

PRACTICE EXAM 9: FAA IA

KNOWLEDGE TEST SIMULATION

Practice Exam 9 — Questions 1 through 50

1. An IA is reviewing airworthiness directive compliance for an aircraft. An AD issued on January 5, 2024, requires compliance within 12 calendar months of the effective date. The latest compliance date is:

- A. January 5, 2025
- B. January 31, 2025
- C. December 31, 2024
- D. December 5, 2024

2. Under 14 CFR § 43.7(g), the approval for return to service after an annual inspection must be granted by:

- A. The holder of an Inspection Authorization
- B. Any certificated A&P mechanic
- C. A Designated Engineering Representative
- D. The local FAA Flight Standards District Office

3. A mechanic is inspecting a flight control cable system and finds the cable tension measures 45 pounds while the manufacturer's specification is 40 ± 5 pounds at standard temperature. The condition is:

- A. Outside the allowable tension range
- B. Below the minimum acceptable tension

- C. Above the maximum tolerance
- D. Within the specified tension tolerance

4. Under § 91.403(a), the primary responsibility for maintaining the aircraft in an airworthy condition rests with:

- A. The Inspection Authorization holder who performs inspections
- B. The certificated A&P mechanic performing repairs
- C. The owner or operator of the aircraft
- D. The aircraft manufacturer's continuing product support

5. The FAA Computer Testing Supplement FAA-CT-8080-8D provides which resource during the IAR Knowledge Test?

- A. Sample regulations, ADs, and TCDS reference materials
- B. The specific aircraft's maintenance records for reference
- C. A directory of all certificated Inspection Authorization holders
- D. A calculator for weight and balance computations

6. An IA is inspecting an aircraft's records and finds that a Form 337 was completed but not forwarded to the FAA Aircraft Registry. The submission window has passed. The correct action is:

- A. Accept the Form 337 as complete within the aircraft records
- B. Create a new Form 337 with a current date
- C. File the Form 337 with the local FSDO instead
- D. Submit the Form 337 now to resolve the regulatory gap

7. Under Part 43 Appendix A paragraph (a), installation of an accessory not approved for the engine is classified as:

- A. A minor alteration within mechanic authority
- B. A major alteration requiring approved data
- C. Preventive maintenance under § 43.3(g)
- D. Routine maintenance not requiring documentation

8. A Supplemental Type Certificate's Approved Model List specifies applicable aircraft by:

- A. The owner's operational preferences and location
- B. The date of manufacture of the specific aircraft
- C. Make, model, and often serial number range
- D. The aircraft's insurance coverage and policy terms

9. The IA's annual inspection records review should verify currency of required periodic inspections. These include all of the following except:

- A. The aircraft owner's pilot recurrent training records
- B. The altimeter system inspection under § 91.411
- C. The ATC transponder inspection under § 91.413
- D. The ELT inspection under § 91.207(d)

10. Under § 43.11(a), the inspection certification statement for an airworthy annual inspection must state that the aircraft was determined to be in:

- A. Compliance with manufacturer recommendations
- B. Proper operating condition for flight

- C. Service-ready status at the inspection facility
- D. Airworthy condition

11. An IA inspecting an aircraft's propeller finds a 2-inch dent on the leading edge within the manufacturer's dressing limits. The appropriate action is:

- A. Replace the propeller blade immediately
- B. Address through field approval documentation
- C. Dress the dent per manufacturer guidance
- D. Document the finding and ignore the condition

12. Under 14 CFR § 91.7(b), the responsibility for determining whether the aircraft is in condition for safe flight rests with:

- A. The Inspection Authorization holder during annual inspection
- B. The pilot in command of the aircraft
- C. The aircraft maintenance facility's shop supervisor
- D. The FAA Aviation Safety Inspector during ramp checks

13. A mechanic is installing a Parts Manufacturer Approval (PMA) replacement part on an aircraft. The PMA approval authorizes installation on which aircraft?

