Dassault Falcon 2000LXS Oral Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. Which Anti Ice components operate electrically?

- **A. Engine Air Lips and Wheel Brake Heating System**
- **B. Pitot and Static Pressure Probes**
- **C. Wing Inboard Leading Edge and Outboard Slats**
- **D. Cockpit Fans and Air Conditioning Systems**

2. What type of air is utilized in the Air Conditioning system?

- **A. Only hot bleed air**
- **B. Only conditioned air from ECU**
- **C. Mixture of hot bleed air, conditioned air, and recycled cabin air**
- **D. Only recycled cabin air**

3. What is the purpose of the Fault Guide?

- **A. To outline maintenance schedules**
- **B. To assist operators in making dispatch decisions**
- **C. To provide training for pilot certification**
- **D. To list components and their specifications**

4. What is the height of the tail on a Dassault Falcon 2000LXS?

- **A. 22 ft 3 inches**
- **B. 23 ft 5.3 inches**
- **C. 24 ft 6 inches**
- **D. 21 ft 4 inches**

5. What are the automatic mode laws of operation?

- **A. Normal Law and Emergency Law**
- **B. Normal Law and Flight Level Law**
- **C. Normal Law and Manual Law**
- **D. Altitude Law and Flight Level Law**

6. At what altitude is the autopilot minimum engagement for standard ILS approaches with an operational radio altimeter?

A. 150 ft

B. 50 ft

C. 200 ft

D. 100 ft

7. What does CODDE 3 (QRH 2) focus on?

A. Abbreviated normal procedures

B. Expanded emergency procedures

C. Abbreviated abnormal and emergency procedures

D. General maintenance guidelines

8. Under what conditions will air brakes automatically extend during a rejected takeoff and landing?

A. When the AUTO EXT pushbutton is set to manual

B. When the thrust levers are at full power

C. When LH and RH landing gears are depressed and thrust levers are retarded

D. When speed exceeds 200 knots

9. What is the wingspan of the Falcon 2000LXS?

A. 68.5 feet (20.9 meters)

B. 70.1 feet (21.4 meters)

C. 72.1 feet (22.0 meters)

D. 75.5 feet (22.9 meters)

10. What is a key feature of the Falcon 2000LXS that facilitates ease of flight training?

A. Extensive onboard manuals

B. Highly advanced autopilot systems

C. Simple cockpit layout with fewer instruments

D. Retractable landing gear

Answers

1. B
2. C
3. B
4. B
5. B
6. B
7. C
8. C
9. B
10. B

Explanations

1. Which Anti Ice components operate electrically?

A. Engine Air Lips and Wheel Brake Heating System

B. Pitot and Static Pressure Probes

C. Wing Inboard Leading Edge and Outboard Slats

D. Cockpit Fans and Air Conditioning Systems

The correct answer focuses on the components that utilize electrical systems for anti-icing purposes. In the case of the Pitot and Static Pressure Probes, these components are equipped with electrical heating elements designed to prevent icing. This is critical for ensuring accurate airspeed and altitude readings, which are vital for safe aircraft operation, particularly in icy conditions. While other options contain components that serve various functions, they do not primarily operate electrically for anti-ice purposes. For instance, the Engine Air Lips and Wheel Brake Heating System involves different heating mechanisms and may not fit the definition of anti-ice components predominantly operating electrically. The Wing Inboard Leading Edge and Outboard Slats typically use pneumatic or bleed air systems for ice protection rather than electric components. Lastly, while cockpit fans and air conditioning systems involve electrical operation, they do not directly relate to anti-icing functions. Understanding these distinctions helps clarify why the Pitot and Static Pressure Probes are correctly identified as the electrically operated anti-ice components.

2. What type of air is utilized in the Air Conditioning system?

A. Only hot bleed air

B. Only conditioned air from ECU

C. Mixture of hot bleed air, conditioned air, and recycled cabin air

D. Only recycled cabin air

The air conditioning system on the Dassault Falcon 2000LXS utilizes a mixture of hot bleed air, conditioned air from the environmental control unit (ECU), and recycled cabin air. This approach allows the system to effectively regulate the temperature and maintain comfort within the cabin. Using hot bleed air from the engines provides an initial source of heat, essential for the system to function efficiently, especially during cold weather. The ECU then processes this hot bleed air by cooling it and adding humidity control to create a comfortable environment. Additionally, recycled cabin air plays a vital role in enhancing efficiency; it minimizes the need for continuously introducing fresh outside air, which could strain the system and lead to greater energy consumption. By combining these three sources of air, the system is optimized for both performance and energy efficiency, ensuring a pleasant atmosphere for passengers and crew.

