General Class License Manual and General Q&A – Supplement and Errata

The following material supports or corrects the following publications:

GCLM 8th edition – First Printing
GCLM Q&A 5th edition – First Printing

Determine the version of the manual you are using by referring to the first page of the preface inside your copy. Look for the text box with the copyright information where you'll also find the edition and printing information. (If the edition number is not followed by printing information, the book is the first printing.) The ARRL wishes to thank readers who sent feedback about errors.

New items added in this version of the document are in red.

The current question pool for the General Class license takes effect on July 1, 2015.

Question Pool Changes

none

General Class License Manual – Supplemental Information

Page 1-2 and 3-7: In the US Amateur Radio Band chart for 60 meters, the power limit is 100 W PEP calculated as ERP (Effective Radiated Power). When calculating the station's ERP, use PEP transmitter power output and antenna gain relative to a half-wave dipole.

Page 4-10: in the caption to Figure 4.7, the ac voltage referred to can really be any changing voltage. It is the change in voltage that causes the changing magnetic field that transfers energy to the second inductor. It would be better for the caption to read, "When a changing voltage is applied to coil 1, such as when switch S is opened or closed, the changing current causes the shared magnetic field to vary, causing in turn a voltage to be induced in the turns of coil number 2."

Page 9-2, sidebar on Soldering and Lead: The reason for the recommendation to wash hands after soldering is to avoid contaminating food or ingesting lead. That should be added before the reference to question G0B10.

General Class License Manual – Errata

Page 4-4: The equation for Example 1 should show the second log as an inverse log:
Example 1: A power ratio of 9 dB = $\log^{-1}$ (9 / 10) = $\log^{-1}$ (0.9) = 8
Page 4-14: In Example 19, the equation for the parallel equivalent should read:

$$R_{EQU} = \frac{1}{\frac{1}{10} + \frac{1}{20} + \frac{1}{50}} = 5.9\,\Omega$$

Page 4-5: The first sentence of the second paragraph should exchange the order of summing the squared values and taking the mean: "… — it is the square root of the average (mean) of the squares of the signal voltage values." That's where "root-mean-square" comes from. As an equation, if two voltages are present, the RMS value is calculated as follows:

$$V_{RMS} = \sqrt{\frac{1}{2}(V_1^2 + V_2^2)}$$

Page 5-18: In the list of study questions (the "blue box"), replace G4C04 with G7C04.

Page 5-20: In the final sentence of the first paragraph of the RF Grounding and Ground Loops section, change "This and reduces…" to "This reduces…"

Page 7-17, Figure 7.16E: The cable should be labeled "Double-shielded".

Page 7-18, Example 4: the equation should be SWR = 200/50 = 4:1.

Page 8-3, regarding G3B05: The topics for the question are better addressed beginning on page 8-7 and the question identifier should be included with the reference to G3B11 on page 8-8.

Page 8-5, regarding G3A01: The effect of sunspots on propagation are better addressed on the following page and the question identifier should be included with the reference to G3A09 on page 8-6.

Page 8-6, Figure 8.5: The horizontal axis of the graph is missing the years and the label "Year". Table 8.1 is also misidentified as Table 7.1.

Page 9-4, Figure 9.3: The 240 V AC receptacle and plug wiring should show the White/Neutral connection as Gnd/Green or Bare.

Page 10-1: The title should be "Chapter 10 Glossary".

General Q&A

G9B02: The correct answer is B, not D. This is correct in the main text.