- A. All aircraft of the same category as the original approval
- B. Any aircraft currently registered in the United States
- C. Aircraft operated by owners of the mechanic's employer
- D. Only aircraft for which the PMA approval specifically applies

14. The IA verifying bonding at an antenna installation should measure:

- A. Bonding resistance at the bonding interface
- B. Current flow through the bond at operating voltage
- C. The percentage of electrical conductivity at the terminals
- D. The voltage drop across the bonding wire

15. Under § 43.9(a), a maintenance record entry for work returning the aircraft to service must include all of the following except:

- A. A description of the work performed
- B. The date of completion of the work
- C. The aircraft's market value at completion
- D. The signature and certificate number of the approving person

16. A recurring AD has been complied with at aircraft total time 3,145 hours. The AD requires compliance every 100 hours. The next compliance is due at aircraft total time:

- A. 3,195 hours
- B. 3,215 hours
- C. 3,235 hours
- D. 3,245 hours

17. Under 14 CFR § 65.93, an activity that does not satisfy the IA renewal requirement is:

- A. Holding a current airman medical certificate
- B. Performing annual inspections per 90-day period held
- C. Attending an approved IA renewal seminar

D. Passing an oral test administered by an FAA inspector

18. The primary regulatory basis establishing the FAA's authority to issue airworthiness directives is:

- A. 14 CFR Part 43 maintenance provisions
- B. 14 CFR Part 39 airworthiness directives
- C. 14 CFR Part 65 mechanic certification
- D. 14 CFR Part 91 aircraft operations

19. An IA is approving a major alteration performed under an STC. The Form 337 must reference:

- A. The installer's hourly labor rate and cost
- B. The aircraft owner's contact information
- C. The local FSDO's approval for the specific installation
- D. The STC number and data package revision

20. Under § 91.417(a)(2), records of life-limited parts status must be:

- A. Summarized annually by the aircraft owner
- B. Reviewed by the mechanic at each inspection
- C. Retained permanently and transferred at sale
- D. Submitted monthly to the FAA Aircraft Registry

21. The IA is inspecting an aircraft's fuel system and discovers water contamination in the fuel tank sumps. The correct disposition is:

- A. Drain the water and sump until fuel is water-free

- B. Add fuel additive to address the contamination
- C. Document the condition for next inspection
- D. Continue operations and monitor the condition

22. Under AC 43.13-1B Chapter 4, a sheet metal patch requires a minimum edge distance between the fastener and the sheet edge. The standard minimum is:

- A. One fastener diameter
- B. Three fastener diameters
- C. Five fastener diameters
- D. Two fastener diameters

23. A special flight permit under § 21.197 may be issued for aircraft that do not meet airworthiness requirements but are:

- A. Operating under commercial transport certification
- B. Equipped with all required flight instruments
- C. Capable of safe flight for the specific permit purpose
- D. Scheduled for immediate overhaul or major repair

24. An IA reviewing a Form 337 discovers Block 7 contains an A&P mechanic's signature but not an IA designation. The Form 337 is for a major alteration. The document is:

- A. Acceptable because A&P mechanics may approve alterations
- B. Incomplete because major alterations require IA approval
- C. Acceptable for preventive maintenance categorization
- D. Correct under the current Form 337 format

25. Under AC 43.13-1B Chapter 6, corrosion along the grain boundaries of a metal structure that may not be visible on the surface is called:

- A. Exfoliation corrosion
- B. Filiform corrosion
- C. Pitting corrosion
- D. Intergranular corrosion

26. The IA performing an annual inspection must determine that all applicable airworthiness directives have been complied with. This verification covers:

- A. All ADs on the aircraft, engine, propeller, and appliances
- B. Only the most recent 12 months of AD issuance
- C. Only ADs with recurring compliance intervals
- D. Only the airframe-specific ADs for the aircraft

27. An IA is inspecting an aircraft with an ELT installation. The battery expiration date has been reached. The appropriate action is:

- A. Defer replacement until the next scheduled annual inspection
- B. Document the expiration as a deferrable condition
- C. Replace the battery before return to service
- D. Apply a new installation date label to the battery

28. Under 14 CFR § 43.3(d), approval for return to service after a major repair on a Part 91 aircraft may be granted by:

- A. Any certificated mechanic with appropriate rating

- B. The holder of an Inspection Authorization
- C. The aircraft owner with owner-pilot privileges
- D. A Designated Engineering Representative

29. The FAA Dynamic Regulatory System is useful for the IA to:

- A. Submit Form 337 documentation electronically
- B. Obtain special flight permits for ferry operations
- C. Register aircraft in the U.S. Civil Registry
- D. Research airworthiness directives applicable to aircraft

30. A mechanic is verifying that a repair conforms to acceptable methods and practices. AC 43.13-1B is:

- A. Acceptable data for minor and certain major repairs
- B. Approved data for any major alteration
- C. Required for all maintenance regardless of category
- D. Applicable only to owner-performed maintenance

