the date of issue
- D. The owner ceases to be the owner or the legal title to the aircraft is transferred

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### Correct: D

Per CAR 202.32, a certificate of registration ceases to be valid when the owner ceases to be the owner (i.e., the aircraft is sold or legal title is transferred). A certificate of registration does not expire after 12 months — it remains valid until the owner changes, the aircraft is deregistered, or the owner requests cancellation.

Ref: CAR 202.32, CAR Part II Subpart 2

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## Question 3

### Standards 571 — Maintenance Standards

Under Transport Canada Standard 571, which of the following is true regarding the approval of maintenance schedules for Canadian-registered aircraft?

- A. All maintenance schedules must be approved by the Minister before they can be used
- B. Maintenance schedules may be developed by the AMO and do not require approval if based on manufacturer recommendations

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- C. Only maintenance schedules published by Transport Canada are acceptable for use in an approved maintenance organization
- D. Maintenance schedules must be reviewed and re-approved every 12 months

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**Correct: A**

Standard 571.03 requires that every aircraft be maintained in accordance with a maintenance schedule that has been approved by the Minister (Transport Canada). While manufacturers provide recommendations, the formal maintenance schedule itself requires ministerial approval to be used in Canadian aircraft operations.

Ref: Standard 571.03

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### Question 4

Standards 571 — Technical Records

According to Standard 571.10, how long must technical records for a Canadian-registered aircraft be retained after the work is completed?

- A. 1 year after the work is completed
- B. Until the next scheduled maintenance inspection
- C. 2 years after the work is completed
- D. For the life of the component or until the aircraft is permanently withdrawn from service

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**Correct: D**

Standard 571.10 requires that technical records be retained for the life of the component, or until the aircraft or component is permanently withdrawn from service. Records include maintenance releases, work orders, and modification records. This ensures full traceability of every maintenance action throughout the aircraft's operational life.

Ref: Standard 571.10

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### Question 5

Airframe — Landing Gear

During a retraction test of a main landing gear on a transport category aircraft, the gear fails to lock in the down position. What is the MOST likely cause if the hydraulic system pressure is within limits?

- A. A failed downlock microswitch
- B. Insufficient hydraulic fluid return flow
- C. A damaged or misadjusted downlock spring or actuator mechanism
- D. Excessively high ambient temperature causing viscosity loss

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**Correct: C**

When hydraulic pressure is normal but the gear does not lock down, the mechanical downlock mechanism is the primary suspect. The downlock spring or mechanical actuator physically holds the gear in the extended position. A failed microswitch affects the indication (lights/warnings), not the actual locking function.

Ref: ATA 32 — Landing Gear, AMM Chapter 32

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## Question 6

Airframe — Structures

According to AC 43.13-1B, what is the minimum edge distance for a single row of flush rivets in an aluminium alloy sheet repair?

- A. 2 times the rivet diameter
- B. 2.5 times the rivet diameter
- C. 3 times the rivet diameter
- D. 4 times the rivet diameter

**Correct: B**

AC 43.13-1B Chapter 4 specifies a minimum edge distance (distance from the centre of the rivet hole to the edge of the sheet) of 2.5 times the rivet diameter for a single row of flush rivets on aluminium alloy structures. For a double row, the minimum edge distance increases to 3 times the rivet diameter.

Ref: AC 43.13-1B, Chapter 4, Table 4-1

## Question 7

Powerplant — Turbine Engines

During a hot section inspection on a Pratt & Whitney PT6A turboprop engine, you find several turbine blades with heavy sulphidation corrosion. What is the MOST appropriate action?

- A. Blend the affected areas with a fine abrasive pad and return the blades to service
- B. Replace only the most heavily corroded blade and rebalance the turbine assembly
- C. Replace all affected blades in the stage as a set, or follow the engine manual instructions
- D. Apply a protective coating to the corroded area and continue operation at reduced power

**Correct: C**

Turbine blades with sulphidation corrosion must be handled in accordance with the engine manufacturer's manual. Depending on the extent of corrosion, the manual may require replacement of all blades in a stage as a set to maintain dynamic balance and aerodynamic consistency. Blending is generally not permitted on turbine airfoils with structural corrosion damage.

Ref: ATA 72 — Engine (Turbine), P&WC PT6A Maintenance Manual

## Question 8

Powerplant — Propellers

When troubleshooting a constant-speed propeller that does not feather during a ground feathering check, which of the following is the MOST likely cause if the propeller will unfeather normally?

- A. Low engine oil pressure
- B. A seized propeller governor feathering valve solenoid
- C. A restricted propeller dome counterweight linkage
- D. Excessive governor boost pressure preventing the propeller from moving to feather

**Correct: A**

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Constant-speed propellers use engine oil pressure to move toward fine pitch (low pitch/high RPM) and centrifugal counterweights or springs to move toward coarse pitch/feather. If the propeller will not feather but unfeathers normally, it suggests insufficient oil pressure to overcome the feathering spring force. The governor feathering valve solenoid is electrical — if seized, it would affect both feathering and unfeathering.

Ref: ATA 61 — Propellers, Hartzell/McCauley Maintenance Manuals

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### Question 9

#### Electronics — Electrical Power

A technician is troubleshooting an intermittent failure in a VHF communication transceiver. The pilot reports that the radio works intermittently and sometimes fails completely during flight. The antenna, coax cable, and connectors have all been tested and are within limits. What should the technician check NEXT?

- A. Replace the transceiver with a known-good unit
  - B. Check the transceiver's power supply voltage and current draw during operation
  - C. Perform a bonding and grounding check of the radio rack and airframe ground path
  - D. Inspect the aircraft's ELT for interference on the VHF band
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#### Correct: C

When the antenna system checks out but the radio is intermittent, intermittent bonding or grounding of the radio rack is a common cause. A poor ground path can cause erratic behaviour as vibration and temperature changes affect the connection. Checking the radio rack's bond to the airframe ground (typically less than 2.5 milliohms per MIL-STD-464) should be done before swapping components.

Ref: ATA 23 — Communications, AC 43.13-1B Chapter 11

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### Question 10

#### Mixed Scenario

A Cessna 172R is brought in for its annual inspection. The engine is a Lycoming IO-360. During compression check, cylinder #3 shows 30/80 psi while the rest are 72/80 or higher. The technician performs a differential compression test and confirms leakage through the exhaust valve. What is the correct course of action?

- A. Replace only cylinder #3 and return the aircraft to service
  - B. Remove the cylinder, inspect the valve and seat, lap or replace as necessary, and reassemble per the engine manufacturer's instructions
  - C. Rotate the crankshaft 360° and re-test; if the reading improves, it is acceptable to return to service
  - D. Replace all four cylinders to maintain balanced compression across the engine
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#### Correct: B

When differential compression shows leakage confirmed through the exhaust valve, the correct procedure is to remove the cylinder for inspection. The valve and seat must be inspected for burns, pitting, or carbon buildup. Depending on the condition, lapping the valve or replacing the valve/seat may be required. Reassembly must follow the engine manufacturer's instructions (torque values, ring gap, etc.). Option A is incorrect because replacing only one cylinder without inspecting the root cause is incomplete maintenance.

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Ref: Lycoming IO-360 Maintenance Manual, AC 43.13-1B Chapter 6

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