NOTE ON PERFORMANCE TESTING

Performance Profile Sheet(s) are included in a format that can be easily photocopied for each trainee. Performance tests are designed to measure competency in the tasks taught in each module.

Please note the number of tasks to be tested while teaching each module. Each trainee should be tested on all the tasks listed on the Performance Profile Sheet(s). Before performance testing, the instructor should brief the trainees on:

- Test objectives and criteria
- Safety precautions
- Procedures for each task to be tested

The instructor administering the performance testing should also do the following:

- Ensure that all of the needed equipment is available and operating properly.
- Set up the testing stations.
- Organize and administer the test in a way that allows for optimal performance.
- Complete the Performance Profile Sheet(s) for each trainee by assigning a pass/fail score for each listed task. Also, include the testing date for each task in the rating box.
- Monitor adherence to all safety regulations and precautions.
- Provide adequate supervision to prevent injuries.
- Take immediate and effective action to remedy any emergency.

Performance Testing

If Performance Testing is done as part of the National Center for Construction Education and Research Standardized Craft Training Program, the following conditions must be met:

1. The Craft Instructor must hold valid NCCER instructor certification for the craft being tested.
2. The training must be delivered through a Accredited Training Sponsor recognized by NCCER.
3. For every module, the specific performance testing must be completed to the satisfaction of the instructor.
4. The results of the testing must be recorded on the Training Report Form 200. This form must be provided to the local Accredited Training Sponsor to be forwarded to the NCCER National Registry.

Module 40401-09 has no Performance Profile Sheet;
no performance testing is required for this module.

Craft: Industrial Maintenance E & I Technician

Module Number: 40402-09

Module Title: Basic Process Control Elements, Transducers, and Transmitters

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

_____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
7	1. Draw a one-line diagram including a measuring element, transducer, and transmitter.	
6	2. Install an electronic transmitter.	

Craft: Industrial Maintenance E & I Technician

Module Number: 40403-09

Module Title: Instrument Calibration and Configuration

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

_____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.

Objective	TASK	RATING
4	1. Calibrate a pneumatic pressure switch using the proper equipment.	
3, 4	2. For a given level application, determine the calibration range for a DP transmitter.	
5	3. Calibrate a 4–20mA temperature transmitter using the proper calibration equipment.	
8	4. Calibrate a smart transmitter using a HART® communicator.	
3, 4	5. Check a transducer for proper operation.	

Craft: Industrial Maintenance E & I Technician

Module Number: 40404-09

Module Title: Pneumatic Control Valves, Actuators, and Positioners

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

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INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.

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Objective	TASK	RATING
1, 2, 3	1. Disassemble and reassemble one or more control valves.	
4	2. Bench set an actuator and mount on a control valve.	
5	3. Install and set up a positioner on a control valve.	
9, 10, 11	4. Interpret valve markings and nameplate information.	
10	5. Identify valve components from specific drawings.	

Craft: Industrial Maintenance E & I Technician

Module Number: 40405-09

Module Title: Performing Loop Checks

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

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INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
3	1. Perform a continuity check on a pneumatic system.	
3	2. Perform a continuity check on an electrical system.	
4	3. Prove a loop.	

Craft: Industrial Maintenance E & I Technician

Module Number: 40406-09

Module Title: Troubleshooting and Commissioning a Loop

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

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INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
2	1. Troubleshoot an oscillating process.	
3	2. Troubleshoot a newly installed control loop.	
5	3. Commission a loop.	

Craft: Industrial Maintenance E & I Technician

Module Number: 40407-09

Module Title: Process Control Loops and Tuning

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

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INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
6	1. Perform closed-loop tuning.	
7	2. Perform open-loop tuning.	
8	3. Perform visual loop tuning.	
5	4. Set up and use a pneumatic controller in a loop.	

Craft: Industrial Maintenance E & I Technician

Module Number: 40408-09

Module Title: Data Networks

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

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INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
6	1. Properly run and terminate CAT 6 and coaxial cables.	

Craft: Industrial Maintenance E & I Technician

Module Number: 40409-09

Module Title: Programmable Logic Controllers

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

_____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
4	1. Locate the specific I/O point associated with a given software address.	
10	2. Connect to a PLC and turn on an output device.	

PERFORMANCE PROFILE SHEET — NCCER TRAINING

Craft: Industrial Maintenance E & I Technician

Module Number: 40410-09

Module Title: Distributed Control Systems

Contren® Learning Series

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

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INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
2, 3	1. Develop a diagram of the basic system architecture of a DCS, including the components and information flow.	
8	2. Use a DCS interface to obtain process data.	