

# NEW PRODUCTS

STORY BY CHRISTINE KNAUER

T

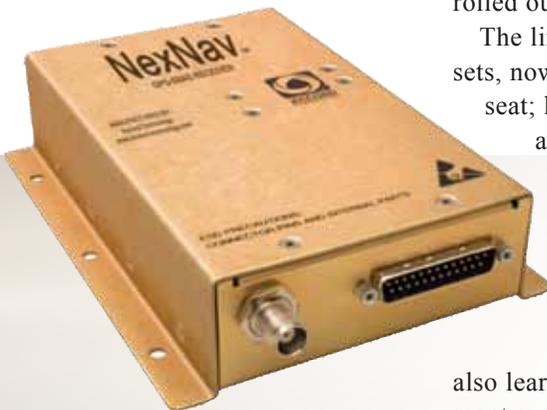
he Aircraft Electronics Association's popular New Product Introductions stole the limelight at the 2011 AEA International Convention & Trade Show in Reno, Nev., as manufacturers rolled out dozens of innovative new products and features.

The lineup included new touchscreen GPS/nav/comm avionics; shrinking test sets, now so small and light, they can be easily ported from the bench to the left seat; helicopter antennas that conserve space by incorporating several search and rescue frequencies into one radome; a new cabin lighting system that replicates natural daylight; and a radio and audio panel melded into one box, saving valuable real estate in the panel.

The new airborne smartphone and iPod accessories, Wi-Fi and email systems, high-definition displays and Blu-ray players, bring more benefits of home and office to the cockpit and cabin.

During the two hours of new product introductions, AEA members also learned about new cabin power outlets and inverters, integrated entertainment systems, a fast broadband data router, a communications management unit as well as new features to popular products. Several companies announced new and upcoming TSO and STC approvals, a sign that the industry continues to move forward.

For more details, here's a closer look at the new products, features, services and special announcements from the AEA Convention in Reno, Nev.



Accord Technology's NexNav mini

## AEA Convention Makes Magic with More

### **Accord Technology**

Accord Technology of Phoenix, Ariz., announced it has received FAA production approval on its NexNav mini GPS TSO-C145c WAAS Class Beta-1 ONLY sensor/receiver. The low-power, credit-card-size receiver enables ADS-B, LNAV/Baro-VNAV approaches and RNP among other capabilities, and is compatible with satellite-based augmentation system networks around the world, such as EGNOS in Europe, MSAS in Japan and GAGAN in India.

According to Hal Adams, Accord's co-founder and chief operating officer, the mini GPS receiver offers an affordable ADS-B solution for civil platforms — from gliders and light sport aircraft through commercial air transport, as well as unmanned aerial systems and airport surface vehicles.

The NexNav mini meets AC

20-165 requirements, filling the gap between ADS-B GPS source requirements of AC 20-165 and current TSO-C145c GPS WAAS standards.

“There’s a gap between existing GPS TSO/MOPS (GPS TSOs 129, 196 145, 146 for NAV systems and corresponding MOPS) and the ADS-B AC 20-165 requirements,” Adams said. “Each GPS TSO has a different challenge to meet the ADS-B AC 20-165. We hold the latest TSO-C145c, and had the least amount to do to be compliant.”

Accord Technology will deliver the NexNav mini immediately while finalizing the NexNav MAX GPS WAAS Class Beta-1, -2, -3 authorizations in the next few months, according to Adams.

To learn more, visit [www.accord-technology.com](http://www.accord-technology.com) or call 623-271-8800.

*Continued on following page*

## Than 30 New Products and Features

## NEW PRODUCTS

*Continued from page 39*

### Aerospace Optics

Aerospace Optics of Fort Worth, Texas, introduced its new VIVISUN Multi-Function Body LOGIC Series Pulse/Timer switch. The pulse/timer switch replaces other hardware items traditionally integrated into external circuits, including time-delay relays, external-pulse-generation circuits and relays that are used to change signal polarity.

VIVISUN's LOGIC Series Pulse/Timer switch



The pulse/timer feature generates a timed output or pulse in response to an event occurring elsewhere in the aircraft.