31. The IA performing a pre-inspection records review must verify currency of:

- A. The aircraft owner's insurance policy documentation
- B. The airworthiness certificate, registration, and periodic inspections
- C. The aircraft's most recent fuel receipt and oil change record
- D. The pilot's personal logbook for the specific aircraft

32. An aircraft's weight and balance record must be revised after:

- A. The aircraft is sold to a new owner
- B. Every routine maintenance event performed
- C. The aircraft's annual inspection is completed
- D. Maintenance that may appreciably change weight or balance

33. Under 14 CFR § 91.203(a), which document must be on board the aircraft during operations?

- A. An effective airworthiness certificate
- B. The aircraft's latest Form 337 for all alterations
- C. The aircraft's comprehensive insurance policy
- D. The aircraft's original type certificate documentation

34. An IA is inspecting a control cable for wear. AC 43.13-1B Chapter 7 establishes that broken strands at critical locations are particularly consequential. The most critical location for broken strands is:

- A. Along straight runs between pulleys
- B. At the turnbuckle barrel center section
- C. At pulleys and fairleads where cyclic flexing occurs
- D. At swaged terminal fittings away from guides

35. The TCDS for an aircraft includes a note requiring specific equipment for aircraft with serial numbers above 1500. The IA is inspecting an aircraft with serial number 1625 and finds the required equipment is not installed. The condition is:

- A. Acceptable because the note is advisory only
- B. A non-conformity to the approved type design

- C. Acceptable if the owner has not installed it
- D. Not addressed by the TCDS requirements

36. Under 14 CFR § 21.303, production of modification and replacement parts for sale is authorized by:

- A. The aircraft owner's request for custom parts
- B. A repair station certificate under Part 145
- C. The local FSDO for the requesting mechanic
- D. Parts Manufacturer Approval granted by the FAA

37. An IA has inspected an aircraft and found an unairworthy condition. The IA must provide the owner with a dated and signed list of what?

- A. The discrepancies and unairworthy items found
- B. The estimated repair cost for each item
- C. The mechanics qualified to perform the repairs
- D. The owner's obligations for future inspections

38. Under § 43.15(c), an annual or 100-hour inspection requires the aircraft engine to be run at:

- A. The beginning of the inspection procedure
- B. The end of the inspection
- C. The midpoint of the inspection schedule
- D. Whatever time the mechanic deems appropriate

39. A mechanic is performing a weld repair on a rudder hinge bracket. The work is classified as:

- A. Preventive maintenance under § 43.3(g)
- B. Minor repair within A&P authority
- C. Major repair requiring approved data and IA approval
- D. Routine maintenance without documentation

40. An aircraft has an empty weight of 1,450 pounds and empty moment of 107,300 in-lb. An alteration removes 6.0 pounds at station 55.0 inches. The new empty weight is:

- A. 1,455 pounds
- B. 1,455.5 pounds
- C. 1,456 pounds
- D. 1,444 pounds

41. Under § 65.95(a)(1), the IA may approve a major alteration for return to service on aircraft under:

- A. Part 121 continuous airworthiness programs
- B. Part 127 commercial maintenance programs
- C. Part 135 continuous maintenance programs with FSDO coordination
- D. Part 91 general operating rules

42. The IA's attestation for a Special Flight Permit addresses:

- A. The aircraft's capability for safe flight under permit limitations
- B. The pilot's personal qualifications for the ferry operation
- C. The owner's insurance coverage during the permit period

D. The fuel availability at the destination airport

43. An IA is inspecting an aircraft and finds the airworthiness certificate is not displayed at the cabin entrance. The aircraft:

- A. Is acceptable because the certificate is in the aircraft
- B. Is not in compliance with § 91.203(b) regulatory requirement
- C. Is acceptable for continued routine operations
- D. Is not addressed by the display requirement

44. Under Part 43 Appendix A paragraph (c), an owner-pilot may perform which category of work?

- A. Major alteration using approved data
- B. Major repair with IA approval
- C. Preventive maintenance as listed
- D. Structural welding repair

45. The FAA Form 337 Block 8 description of work should be written to allow:

- A. A future mechanic to understand and verify what was done
- B. The owner to identify the installation cost
- C. The FAA to assess the work's commercial value
- D. The insurance company to evaluate coverage

46. Under § 91.417(b)(1), records of ordinary maintenance must be retained for:

- A. Permanently and transferred with the aircraft

- B. Ten years or until the aircraft is sold
- C. One year or until superseded, whichever comes first
- D. Five years from the completion date

