



Autopilot Trainer is an excellent resource for teaching the principles of automatic flight controls by demonstration using a complete system that encompasses all the aspects of three(3) axis autopilot and automatic flight controls.

Differences from AP-100B Model

- Automatic/Motorized Yoke System
- Automatic/Motorized Rudder Pedal System
- Automatic/Motorized Throttle Lever
- Pitch Trim Servo System
- Heading Feed Back
- Altitude Feed Back
- Active Remote Gyro HSI System
- Flux Detector(The Magnetic Azimuth Transmitter)
- Slaving Accessory
- Remote Control Panel
- Vacuum Pump

Specifications

Features

- Indicators operate in sync with auto-pilot system
- Aircraft position controlled by yoke.
- Automatic/Motorized Yoke System
 - Yoke automatically/motorized moves in two axis with data from autopilot computer. It performs automatic positioning according to the position of the airplane.
- Automatic/Motorized Rudder Pedal System
 - Rudder Pedal automatically/motorized moves in one axis with data from autopilot computer. It performs automatic positioning according to the position of the airplane.
- Automatic/Motorized Throttle Lever
- Yoke and rudder pedal can move the control surfaces of the aircraft.
- Servos operate in sync with auto-pilot and yoke/rudder pedal.
- 2 axis DOF + 1 DOF system
- Pitch Trim Servo System
- Heading Feed Back
- Altitude Feed Back
- Active Remote Gyro HSI System
- Remote Control Panel

- Vacuum Pump
- Remote Altitude control & feedback
- Remote Heading control & feedback
- Remote side wing control
- Remote head wing control
- The aircraft automatically calibrated to runway position when the trainer is turned on.
- Instructor's panel for Fault Insertion
- The system mounted on a metal/aluminum mobile stand.
- Metal/aluminum frame with 4 wheels. 2 of 4 wheels are lockable.

Components

15-inch PFD-MFD screen

- Attitude Directional Indicator(ADI)
 - Directional Gyro(HSI)
 - Airspeed Indicator(ASI)
 - Altimeter(ALT)
 - Vertical Speed Indicator(VSI)
 - Turn and Slip Indicator
 - Course deviation bar(CDI)
 - Course Pointer
 - RPM indicator
 - Manifold Pressure indicator
 - Engine instruments(Oil, Fuel system)
- **Yoke (Automatic/Motorized)**
 - **Rudder Pedal (Automatic/Motorized)**
 - **Throttle Control (Automatic/Motorized)**
 - **Pitch / Yaw / Roll / Pitch Trim servos**
 - **The trainer should have auto-pilot panel.**
 - Active AP(auto-pilot) function button,
 - Active Pitch function button,
 - Active Roll function button,
 - Active ALT(altitude) function button,
 - Active V/S(vertical speed)function button,
 - Active FLC function button,

- Active HDG(heading) function button,
 - Active FEET function Knob,
 - Active FPM function Knob,
 - Active HDG function Knob,
 - All function buttons should be illuminated.
- **Master Power and Switch panel.**
 - DC master power switch,
 - Master power lamp,
 - Beacon switch,
 - Engine Start,
 - PFD circuit breaker,
 - Auto-Pilot circuit breaker,
 - Beacon circuit breaker,
 - Gyro circuit breaker,
 - Circuit breaker lockout,
 - Aural warning horn,
 - Resettable master caution
 - **Model Metal Aircraft**
 - Aircraft size should be minimum 1400mmx1300mm
 - Aircraft color should be white
 - Moveable Aileron/Elevator/ Trim & Rudder
 - Aileron/elevator/trim and rudder are different color
 - • DOF system should operate in sync with auto-pilot(aileron/elevator/rudder) and yoke&rudder pedal.
 - The trainer should have a beacon.
 - **Remote Directional Gyro**
 - Remote mounted
 - Drive signal for heading loop drive motor
 - Slaving meter drive signal
 - Original Mounted Tray
 - Shock mounted
 - Internal power supply
 - Provide's a gyro-stabilized magnetic heading
 - Used in conjunction with the Magnetic Azimuth Transmitter.
 - Power: 14 or 28 volt dc
 - 300 degree free turnable system for testing

- **Flux Detector(The Magnetic Azimuth Transmitter)**
 - Senses the direction of the earth's magnetic field and transmits information to gyro.
- **Slaving Accessory**
 - Slave/Free Gyro Switch
 - Slaving Meter indicator
 - CW/CCW Adjustment
- **Remote Control Panel**
 - Heading Control
 - Altitude Control
 - Speed Control
 - Side Wings Control

Documentation

- User's Manual
- Study Guide
- Instructor's Guide
- Device's original Wiring Diagrams
- Components Diagrams

Power Specs

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