“For example, if smoke was detected in the aircraft, the pulse/timer would sound a buzzer for 10 seconds and cause the LOGIC Series switch to blink,” said Loren Jensen, president and

COO of Aerospace Optics. “The pulse/timer would then allow for a manual reset of the system or maintain a continuous alarm loop until the smoke cleared.”

The switch is a two-channel component designed to respond to a rising or falling edge and generate a high or low outgoing pulse. It can initiate an action while letting go of a secondary signal, drive a logic-level into an electronic device, set blink time for the LOGIC Series switch and turn on a device such as horns, buzzers and indicators for a set time. It can read various changes of state such as weight-on and weight-off wheels.

To learn more, visit [www.vivisun.com](http://www.vivisun.com) or call 888-848-4786.

### Aircell

Aircell of Broomfield, Colo., introduced the Aircell Smartphone, a next-generation cabin handset designed

specifically for business aircraft. It features an Android-based operating system and a 3.8-inch, color, touchscreen display. First shipments are scheduled for late 2011.

With intuitive, menu-driven features, the Aircell Smartphone allows passengers to place and receive voice calls aboard business aircraft as easily and conveniently as they do with mobile phones on the ground, according to John Wade, Aircell’s executive vice president and general manager of business aviation services.

The fully-certified Aircell Smartphone is Bluetooth-compatible for hands-free operation, includes an integrated audio jack for wired headsets and earbuds and offers interchangeable wireless or wired operation.

The system is backward compatible with all Aircell Axxess communications systems currently in production and available as a drop-in replacement for current Aircell Axxess flush-mount handsets.

Aircell also announced that the company is adding voice capabilities to its Gogo Biz service. In late 2011, the new voice capabilities will join the existing high-speed Internet capabilities for business aircraft. The service will support several simultaneous voice calls and Internet sessions.

The Aircell Smartphone will be fully compatible with the new Gogo Biz Voice service via the ATG 4000 and ATG 5000 systems.

To learn more, visit [www.aircell.com](http://www.aircell.com) or call 303-301-3200.

The Aircell Smartphone



## Aspen Avionics

Aspen Avionics of Albuquerque, N.M., and Avidyne Corp. announced collaborative plans, enabling the Evolution EFD1000 primary flight display as the attitude source, mode annunciator and flight director command display for Avidyne's new DFC90 digital autopilot. The integration package will be released later this year.

Aspen introduced a series of enhancements that broaden the compatibility and expand the functionality of the Evolution flight display system. Among other enhancements, Aspen's most recent product updates include approval for the Evolution system to emulate the Collins PN-101 HSI system, providing lateral and vertical deviation, heading and course datum inputs to compatible autopilots.

Aspen also announced improved integration with Cobham's S-TEC autopilots. The companies are working together to enable the Aspen EFD1000 to directly interface with the S-TEC 55X and 60-series autopilot computers for altitude pre-select, autopilot mode, and flight director functionality.

According to Aspen, now all aircraft registered in Brazil that fall under Aspen's AML have an approval path to install or expand Aspen's glass cockpit products. The Brazilian STC has expanded to include the EFD1000 multi-function flight display, the EFD500 MFD, the EFD1000C3 Pro primary flight display and the EA100 attitude-based autopilot adapter for the most current approved model list of more than 900 aircraft, including larger Class III aircraft. Previously, the Brazilian STC only applied to the EFD1000 PFDs.

To learn more, visit [www.aspenavionics.com](http://www.aspenavionics.com) or call 888-992-7736 or 505-856-5034.

## Avidyne Corp.

Avidyne of Lincoln, Mass., announced the company's partnership with Aspen Avionics to develop an interface between the Avidyne DFC90 autopilot and the



Aspen's Evolution EFD1000

Aspen Evolution EFD1000.

The new interface expands the retrofit market for Avidyne's DFC90 autopilot while expanding the interface capability for Aspen's EFD displays.

"With their versatile Evolution display systems, Aspen can retrofit into a wide variety of aircraft with varied avionics configurations, and we are pleased to be working with them on the interface with our DFC90," said Patrick Herguth, Avidyne's COO.

The DFC90, Avidyne's all-digital, attitude-based flight control system, provides the standard vertical and lateral modes of operation typically found in a turbine-class autopilot system, including flight director, altitude hold, airspeed hold, vertical speed hold, heading and navigation.

