1. Pilots use “ARROW” to remind them of the required documents that must be in an aircraft during flight. What does each letter stand for? (10.A.3)

A Airworthiness Certificate

R Registration

R Radio Station License

O Operating Limitations (AFM/POH)

W Weight and Balance

1. Which of the following is a category of aircraft as it would appear on a Standard Airworthiness Certificate? Select all that apply. (10.A.2)
2. Single-engine
3. Helicopter
4. Jet
5. Transport
6. Utility
7. A section in a POH/AFM that describes information about flight controls would most likely be titled \_\_\_\_\_\_\_\_\_\_. (10.A.1)
8. Airplane Systems Descriptions
9. Performance
10. Emergency Procedures
11. Weight & Balance
12. Whenever any information on an airworthiness certificate changes, the owner must \_\_\_\_\_\_\_\_\_\_ to avoid a violation. (10.A.2)
13. have the aircraft inspected by the FAA as soon as possible
14. re-register the airplane within 30 days
15. obtain a revised certificate as soon as possible
16. notify the FAA about the changes on their website
17. A Special Airworthiness Certificate would be issued for which of the following classifications? Select all that apply. (10.A.2)
18. Transport
19. Experimental
20. Commuter
21. All of the above

1. Regular aircraft inspections are required by the FAA. The overall goal is \_\_\_\_\_\_\_\_\_\_. (10.A.3)
2. service
3. safety
4. quality
5. efficiency
6. An aircraft manufacturer is obligated to supply the consumer or operator with which of the following? Select all that apply. (10.A.3)
7. Maintenance manuals
8. Replacement parts
9. Service bulletins
10. Lifetime warranty
11. Component recalls
12. The title page of a POH/AFM must contain which of the following information? Select all that apply. (10.A.1)
13. Notice that the POH must be carried in the aircraft
14. Aircraft serial number
15. Registration number
16. Transponder code
17. Airport at which the aircraft is based
18. A VOR is a ground-based radio transmitter used for aerial navigation. The VOR receiver must be \_\_\_\_\_\_\_\_\_\_. (10.A.3)
19. replaced every 30 days
20. checked for accuracy every 30 days
21. re-charged before each flight
22. inspected by the FAA every 30 days
23. A 100-hour inspection is required for aircraft used for \_\_\_\_\_\_\_\_\_\_. (10.A.3)
24. cargo
25. recreation
26. hire or instruction
27. search and rescue
28. The transponder communicates with air traffic control. Which of the following is true about transponder inspection requirements? (10.A.3)
29. The transponder should only be tested by the aircraft’s owner.
30. The transponder must be tested annually by the FAA.
31. The transponder must be tested every 24 months.
32. Transponders do not require inspection.
33. Which of the following is true about an Airplane Flight Manual? Select all that apply. (10.A.1)
34. It must contain important information about local airports.
35. It must be approved by the FAA.
36. It contains the information and instructions needed to safely operate the aircraft.
37. It must be kept aboard the aircraft.
38. It needs to be renewed every 24 months.

1. What happens if an Airworthiness Directive (AD) hasn’t been complied with? (10.B.1)
2. The owner has 30 days to comply with the AD.
3. The aircraft becomes technically unairworthy.
4. Nothing; ADs are warnings that aren’t legally enforceable.
5. The owner’s license will be suspended until the AD is complied with.

1. There are two main parts to a preflight inspection. One part is to verify the airworthiness status. What is the other main part to a preflight inspection? (10.A.3)
2. Conduct a visual inspection of the aircraft.
3. Review the flight plan.
4. Verify proof of ownership.
5. Verify that the pilot’s license is current.
6. For a pilot, preflight preparations include knowing which of the following? (10.C.1)
7. Runway lengths and slopes at all airports of intended use
8. Aircraft gross weight and fuel requirements
9. Takeoff and landing distances required
10. All of the above
11. **A pilot who performs preventive maintenance must make an entry in the aircraft logbook. Which of the following does NOT need to be included in a logbook entry? (10.B.1)**
12. The type of work performed and a brief description of its extent
13. The number of hours that it took to complete the work
14. The pilot’s name, signature, the certificate number, and type of license
15. The date of completion of the work performed
16. There are typically a number of things that can lead to an accident. The aviation industry uses the term \_\_\_\_\_\_\_\_\_\_ to describe this concept. (10.C.1)
17. contributing factors
18. accident list
19. error chain
20. multiple causes
21. To carry passengers at night, a pilot must have completed three takeoffs and three landings―to a full stop―during the period beginning one hour after sunset and ending one hour before sunrise, within the preceding 90 days. This is \_\_\_\_\_\_\_\_\_\_. (10.C.1)
22. a certification requirement
23. a currency requirement
24. a performance requirement
25. a preventive maintenance requirement
26. Which of following are preventive maintenance items that a pilot can accomplish? Select all that apply. (10.B.1)

1. Replenish hydraulic fluid
2. Replace faulty airfoils
3. Replace position and landing lights
4. Replace damaged fuel lines
5. Remove, install, and repair tires

1. Aeronautical decision-making (ADM) is the process by which \_\_\_\_\_\_\_\_\_\_. (10.C.1)
2. the NTSB determines the possible causes of an airplane accident
3. the FAA issues licenses, permits, and certifications
4. pilots use their best judgment to ensure the best outcome for a flight
5. air traffic control determines optimal arrival and departure times
6. List five things that would be checked during a preflight inspection. (10.A.3)

Sample response:

A preflight cabin inspection would include:

ensuring that seatbelts are functional

checking for windshield damage

ensuring seat rails and latches are functional

testing lights

checking fuel quantity

extending flaps to ensure they are functional

1. Explain why the FCC gives the PIC so much authority in an emergency. (10.C.1)

Sample response:

The pilot in command is the only person who has the information and skills to determine how to quickly respond to an emergency. With the pilot’s and passenger’s lives at risk, as well as unsuspecting people on the ground, the PIC is likely to make immediate and careful decisions that result in the least amount of harm to everyone involved.

1. Describe what a section on aircraft limitations in a POH/AFM as required by the FAA would contain. (10.A.1)

Sample response:

A limitations section would include information about maximum allowable measures, such as engine limitations, allowable weights, airspeed limitations, and authorized maneuvers.

1. What is an Airworthiness Directive (AD) and what does the owner/operator need to do if an AD is issued for their aircraft? (10.B.1)

Sample response:

An Airworthiness Directive is issued by the FAA to address a safety problem related to an aircraft or its equipment. They are often issued as a result of accidents. The owner/operator must comply with the requirements of the AD and a record must be kept in the maintenance logbooks. Complying with an AD may require an inspection, repair, replacement, modification, or other action to correct the problem.

1. Explain how maintenance considerations might differ between an aircraft that operates in dry climates and one that operates in humid climates. (10.A.3)

Sample response:

Humidity creates moisture and condensation in airtight components of an aircraft. Maintenance in humid climates would involve a closer inspection of fuel lines and electrical components. Dry climates can cause rubber and plastics to dry out prematurely. Maintenance in dry climates would involve a closer inspection of parts like rubber hoses and tires.