47. An IA inspecting an aircraft with multiple STCs should:

- A. Remove older STCs to simplify the configuration
- B. Focus only on the most recent STC installation
- C. Document each STC without compatibility review
- D. Evaluate whether combined installations remain approved

48. Under AC 43.13-1B Chapter 6, filiform corrosion is characterized by:

- A. Deep pits penetrating the metal substrate
- B. Thread-like patterns beneath the paint film
- C. Uniform thinning of the metal surface
- D. Layered flaking of the metal surface

49. The aircraft weight and balance record must be:

- A. Maintained as part of the aircraft's permanent records
- B. Retained only until the next annual inspection
- C. Submitted monthly to the FAA Aircraft Registry
- D. Kept separate from the aircraft's maintenance logs

50. Under 14 CFR § 65.91(c), the applicant for an Inspection Authorization must:

- A. Hold a repairman certificate issued in the preceding 12 months
- B. Be employed by a Part 145 certificated repair station
- C. Hold an A&P certificate with both ratings in effect for at least 3 years
- D. Have completed an approved aviation technician course within 5 years

PRACTICE EXAM 9: ANSWER KEY AND EXPLANATIONS

1. B — January 31, 2025. AD compliance within 12 calendar months of the effective date means compliance by the last day of the twelfth calendar month following the effective month. An AD effective January 5, 2024 expires at the end of January 2025. Calendar-month calculations always extend through the last day of the target month.
2. A — The holder of an Inspection Authorization. Section 43.7(g) specifically assigns approval authority for annual inspections exclusively to IA holders. A&P mechanics without IA privileges, DERs, and FSDO inspectors cannot approve annual inspections — this is what distinguishes the IA from the A&P certificate.
3. D — Within the specified tension tolerance. A measured tension of 45 pounds falls within the specified range of 40 ± 5 pounds (35 to 45 pounds). The tension is at the upper limit of tolerance but still within the acceptable range. Tension tolerances are regulatory specifications that must be met but not exceeded.
4. C — The owner or operator of the aircraft. Section 91.403(a) places the primary responsibility for maintaining the aircraft in an airworthy condition on the owner or operator. This responsibility is continuous and cannot be transferred to the IA, mechanic, or manufacturer; each party has distinct regulatory duties.
5. A — Sample regulations, ADs, and TCDS reference materials. FAA-CT-8080-8D contains curated excerpts of regulations, advisory circulars, sample airworthiness directives, and TCDS references used as reference material for test questions. Specific aircraft records, IA directories, and calculators are not included.
6. D — Submit the Form 337 now to resolve the regulatory gap. A missed submission requires current submission to the Aircraft Registry to resolve the regulatory gap. The Form 337 should be filed now even though the 48-hour window has passed — late submission is preferable to no submission.
7. B — A major alteration requiring approved data. Part 43 Appendix A paragraph (a) specifically lists installation of an accessory not approved for the engine as a major alteration. Major alterations require approved data, Form 337 documentation, and IA approval for return to service.
8. C — Make, model, and often serial number range. The STC's Approved Model List identifies applicable aircraft by make, model, and often serial number range. The aircraft must fall within

the AML for the STC to be valid approved data; location, manufacture date, and insurance are not AML criteria.

9. A — The aircraft owner's pilot recurrent training records. The IA's records review verifies currency of altimeter (§ 91.411), transponder (§ 91.413), and ELT (§ 91.207(d)) inspections. Pilot training records are not part of the aircraft's required maintenance records review.
10. D — Airworthy condition. Section 43.11(a) requires the inspection entry to state that the aircraft has been inspected in accordance with the applicable inspection and was determined to be in airworthy condition. This specific regulatory language is required.
11. C — Dress the dent per manufacturer guidance. A dent within the manufacturer's dressing limits may be dressed per manufacturer guidance. This is the appropriate action for damage within specified limits — replacement, field approval, and ignoring are not the appropriate responses.
12. B — The pilot in command of the aircraft. Section 91.7(b) assigns the responsibility to determine whether the aircraft is in condition for safe flight to the pilot in command. This is distinct from the IA's airworthiness determination during inspection; both responsibilities coexist.
13. D — Only aircraft for which the PMA approval specifically applies. PMA approval is issued for specific aircraft, engines, propellers, or appliances on which the part is eligible for installation. The approval does not extend automatically to similar aircraft or all registered aircraft.
14. A — Bonding resistance at the bonding interface. AC 43.13-1B Chapter 11 specifies that bonding adequacy is verified by measuring bonding resistance at the bonding interface, typically in milliohms. Current flow, conductivity percentage, and voltage drop are not the regulatory measurement.
15. C — The aircraft's market value at completion. Section 43.9(a) requires description of work, date, performer's name if different from approver, and signature with certificate number. Market value is not a regulatory element of the maintenance record entry.
16. D — 3,245 hours. The next compliance is calculated by adding the recurring interval to the last compliance time: $3,145 + 100 = 3,245$ hours. Simple addition of the recurring interval produces the next-due time for any recurring AD.
17. A — Holding a current airman medical certificate. Section 65.93 renewal activities include performing inspections, attending refresher courses, or passing an oral test. A medical certificate is required for pilots, not for IA renewal. Insurance, certificates, and certifications outside the specific § 65.93 activities are not renewal options.
18. B — 14 CFR Part 39 airworthiness directives. Part 39 establishes the FAA's authority to issue airworthiness directives and the operator's obligation to comply. Parts 43, 65, and 91 address different regulatory domains.