Aspen Evolution displays are currently compatible with Avidyne's TAS600 traffic advisory systems. The DFC90 is certified with Avidyne's Entegra integrated flight deck displays in Cirrus aircraft.

"We're currently gauging customer interest in future programs and airframes," said Tom Harper, Avidyne's director of marketing.

Certification of the systems' interface should be completed later this year.

To learn more, visit [www.avidyne.com](http://www.avidyne.com) or call 781-402-7400.



Avidyne's DFC90 autopilot

*Continued on following page*

## NEW PRODUCTS

*Continued from page 41*

### **Buller Enterprises**

Buller Enterprises of Bismarck, N.D., introduced its newest computer-aided router, the Panel Pro 5925. The new system expands the capabilities of the 5624a model by adding a fully software-controlled Z-axis, allowing controlled 3-D operations such as countersinking, chamfering and inletting.

The Panel Pro 5925 also features a heavy-duty dual X-axis drive, 59-inch by 25-inch cutting area, production quality 3.5 hp variable speed router, and AvCAM operating software with Auto Tool Path technology. The AvCAM software automatically applies tool paths to DXF CAD files.

Designed for creating aircraft instrument panels and related sheet metal parts, the Panel Pro CNC router can be used in any size shop, according to Larry Buller, owner and founder of Buller Enterprises.

Options available for the Panel Pro 5925 include the EG1 rotary engraver, the scribing diamond engraver, the Measure Pro touch probe to reverse engineer existing panels and the King Air spacer kit to mount panels with rolled edges while cutting.

Edmo Distributors and Aero Express distribute the Panel Pro 5925.

To learn more, visit [www.bullerent.com](http://www.bullerent.com) or call 701-255-7640.

*Buller Enterprises' Panel Pro 5925*



### **Cirris Systems Corp.**

Cirris Systems of Salt Lake City, Utah, unveiled additional pre-programmed connector libraries for its Pin-Sight system, a tool that helps assure correct pin-



*An operator inserts wires into a connector using Pin-Sight*

ning of electrical connectors. The company added the entire line of Sub-D and Micro-D connectors, bringing the number of total connectors now in the library to more than 15,000.

“Many attendees said that

they looked at Pin-Sight last year, but thought that it was much more useable now that we’ve added Sub-D and Micro-D connectors to the library,” said Brent Stringham, Cirris’ director of sales and marketing. “Also, the ability to import harness build programs directly from their electronic files was an exciting addition for many attendees.”

Pin-Sight’s high-res CCD camera guides the operator through the assembly process by electronically super-imposing, on a video monitor, a target circle around the correct cavity for the next wire to be inserted. In addition to guiding the operator to the correct cavity location, Pin-Sight uses a force-sense gauge to verify proper contact retention (pull-back test). Designed for low-volume harness assembly, Pin-Sight requires no mating connectors, allowing for fast and easy setup.

“The biggest question we get asked about Pin-Sight is ‘Can we also use it to pin connectors on the aircraft?’” Stringham said. “Be sure to attend the ‘What’s New’ presentation at the AEA convention next year.”

To learn more, visit [www.cirris.com](http://www.cirris.com) or call 800-441-9910.

## Cobham

Comant Industries of Fullerton, Calif., a division of Cobham, announced that the company has teamed with leading radio manufacturers such as Technisonic and Cobham Avionics—Wulfsberg to develop helicopter antennas that incorporate popular search and rescue frequencies into one radome. Combining the frequencies into one radome helps reduce the number of antennas installed.

The new CI 295-200 antenna is the first in a series of antennas Comant is developing and currently performing environmental testing on, according to Debra Hoppe, Comant's business development manager.

Comant also announced its new C190 TSO WAAS GPS antenna designed in a "teardrop" shape and its new Iridium antenna, the CI 490-22 model, which holds FAA C144 TSO.

In addition, the company introduced its C190 TSO WAAS GPS antenna that combines VHF communications capability within its ComDat product line. Comant continues to produce its ComDat WAAS GPS/VHF combination antennas specifically designed for use with Garmin WAAS GPS systems.

"This is the only C190 WAAS/VHF combination antenna available on the market," Hoppe said.