3. What is the purpose of the Fault Guide?

A. To outline maintenance schedules

B. To assist operators in making dispatch decisions

C. To provide training for pilot certification

D. To list components and their specifications

The purpose of the Fault Guide is primarily to assist operators in making dispatch decisions. This tool is designed to provide crucial information when addressing equipment malfunctions or system failures, helping operators to ascertain the impact of specific faults on the aircraft's overall airworthiness and operational capabilities. By having access to a Fault Guide, operators can quickly assess whether a resolved issue permits continued flight or if there are operational restrictions that need to be considered. The Fault Guide includes references to maintenance procedures, troubleshooting tips, and guidance on potential limitations that a fault may impose. This enables flight crews and maintenance personnel to make informed decisions about whether the aircraft should be grounded for repairs or deemed safe for continued operation, thus ensuring safety in flying operations. Other options like maintenance schedules or component specifications serve different purposes in operational contexts but do not directly aid in making real-time, operational dispatch decisions in the presence of faults. Similarly, pilot certification training is outside the scope of what the Fault Guide is designed to address.

4. What is the height of the tail on a Dassault Falcon 2000LXS?

A. 22 ft 3 inches

B. 23 ft 5.3 inches

C. 24 ft 6 inches

D. 21 ft 4 inches

The height of the tail on a Dassault Falcon 2000LXS is accurately specified as 23 feet 5.3 inches. This measurement is significant as it impacts various operational aspects, including navigation, ground handling, and hangaring considerations. Understanding the aircraft's dimensions, including tail height, is crucial for pilots and ground crews when planning for takeoff, landing, and maneuvering in tight spaces. Other options present heights that deviate from the actual specifications of the aircraft. Such discrepancies could lead to misunderstandings regarding the aircraft's requirements and capabilities, impacting operational efficiency and safety.

5. What are the automatic mode laws of operation?

A. Normal Law and Emergency Law

B. Normal Law and Flight Level Law

C. Normal Law and Manual Law

D. Altitude Law and Flight Level Law

The correct answer is that the automatic mode laws of operation in the Dassault Falcon 2000LXS include Normal Law and Flight Level Law. Normal Law is the primary mode of operation during flight, providing the aircraft with various protections and automated responses to pilot inputs. This law is designed to ensure stability and control, enhancing both safety and efficiency during operation. Flight Level Law, while sometimes seen in conjunction with Normal Law, specifically handles the performance and control aspects of an aircraft operating at a defined cruise altitude. It integrates altitude control features that optimize fuel consumption and performance parameters. The other options do not accurately reflect the operational modes of the aircraft. Emergency Law pertains to specific conditions where the aircraft defaults to a minimal control state, and Manual Law would indicate a scenario where the aircraft is operated without any automated protection, which is typically not considered an automatic operation mode. Altitude Law has similarities to Flight Level Law but is not a recognized term within the operational laws of the Falcon 2000LXS. Thus, the correct pairing of Normal Law with Flight Level Law best describes the automatic operation modes utilized in this aircraft.

6. At what altitude is the autopilot minimum engagement for standard ILS approaches with an operational radio altimeter?

A. 150 ft

B. 50 ft

C. 200 ft

D. 100 ft

For standard ILS (Instrument Landing System) approaches with an operational radio altimeter, the minimum altitude for autopilot engagement is typically 50 feet. This is significant because it allows the autopilot system to automatically manage the descent and landing phase of flight with a high degree of precision. 50 feet is a commonly accepted minimum engagement altitude because it enables the autopilot to effectively assist the pilot just above the decision height of the approach. This height is crucial for ensuring safe operations during low visibility or adverse conditions typically associated with ILS approaches. Since the autopilot can maintain control of the aircraft at this critical phase, it ensures a smoother transition from autopilot control to manual flying, if necessary, just before touchdown. The options indicating 150, 200, and 100 feet do not align with standard practices, as these altitudes would generally not allow the autopilot to efficiently manage the final stages of the approach and landing, which are critical for maintaining safety and accuracy in these operations.