19. D — The STC number and data package revision. Form 337 documenting an STC-based alteration must reference the STC number and the applicable data package revision level. Labor rates, owner contact information, and FSDO approvals are not regulatory references for the Form 337.
20. C — Retained permanently and transferred at sale. Section 91.417(a)(2) requires life-limited parts status records to be retained permanently and transferred with the aircraft at sale. These are part of the aircraft's permanent record, not subject to annual summary or monthly submission.
21. A — Drain the water and sump until fuel is water-free. Water in fuel tank sumps is addressed by draining the water and continuing to sump until fuel is water-free. This is the standard inspection procedure for water contamination. Additives, deferral, and continued operation are not appropriate responses to active water contamination.
22. D — Two fastener diameters. AC 43.13-1B Chapter 4 establishes minimum edge distance of 2 fastener diameters from the center of the fastener to the nearest edge. This prevents edge tearing and preserves structural integrity of the repair.
23. C — Capable of safe flight for the specific permit purpose. Special flight permits under § 21.197 are issued for aircraft capable of safe flight for the specific limited purpose despite not meeting full airworthiness requirements. The aircraft's capability must be adequate for the operation under the permit's limitations.
24. B — Incomplete because major alterations require IA approval. Section 43.7(g) requires IA approval for major alterations. A Form 337 signed by an A&P mechanic without IA designation does not meet this requirement. The Form 337 is incomplete and cannot be accepted as regulatorily valid.
25. D — Intergranular corrosion. AC 43.13-1B Chapter 6 describes intergranular corrosion as attack along grain boundaries of the metal, progressively weakening the structure without necessarily showing external signs. It is particularly consequential because it may not be visible on the surface before significant structural weakening occurs.
26. A — All ADs on the aircraft, engine, propeller, and appliances. Section 43.15 requires the inspector to determine that all applicable ADs have been complied with. This extends to the airframe, engine, propeller, and installed appliances subject to AD applicability — not limited to recent, recurring, or airframe-specific ADs.
27. C — Replace the battery before return to service. Section 91.207(c) requires ELT battery replacement when the expiration date is passed. An expired battery renders the ELT non-compliant with § 91.207; replacement is required before return to service, not deferral, documentation, or relabeling.
28. B — The holder of an Inspection Authorization. Section 43.7(b) establishes that approval for return to service after major repairs is exclusive to the IA on Part 91 aircraft. This is the fundamental distinction between the IA and the A&P certificate.