To learn more, visit [www.cobham.com/comant](http://www.cobham.com/comant) or call 714-870-2420.

## Dallas Avionics

Dallas Avionics of Dallas, Texas, announced the launch of the new Flightcell DZM3, a single, panel-mounted, all-in-one satellite phone system. It offers global dial-up voice calling integrated into the aircraft audio system, aircraft tracking, two-way messaging and automated flight following.



Comant's CI 295-200 antenna

Manufactured by Flightcell of Nelson, New Zealand, the Flightcell DZM3 includes an integrated Iridium transceiver and operates on the Iridium satellite network. The DZM3 also offers the option of connecting a 3G modem for operation on 3G cellular networks.

According to Flightcell's Vice President Hamish Neill, the Flightcell DZM3 "significantly reduces installation and setup cost because the electronics are all installed in one panel-mounted control head. The post-installation setup takes just minutes using PC configuration software or by navigating the intuitive setup menu on the NVG-compatible LCD display."

The system options include the external cellular modem and a two-wire/POTS cabin phone connection. Interfaces comprise of two RS232, one RS422 and one USB. There are also two digital and two analogue discrete inputs.



Flightcell DZM3

The currently distributed DZM3 is designed for civilian applications such as police, search and rescue, medevac, corporate and passenger aircraft.

To learn more, visit [www.dallasavionics.com](http://www.dallasavionics.com) or [www.flightcell.net](http://www.flightcell.net) or call 800-527-2581.

## Digitran

Digitran of Rancho Cucamonga, Calif., announced it has extended the life capability of its momentary rotary spring return 56 Series miniature rotary switches. The new rotary switches, called the 56 Series Extended Life, are designed for use in all panel-mounted avionics applications where space behind the system operator

*Continued on following page*

## NEW PRODUCTS

*Continued from page 43*



panel is very limited, a common situation in aircraft cockpit panels as well as aircraft galleys and lavatories.

The extended life capability is packaged in the same miniature 9/16-inch diameter as the standard 56 series and can serve as a drop-in replacement for high-cycle switch applications where extended life or reduced life-cycle costs are required. Sample and production quantities are available with an eight-to-10-week lead-time.

“This latest evolution of our 56 Series answers one of the biggest design dilemmas of modern aircraft subsystem design — getting spring return functionality into a tighter space while minimizing maintenance costs. The 56 Series Extended Life directly addresses this issue by maintaining a tight envelope with 10 times the life capability. The subsystem designer gets to have his cake and eat it, too,” said Larry Wismer, Digitran’s sales and marketing manager.

To learn more, visit [www.digitran-switches.com](http://www.digitran-switches.com) or call 909-581-0855.

### **DMA-Aero**

DMA-Aero of Danbury, Conn., introduced its new MPS43 Ultra Compact Air Data Test Set for fast and reliable fully automatic calibration and leak testing of pitot-static instruments on the ramp for all modern



*DMA-Aero's MPS43 Ultra Compact Air Data Test Set weighs 9 pounds.*

commercial fixed- and rotary-wing aircraft.

Designed for use in the cockpit, the portable test set connects to hoses fed through the cockpit window, minimizing damage to the pitot tubes. With RVSM-compliant accuracy, the instrument provides operation up to 55,000 feet altitude and 5-to-550 knots airspeed.

“It’s a major breakthrough in portability and ease of use for fully automatic instruments,” said Robert Knowles, president for DMA-Aero.

In 2001, DMA’s test set weighed 75 pounds. In 2007, a more compact version included wheels for easier transportation and weighed about 44 pounds. This newest test set weighs 9 pounds, according to Knowles.

It features rugged construction, a 12-month calibration cycle and 24-month warranty. Built-in protection to safeguard the test set and UUT includes isolation in the event of power loss. An internal battery backup allows continued operation when power is unavailable or inadvertently disconnected. The test set’s pump has a guaranteed 1,000-hour life and only runs on demand.

Other features include TAS temperature correction, altitude offset correction, automatic leak testing and EPR test.

The MPS43 test set is available for immediate delivery from DMA-Aero or DAC International.

To learn more, visit [www.dma-aero.com](http://www.dma-aero.com) or call 203-790-8371 or 512-331-5323.

