THE POWER OF COOPERATIVE SOLUTIONS®

PACS



Proxy Autonomous Control System

Customizable hardware & software system that converts standard manned vehicles into unmanned, autonomous vehicles or into Optionally Piloted Vehicles (OPVs).

Principal system elements:

- Power Distribution Unit (PDU): redundant power control subassembly providing remote switching and dual 100A 28VDC buses
- Autopilot Controller: autopilot system for control of flight; includes redundant control of autopilot logic
- Converts between piloted and unmanned with flip of a switch
- Provides high level of autonomy and cooperation with other vehicles and Ground Control Station (GCS) using a mesh network environment
- GCS Operators act as mission managers and not as pilots; operators focus on mission objectives
- Servos: provides control of flight surfaces; allows for OPV operation
- Engine Monitoring: provides electronic engine control and monitoring
- Local Area Network: redundant network
- Customized Radio Communications
- Virtual Air Controller (VAC):
 - Small hardware package, weighing less than 5 pounds
 - Computer "brain" that executes cooperative flight



US Patent No. 8,788,121; US Patent No. 8,874,360