7. What does CODDE 3 (QRH 2) focus on?

A. Abbreviated normal procedures

B. Expanded emergency procedures

C. Abbreviated abnormal and emergency procedures

D. General maintenance guidelines

CODDE 3, as referenced in the Quick Reference Handbook (QRH), specifically targets abbreviated abnormal and emergency procedures. This is important for pilots as it allows them to quickly address unusual situations or system failures encountered during flight. The procedures included under CODDE 3 are streamlined and aimed at providing essential actions that can be taken promptly to ensure safety and to minimize any risk associated with abnormal operations or emergencies. The focus on abbreviated procedures is crucial because, during high-stress situations like an emergency, the ability to quickly reference and implement key actions can be the difference between a smooth resolution and a potential crisis. Having these actions condensed makes it easier for pilots to react quickly without the added burden of sifting through extensive documentation. In contrast, other choices such as abbreviated normal procedures or expanded emergency procedures do not accurately reflect the specific nature of CODDE 3. Normal procedures relate to routine operational tasks rather than abnormal or emergency situations, and expanded emergency procedures would imply a more detailed approach than what is provided in CODDE 3. General maintenance guidelines are unrelated to flight operations and are focused on aircraft upkeep rather than immediate in-flight responses.

8. Under what conditions will air brakes automatically extend during a rejected takeoff and landing?

A. When the AUTO EXT pushbutton is set to manual

B. When the thrust levers are at full power

C. When LH and RH landing gears are depressed and thrust levers are retarded

D. When speed exceeds 200 knots

Air brakes on the Dassault Falcon 2000LXS are designed to enhance the deceleration of the aircraft during a rejected takeoff or landing scenario. The correct condition for their automatic extension is when both the left-hand (LH) and right-hand (RH) landing gears are depressed, coupled with a reduction in thrust by retarding the thrust levers. This design is based on the aircraft's operational needs during landing and rejected takeoff scenarios, where quick deceleration is crucial for safety. The activation of the air brakes upon landing gear contact ensures that the aircraft begins to slow down effectively and can help manage the aircraft's speed in critical phases. Retarding the thrust levers signals that the pilots are reducing engine power, further supporting the need for immediate deceleration. In contrast, if the AUTO EXT pushbutton is in manual, the air brakes would not automatically deploy, thus negating this condition. When thrust levers are at full power, the plane is typically in the acceleration phase rather than requiring air brakes. Lastly, speed exceeding 200 knots is an irrelevant condition here, as the air brakes need to activate based on landing gear and throttle position rather than an absolute speed.

9. What is the wingspan of the Falcon 2000LXS?

A. 68.5 feet (20.9 meters)

B. 70.1 feet (21.4 meters)

C. 72.1 feet (22.0 meters)

D. 75.5 feet (22.9 meters)

The wingspan of the Falcon 2000LXS is accurately stated as 70.1 feet (21.4 meters). This measurement is significant because it contributes to the aircraft's performance characteristics, including its lift and fuel efficiency. A larger wingspan generally allows for better aerodynamic efficiency, which can lead to improved range and overall flight performance. This specific wingspan allows the Falcon 2000LXS to access a variety of airports, including those with shorter runways, while also maintaining excellent stability and handling during flight. Understanding the wingspan is crucial for pilots and operators as it informs various operational aspects, such as approach speeds and turning radii.

10. What is a key feature of the Falcon 2000LXS that facilitates ease of flight training?

A. Extensive onboard manuals

B. Highly advanced autopilot systems

C. Simple cockpit layout with fewer instruments

D. Retractable landing gear

A key feature of the Falcon 2000LXS that facilitates ease of flight training is its highly advanced autopilot systems. These systems significantly enhance flight safety and reduce pilot workload during training scenarios. With advanced capabilities such as automatic altitude hold, course tracking, and stabilization, pilots can focus more on the training objectives rather than manual flying techniques. The autopilot also allows for smoother transitions between different phases of flight, which is particularly valuable in training environments where students can learn about managing various flight conditions without being overwhelmed by the need to control every aspect of the aircraft manually. While extensive onboard manuals do provide necessary information, they don't directly aid in the operational aspects during training flights. A simple cockpit layout can be beneficial, but the Falcon 2000LXS features a more sophisticated cockpit that supports experienced pilots and requires familiarity. Finally, the retractable landing gear, while an important component of aircraft design, does not directly impact flight training as significantly as an advanced autopilot system does.