Portable PLC Troubleshooting Learning System (Allen-Bradley CompactLogix) – 990-PAB53F

The 990-PAB53F Portable PLC Troubleshooting Learning System provides comprehensive curriculum and a cutting-edge workstation to teach PLC (Programmable Logic Controller) programming, operation and applications in industry. The 990-PAB53F uses FaultPro, Amatrol's unique electronic fault insertion, to teach PLC troubleshooting skills, including PLC input and output testing, software testing, and application troubleshooting. Learners study both basic and advanced applications using Allen-Bradley's CompactLogix 5300 PLC, PanelView Plus, and networking throughout the curriculum.

The 990-PAB53F comes with a mobile carrying case, workstation mounting panel, master control relay circuit, Allen-Bradley CompactLogix 5300 Programmable Controller, RS Linx and RS Logix 5000 software, a PanelView Plus terminal, an Ethernet Switch, I/O Simulator, five application circuits, student curriculum, instructor's assessment guide, and installation guide. Learners will study industry-relevant applications and troubleshooting skills needed in today's workplace.

PLC Fault Troubleshooting
The 990-PAB53F uses FaultPro, an electronic fault insertion system that is only available from Amatrol, to insert 35+ faults into the system for troubleshooting. Learners will troubleshoot these faults as they progress through 25 different troubleshooting skills. Learners practice skills

directly related to industry needs, including using a six-step sequence to troubleshoot a PLC system, troubleshooting a PLC routine that performs on/off control using an analog input, and testing a PLC-controlled Pulse-Width Modulation (PWM) output device.

Rich Applications: Basic through Advanced
In addition to troubleshooting skills, the 990-PAB53F includes application circuits and components for thermostatic temperature control, analog temperature control, reversing constant speed motor control, variable speed motor control with feedback, and stepper motor homing and commissioning. These circuits include basic and advanced applications starting with discrete I/O projects and extending to projects involving analog I/O.

Steve Wenzel
254-299-8152
swenzel@mclennan.edu

John Hutchens
254-299-8156
jhutchens@mclennan.edu

Modern Curriculum with PanelView Plus Terminal and Networking

The extensive Amatrol curriculum offered with the 990-PAB53F features a wide range of analog, discrete, data and networking commands. The curriculum has been designed to teach modern PLCs as they are used today, with the PanelView Plus terminal and networking applied throughout the curriculum. Learners cover a wide variety of program commands, ranging from timers and contacts, stepper motor control, PWM control, and analog control that will quickly develop relevant and critical skills.

Portable Workstation

The 990-PAB53F is a mobile training platform for training at multiple facilities and convenient storage. It features a sturdy, portable case with wheels and a handle for easy transport. The cover can be quickly removed so the case can sit firmly upright on a table surface. The cover also locks so that the workstation can be safely stored when not in use.

Learning Topics
- PLC Troubleshooting
- PLC Systems Troubleshooting
- Analog Input/Output Troubleshooting
- Analog Application Troubleshooting
- Basic Panelview Plus Terminal Operation

- Panelview Plus Application Editing
- PLC Program Operations
- PLC Programming
- PLC Motor Control
- PLC Timer and Counter Instructions
- Event Sequencing
- Program Control Instructions
- Math and Data Instructions
- Analog Inputs
- Analog Outputs
- Variable Output Applications

Steve Wenzel
254-299-8152
swenzel@mclennan.edu

John Hutchens
254-299-8156
jhutchens@mclennan.edu