



Designed to represent a complete aircraft fuel system, Model FCU – 100 Turbine Fuel System Training Set enables trainees to learn the essentials of fuel system components and how these components are linked to each other in a typical aircraft fuel system. This trainer includes a capacitance fuel system that shows non-linear fuel quantity indications with multiple probes set at various angles. It comes fully plumbed and with a wing tank.

This completely functional fuel system consists of a fuel management panel, fuel transfer system and capacitance fuel quantity indicating system. It also contains an instructor's panel that makes it possible to add faults to conduct troubleshooting training. The fuel system panel features fuel quantity indicators, a fuel transfer selector valve, fuel transfer and low fuel warning lights, fuel pressure and flow indicators and complete fuel system drawings.

This system contains, engine driven fuel pump screen, fuel filter, fuel control unit, turbine fuel nozzle inside a clear enclosed container etc.

Specifications

Features

- Understand fundamentals of aircraft fuel system and its components.
- Fully functional and configured like a typical aircraft fuel system.
- Aircraft fuel system can run automatically and manually.
- Fuel tanks are automatically filled and when tank is full system is automatically be shut off.
- The control of the fuel that flows to combustion chamber can be observed using the throttle lever.
- Fuel tanks have a maintenance hatch.
- Fuel tanks be manually drained for maintenance.
- Fuel tanks have transparent window in order to observe fuel filling and refilling.
- Combustion chamber is transparent.
- Tanks are able to manually or automatically cross-fit.
- Aircraft fire scenario is simulated.
- The hose and tubes used in the trainer are labeled according to aviation standards.
- Wirings on the trainer are connected via terminals.
- Wires have clear identification labels for each wire.
- All wires are coded and labeled for troubleshooting.
- All required hoses and pipes
- Instructor's panel for Fault Insertion(Independent unit)
- The system mounted on a metal/aluminum mobile stand.
- Metal/aluminum frame with 4 wheels. 2 of 4 wheels are lockable.

- Training video for teachers
- Delivered fully assembled tested and ready to operate
- Colored Ultraviolet printing method on aluminum composite panel.

- Computer Control Software (CCS)
 - Trainer monitored
 - Fault panel control from software
 - All data shown in the software

Components

- Fuel Control Unit(FCU)
- Three(3) pieces minimum mock-up fuel tank
- A minimum 40 Lbs aircraft refuel tank
- Three(3) pieces fuel pump
- Three(3) Level control switches
- A refuel pump
- Engine no: 1 Combustion chamber
- Fuel Nozzle
- Throttle lever
- Fuel filter
- Crossfeed control valve
- Fuel Pressure sender
- Fuel Level Sender
- Fuel Flow Sensor
- Shut-Off Valve
- Control panel
- 10" inch touchable screen
- Terminals
- Three(3) manual drain valve
- Check valves
- LAN output
- Control Panel
- Master power panel
- Master caution panel
- Aural warning horn
- Left pump control switch
- Right pump control switch
- Main pump control switch
- Test button
- Status lamps

- Aircraft circuit breaker
- Aircraft circuit breaker lockout
- Pressure relief bypass valve
- 10" inch touchable screen (like EICAS or ECAM)
 - Left tank fuel quantity indicator
 - Right tank fuel quantity indicator
 - Fuel pressure indicator
 - Fuel flow indicator
 - Switch Position
 - Valve status

Documentation

- User's Manual
- Study Guide
- Instructor's Guide
- Components Diagrams
- Flow Diagrams

Power Specs

- Electrical box
- Residual current device
- Emergency Button
- Energy Signal Lamp
- 110 VAC 60 Hz or 220-240 VAC 50 Hz