

Electrical Lineworker Program Review Summary Points – June 13, 2019

Attendees:

Dr. Elizabeth Anderson, Georgia Northwestern; Rob Rowland, North Georgia; Ronnie Ayers, North Georgia; David Kuipers, South Georgia; Jason Strickland, Coastal Pines; John Kennedy, Coastal Pines; Selena James, Georgia Piedmont; Gordy Morris, Georgia Power; Jimmy Etheridge, Georgia Transmission Corp; Tami Blount, South Georgia; Wally Summers, South Georgia; Harry Reeves, Georgia EMC; Kelly Pollard, Georgia Piedmont; Marilyn Walker, Georgia Power; Kathryn Hornsby, TCSG; Saundra King, TCSG; and Steve Conway, TCSG.

Industry Needs:

After brief introductions by all, participants identified skills needed for jobs in this field. Responses included: climbing, familiarization with industry, basic electricity 101 knowledge, CDLs, electrical safety, basic math and reading skills, teamwork, use of basic hand tools (side cutters, pliers, shovels, spades, etc.), CPR, interview skills, communication skills (oral), ability to follow instructions, logical thinking (problem solving), ability to change with technology and techniques.

Electrical Lineworker Program Outcomes Review:

The four existing program outcomes were reviewed and discussed. The group agreed that the four outcomes listed were pretty good still. A suggestion was made to change the verbiage slightly to “learn and perform” the 4 outcomes rather than “develop and demonstrate” as currently stated.

Aircraft Structural Electrical Lineworker TCC Courses Content:

The group then reviewed and discussed the ~~ASTT courses~~ Lineworker TCC courses content. The following comments were recorded for particular competencies:

- ~~ASTT 1010 (Basic Blueprint Reading) CDL Training~~ – learning outcome ~~15 under Orthographic Drawings~~ can be removed, located under an earlier competency for equipment safety; learning outcome 2 under Features can be removed as well; CDL training should remain as part of this TCC and not be separated out; in order to better reflect the actual CDL skills taught and the actual hours spent the group agreed this whole competency area would be greatly expanded when the curriculum work group reconvened to actually revise the TCC at a later date.
- ~~ASTT 1020 (Aircraft Blueprint Reading)~~ – learning outcome 4 under Engineering Numbering and Revision System should be moved up to number 1 in the list; learning outcomes 8 and 9 under Body/Field of the Drawing can be combined into one; learning outcomes 2 and 3 under Configured, Method, and Undimensioned Drawings can be combined; if shop math needs to be added to the program as a competency it can be inserted into this course; Physical Requirements – a learning outcome needs to be added for underground safety.
- ~~ASTT 1030 (Structural Fundamentals)~~ – learning outcome 2 under Fasteners should have “stress” replaced with “tension loads”; learning outcome 10 under Hand Tools should have “select speed” added; learning outcome 12 under Hand Tools should add “for drill motor

and ratchet guns”; learning outcome 14 under Hand Tools should remove “tip for fastener used” and replace with “set for rivet being used”; learning outcomes 21 and 22 under Hand Tools should swap order; and learning outcomes 23 and 24 under Hand Tools should be moved over to ASTT 1040 General Electrical Safety – learning outcome 1 should be reworded to say “understand the principles” of safety in the workplace. Learning outcome 4 should have “grounded” added. Learning outcome 5 should just refer to PPEs. A 6th learning outcome should be added about properly grounding the truck.

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- ASTT 1040 (Structural Layout and Fabrication) — learning outcomes 3, 10, 14, 18, 20, and 24 can be removed from under Stationary Equipment as they are all repeated; learning outcome 32 under Stationary Equipment should be reworded to say “Bevel or chamfer the metal edges.” Effective Communication Skills – a 4th learning outcome should be added for crew resource management or CRM actions during emergencies.
- ASTT 1050 (Aerospace Quality Management) — no changes but it should be noted this course can easily be adapted to on line delivery. Hand tools – a third learning outcome should be added for Identifying materials used on the job site such as conductors and insulators.
- ASTT 1070 (Aerodynamics) — the one learning outcome under Control Surfaces should have the word “fabrique” removed and “spoilers” inserted. Basic Electrical Fundamentals – in learning outcome 5 the word “program” can be removed. Learning outcome number 6 can be relocated to hand tools above.

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- ASTT 1090 (Composites and Bonded Structures) — learning outcome number 5 under Safety should have “MSDS” replaced with “SDS”; learning outcome number 3 under Inspection Techniques should be moved up to number 1 in the listing and the word “repair” should be replaced with “damaged”; learning outcomes 4 and 5 under Inspection Techniques should be moved down to number 6 under Application. Lineman Simulations – learning outcome 3 should have 35’ instead of 34’; learning outcome 11 should have “common knots” not 25; learning outcome 14 should have “tamped” not “tampered”; learning outcome 17 should refer to human performance; a new learning outcome for setting a pole by hand should be added.

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- ~~ASTT 1100 (Sealants) — learning outcome number 5 under Safety should have “MSDS” replaced with “SDS”.~~
- ~~ASTT 1110 (Corrosion Control) — learning outcome number 4 under Corrosion Theory should have “metals” replaced with “materials”; the learning outcome under Corrosion Prevention should have “paint” replaced with “prime”; learning outcome 16 under Non-Destructive Inspection can be removed as it is redundant.~~
- ~~ASTT 1120 (Aircraft Metallurgy) — learning outcome 4 under Safety should have “material” removed; learning outcome 3 under Heat Treatment should have “agent” replaced with “aging”.~~
- ~~ASTT 1180 (Aircraft Technical Publications) — no changes proposed but computer navigation skills can be added as a competency area if needed.~~
- ~~ASTT 1190 (Internship) — no changes proposed~~

Additional Discussion and Future Work:

Before closing Steve stated that he would send out the curriculum document with the suggested edits above in just a few days for all to review and make any further edits. After that it could be sent out

statewide for industry review and comments. ~~Next month the faculty would reconvene in~~ Sometime this summer a curriculum work group consisting of both the CDL and lineworker instructors and work on streamlining and adjusting the program as needed. Dr. Parker informed the group that Albany Tech can provide quality process training to any college personnel in the system. Randy stated that he would try and find some information on the old composites TCC that existed some time ago will convene to look at the collective program edits suggested and then deal with the curricular revision especially expanding the CDL competencies and learning outcomes.

Selena asked the group about finding good instructors for the program as she was about to have two instructors retire. Others in the group stated reaching out to Georgia Power and local EMC partners is always the best place to start looking for potential instructors.