Update to Inspection Authorization Test — October 2009

Inspection Authorization Test Prep — ASA-IA-5

With the following changes, ASA's *Inspection Authorization Test Prep, Fifth Edition* provides complete preparation for the FAA Inspection Authorization Knowledge Exam. The FAA may rearrange the answer stems on your test to appear in a different order than you see in the ASA Test Prep. For this reason, be careful to fully understand the intent of each question and corresponding answer while studying, rather than memorize the A, B, C associated with the correct response.

Page Number	Question Number	Correct Answer	Explanation
6–18	223f	[B]	*A new question is added to read:* **223f.** What kind of defect is detected when using longitudinal magnetization? A—Longitudinal. B—Transverse. C—Lateral. Longitudinal magnetization occurs when the part is subjected to circular current. This circular current causes the magnetic lines of force to flow through the length of the part in a "longitudinal" path. A "transverse" crack, which is oriented 90 degrees to the magnetic flow will appear because the crack disrupts the magnetic flow through the part, and attracts the magnetic inspection particles. 223f [B] (024) AC 43.13-1B, Figures 5-9 and 5-12
6–18	223g	[A]	*A new question is added to read:* **223g.** What kind of defect is detected when using circular magnetization? A—Longitudinal. B—Transverse. C—Lateral. Circular magnetization occurs when the part is subjected to longitudinal current. This longitudinal current causes the magnetic lines of force to flow around the part in a "circular" path. A "longitudinal" crack, which is oriented 90 degrees to the magnetic flow will appear because the crack disrupts the magnetic flow through the part, and attracts the magnetic inspection particles. 223g [A] (024) AC 43.13-1B, Figures 5-9 and 5-12
6–18	223h	[A]	*A new question is added to read:* **223h.** Which type crack can be detected by magnetic particle inspection using either circular or longitudinal magnetization? A—45 degrees. B—Longitudinal. C—Transverse. Longitudinal magnetization produces a magnetic field that extends lengthwise in the material. It is used to detect faults that extend across the part, perpendicular to the lines of magnetic flux. Circular magnetization produces a magnetic field that extends across the material. It can detect faults that are oriented along the length of the part. Either type of magnetization can detect a fault that runs at 45 degrees to the length of the part. 223h [A] (024) AMT-G Ch 7

Continued

Page Number	Question Number	Correct Answer	Explanation
6–18	223i	[A]	*A new question is added to read:* **223i.** The term "resin rich" refers to composite material that is A—filled with resin but lacks sufficient reinforcing fiber. B—filled with reinforcing fiber but lacks sufficient resin to thoroughly wet the fiber. C—cured without using external heating. A localized area in a composite layup that is filled with resin but lacks sufficient reinforcing fiber is called a "resin rich" area. A resin rich laminate is usually more brittle than a layup with the proper amount of resin. It will also weigh more. 223i [A] (032) ASA *Dictionary of Aeronautical Terms*, page 521
6–28	260a	[B]	*A new question is added to read:* **260a.** What is the maximum amount of time a circuit can be in operation and still be an intermittent duty circuit? A—Three minutes. B—Two minutes. C—One minute. Referring to Figures 11-2 and 11-3 in AC 43.13B, there is a significant difference in the current-carrying capacity of the same diameter wire, depending on whether or not the current flow is intermittent or continuous. However, there is no definition given for understanding what length of time can be used to determine this. This information is located in paragraph 11-68d, where it states "...or intermittent operation (maximum two minutes)." 260a [B] (003) AC 43.13-1B
7–18	375l	[B]	*Add a sentence to the end of the explanation, change the correct answer to [B], and revise the reference code line at the bottom of the page to read as follows:* …This is confirmed by referring to Note 1 para. (a) on Page 23. 375l [B] (020) TCDS A7CE, pages 7 and 23