29. D — Research airworthiness directives applicable to aircraft. The FAA Dynamic Regulatory System (DRS) is the online portal for accessing current and historical ADs, searchable by make, model, engine, and propeller. It is the primary tool for IA's AD research.
30. A — Acceptable data for minor and certain major repairs. AC 43.13-1B is acceptable data for minor repairs and may serve as approved data for certain major repairs when cited on Form 337. It is not approved data for alterations (AC 43.13-2B is the alteration companion but also not approved data for major alterations).
31. B — The airworthiness certificate, registration, and periodic inspections. The IA's records review verifies that the aircraft's airworthiness certificate is current and effective, registration is valid, and required periodic inspections (altimeter, transponder, ELT) are in place. Owner insurance, fuel receipts, and pilot records are not regulatory review elements.
32. D — Maintenance that may appreciably change weight or balance. Section 43.5(b) requires weight and balance revision when maintenance may appreciably change the aircraft's weight or balance. Routine oil changes that do not affect weight or balance, sales, and standard annual inspection completion do not automatically trigger the revision requirement.
33. A — An effective airworthiness certificate. Section 91.203(a) requires an effective airworthiness certificate to be aboard the aircraft during operations. Form 337, insurance, and type certificate documentation are not required to be aboard.
34. C — At pulleys and fairleads where cyclic flexing occurs. AC 43.13-1B Chapter 7 identifies pulleys and fairleads as locations where cables experience cyclic flexing, making broken strands at these locations particularly consequential. Straight runs, turnbuckles, and terminal fittings are not subject to the same cyclic stress as pulleys and fairleads.
35. B — A non-conformity to the approved type design. A TCDS note specifying equipment for aircraft above a specified serial number establishes a type design requirement for those aircraft. Absence of required equipment is a non-conformity to approved type design.
36. D — Parts Manufacturer Approval granted by the FAA. Section 21.303 specifies that production of modification and replacement parts for sale requires FAA-granted authorization, typically Parts Manufacturer Approval. Owner requests, repair station certificates, and FSDO authority do not authorize part production.
37. A — The discrepancies and unairworthy items found. Section 43.11(b) requires the discrepancy list to identify each unairworthy condition found during the inspection. Repair costs, qualified mechanics, and owner obligations are not regulatory elements of the list.
38. B — The end of the inspection. Section 43.15(c) specifically requires the engine to be run at the end of the inspection to determine satisfactory performance per manufacturer recommendations. The run-up verifies post-inspection engine operation; running at other times does not satisfy the regulation.

39. C — Major repair requiring approved data and IA approval. Welded repair of structural components like a rudder hinge bracket is specifically listed as a major repair under Part 43 Appendix A paragraph (b). Major repairs require approved data, Form 337 documentation, and IA approval for return to service.
40. D — 1,444 pounds. Removing 6.0 pounds from the aircraft reduces the empty weight: $1,450 - 6 = 1,444$ pounds. Weight changes are applied by subtraction for removal and addition for installation.
41. D — Part 91 general operating rules. Section 65.95(a)(1) prohibits the IA from approving aircraft under continuous airworthiness programs under Part 121 or 127. Part 91 aircraft — general aviation aircraft — are within the IA's scope of authority.
42. A — The aircraft's capability for safe flight under permit limitations. The IA's attestation for a Special Flight Permit assesses the aircraft's capability for safe flight under the specific permit's operating limitations. Pilot qualifications, insurance, and fuel availability are not the IA's regulatory assessment focus.
43. B — Is not in compliance with § 91.203(b) regulatory requirement. Section 91.203(b) requires the airworthiness certificate to be displayed at the cabin or cockpit entrance legible to passengers or crew. A certificate in the aircraft but not displayed properly violates this regulatory requirement.
44. C — Preventive maintenance as listed. Section 43.3(g) authorizes a certificated pilot to perform preventive maintenance on the pilot's own aircraft, limited to the items listed in Part 43 Appendix A paragraph (c). Major alterations, major repairs, and structural welding are not pilot-owner authority.
45. A — A future mechanic to understand and verify what was done. AC 43.9-1E requires Block 8 to be written with specificity allowing a future mechanic unfamiliar with the work to understand what was done. Cost assessment, commercial valuation, and insurance evaluation are not Block 8 purposes.
46. C — One year or until superseded, whichever comes first. Section 91.417(b)(1) requires ordinary maintenance records to be retained until the work is repeated or superseded by other work, or for one year, whichever occurs first. Permanent retention, 10-year retention, and 5-year retention are not the default standard.
47. D — Evaluate whether combined installations remain approved. Multiple STCs on a single aircraft may create configurations neither STC alone specifically approved. The IA evaluates combined installation compatibility, not by simply accepting all STCs or focusing only on the most recent.
48. B — Thread-like patterns beneath the paint film. AC 43.13-1B Chapter 6 describes filiform corrosion as thread-like corrosion occurring beneath paint films. The distinctive thread-like pattern distinguishes it from pitting, uniform thinning, or layered flaking characteristic of other corrosion types.

49. A — Maintained as part of the aircraft's permanent records. The weight and balance record is part of the aircraft's permanent records, required to be maintained throughout the aircraft's service life and transferred with the aircraft at sale. It is not subject to annual-only retention, monthly submission, or separation from maintenance logs.
50. C — Hold an A&P certificate with both ratings in effect for at least 3 years. Section 65.91(c)(1) requires the applicant to hold a mechanic certificate with both airframe and powerplant ratings, each in effect for a total of at least three years. This is one of the specific eligibility requirements for IA certification.