Press Release
FOR IMMEDIATE RELEASE

Vertical Power to Announce New, Solid-State Intelligent Electrical Control System

Albuquerque, NM — July 9, 2007 — Vertical Power will announce the VP-200 at AirVenture 2007. The VP-200 uses microprocessors and solid-state switches to provide advanced electrical system features, simplified aircraft wiring, and the ability to eliminate dozens of modules, breakers and switches typically found in today's aircraft. The VP-200 is for use with experimental and light sport aircraft.

"In the last five years or so there has been a very significant shift in general aviation aircraft from mechanical systems to all-electronic systems. Trim, flaps, EFIS, ignitions, and engine monitoring functions have all gone electronic, yet the electrical system in your aircraft is the same as it was 50 years ago," said Marc Ausman, President of Vertical Power and an RV-7 builder/pilot. "The electrical system is so much more important now and pilots need more information and more options for electrical control. Moving to the VP-200 is similar to aircraft navigation using a VOR needle and then installing a GPS moving map. You can do it the old way, but the new way gives you much better awareness and a lower workload."

"Now that electronics are such an important part of today's aircraft, I see intelligent electrical control systems as the next important advancement in general aviation aircraft," said Gordon Pratt, VP of Business Development, Cobham Avionics and Surveillance and member of the Vertical Power Board of Advisors. "This is as significant as the change from round dials to a synthetic vision system like the Chelton FlightLogic EFIS we pioneered nearly a decade ago."

During a typical flight the VP-200 has the unique ability to automatically track various flight stages, each one representing a specific "mode" of ground or flight operations. For each mode (Pre-Flight, Before Start, Start, After-Start, Taxi, Run-Up, Takeoff, Cruise, Maneuver, Landing, and Post-Flight) the pilot can:
- define which electrical devices (lights, radios, pumps, etc.) are automatically turned on and off,
- configure the presentation of the engine instruments to optimize and de-clutter the display,
- specify a checklist that appears when switching into a particular mode.

On the ground, the pilot pre-configures the VP-200 to match the way he flies and the way he wants the system to operate. For example, the VP-200 can be configured to turn on the landing lights and boost pump automatically in Takeoff and Landing modes. The run-up checklist can be set to appear when a run-up is performed. The pitch trim system can be set to be less sensitive above a pre-configured air speed.

In addition to the mode-based switching, the pilot has full manual control over the electrical system and can turn each electrical device on and off individually, either with "soft keys" on the display or with external switches. The pilot can also see the real-time status of the electrical system on a graphic display, similar to what is found on newer business and commercial jets.

"The VP-200 handles many of the routine tasks that a pilot performs on every flight so the pilot can spend more time looking outside the cockpit and focus on flying the airplane," said Kevin DeVries, Vice President of Engineering at Vertical Power. "The VP-200 is designed to be very fault tolerant and allows the builder to incorporate numerous backups if desired."

In addition to full electrical device control, a few of the features include:
- a wireless key fob that can turn on and off electrical devices, including the cabin lights and can perform a check of the exterior lights,
- visual and aural alerts when a circuit fault occurs, including protection for short circuits, over-current, over-voltage, and under-voltage conditions,

- visual and aural alerts when engine parameters exceed limits,
- automatic pitch trim biasing when flaps are lowered, and variable speed pitch trim,
- runaway trim & flap protection with backup controls and audible gear and flap warnings,
- configures the trim and flaps after engine start and engine shutdown,
- user-configurable flap behavior with adjustable intermediate stops,
- landing lights can flash/wig-wag,
- alerts when a landing light burns out,
- alerts when the mag switch is set incorrectly,
- timed shut-off of the master switch after engine shutdown.

Vertical Power is also introducing a new and safer way to handle emergencies. Press the red emergency button on the VP-200 and select from a list of emergencies shown on the display (alternator failure, electrical fumes, engine failure, and engine fire). The VP-200 then executes a pre-configured set of actions. For example, if the primary alternator fails, with two button presses the system begins load shedding, switches to the backup alternator and brings up the alternator failure checklist.

Aircraft wiring is also simplified using the VP-200. The builder simply runs wires from the VP-200 to each electrical device such as a radio, transponder, landing light, flap motor, or battery contactor. Switches, circuit breakers, diodes, mechanical relays, complex bus architectures, and various modules are mostly eliminated. In contrast to a switch and circuit breaker panel that requires mechanical or electrical modifications to support changes, the VP-200 can be configured using setup menus. This allows the system to be configured for the wide range of designs found among experimental aircraft and allows future changes to be made very easily. Future software upgrades can be downloaded from the Vertical Power web site and installed via a USB port.

The VP-200 integrates with most popular engine monitors such as the Electronics International MVP-50, Grand Rapids Technologies EIS, Advanced Flight Systems AF-3400/3500EE, and Dynon FlightDEK-D180. Additionally, it can integrate with most popular GPS and EFIS systems including the Chelton EFIS & GADAHRS, Garmin G900X, Garmin 430/530/480, and Grand Rapids Technologies EFIS.

Vertical Power will launch the new VP-200 and VP-200 Duo (supports dual independent electrical busses) systems at the Experimental Aircraft Association Airventure 2007 July 23-29 in Oshkosh, WI. The VP-200 retails for $6,495 and the VP-200 Duo retails for $9,995, and will begin shipping in August 2007. Vertical Power will be exhibiting at Oshkosh, Hangar B booth 2024. For more information, please visit www.VerticalPower.com.

About Vertical Power

Vertical power is in the business of designing and producing modern, intelligent electrical control systems for experimental and light sport aircraft. The company is applying advanced solid-state electronics to reduce wiring complexity, simplify wiring installation, reduce pilot workload, and enhance a pilot's ability to respond to in-flight emergencies.

Vertical Power is the first company to develop intelligent, microprocessor-based electrical control systems for the non-certified aircraft market. The company is based in Albuquerque, NM and sells its products directly to customers and through select dealers. Vertical Power was co-founded by Marc Ausman, Kevin DeVries, and Jake Dostal in June 2006. Six patents have been filed covering various aspects of the VP-200 system.

Press Contact

Marc Ausman, Vertical Power
505-715-6172
marc@verticalpower.com
www.VerticalPower.com