*Continued on page 46*

## NEW PRODUCTS

*Continued from page 44*

### DPI Labs

DPI Labs of La Verne, Calif., launched Hi-Jack'D, a high-definition video distribution upgrade for existing DPI Labs entertainment and cabin management systems. The upgrade preserves the aircraft's existing switch panels and CMS architecture with minimal changes to structure and wiring.

"The beauty of this approach is that we can retain nearly the exact same configuration — same switches, same controllers — and provide this new upgrade feature for HD distribution," said Kevin Hayes, DPI Labs' vice president of sales and marketing. "It's true high-definition with support up to 1080."

## HI-JACK'D

The upgrade removes the existing analog AV unit and replaces it with an HD distribution unit and interface module.

"In essence, we map the existing software for headphones and AV selection to the new unit, creating a seamless upgrade," Hayes said. "One of the major advantages of updating a legacy DPI Labs system is the reduction of manpower to rework the woodwork, engineering the system and laying in new wiring. Since we eliminate most of these activities, our solution provides a very cost-competitive alternative to buying a new system."

To learn more, visit [www.dpilabs.com](http://www.dpilabs.com) or call 501-425-8727 or 909-392-5777.

### EMS Aviation

EMS Aviation of Atlanta, Ga., introduced the company's Aspire Portable AirMail System. Designed to be carried onto the aircraft rather than permanently installed, the 3-pound device connects to an existing Iridium antenna, allowing up to four passengers to send and receive text-only emails by smartphone.



EMS Aviation's  
Aspire Portable  
AirMail System

The system is designed for low-bandwidth devices such as BlackBerrys and iPhones. Because permanent installation is not required, an operator can carry the device from aircraft to aircraft, retaining connectivity on each flight — provided the pilot-in-command approves its use.

"With an Iridium antenna, any operator can begin using the system immediately, and in today's connected world, Portable AirMail offers a cost-effective, in-flight email-only solution," said John Jarrell, vice president and general manager of EMS Aviation. "Its portability makes it ideal for Iridium antenna-equipped, fixed-wing or helicopter operators who want to experience in-flight email without having to modify their aircraft."

The system will be available second quarter 2011.

To learn more, visit [www.emsaviation.com](http://www.emsaviation.com) or call 800-600-9759.

### EMTEQ

EMTEQ of New Berlin, Wis., unveiled DAYLIGHT, its new LED aircraft lighting system that replicates natural light. The variable white lighting system offers zone lighting, adjustable fade times and variable dimming from 3,500K (warm) to 5,000K (cool).

"There's no need for external power supplies, dimming modules or other additional hardware," said Kariann Tector, EMTEQ's business development manager.

Better shielding and routing techniques reduce susceptibility to induced noise for improved communication throughout the system. An additional feature of this system is the ability to monitor temperature as well as accumulated run time of the lights to track the system's performance over time.



EMTEQ's DAYLIGHT variable white lighting system

EMTEQ also exhibited its new, high-intensity LED dome light, the ELD30. Developed for the corporate and VIP aviation markets, the ELD30 is brighter than the 20W MR16 and is designed for overhead lighting in wide or narrow body fixed-wing aircraft as well as rotary-wing aircraft.

The dome light contains a front removable bezel, which is thermally isolated, preventing it from being hot to the touch. The front-mountable design offers easy installation. It offers variable and step dimming control.

EMTEQ also introduced eQuation, branding its line of cabin power products, which includes 110VAC and 220VAC aircraft outlets in North American and Universal styles, 220VAC European style outlets and inverters, as well as data and Ethernet ports.

To learn more, visit [www.emteq.com](http://www.emteq.com) or call 888-679-6170.

### Flight Display Systems

Flight Display Systems of Alpharetta, Ga., showcased its new line of iPhone, iPad and iPod aircraft accessories. The line features an iPod docking station for iPods and iPhones, an iPad arm mount for easy viewing, and an Apple cable adapter to charge batteries and share music during flight.



Flight Display Systems' 10.2-inch, low profile widescreen LCD and arm mount

The company also introduced an upgraded version of its LCD passenger display. Originally designed for the Cessna Mustang, the new 10.2-inch, low profile widescreen LCD and arm mount is now available for all retrofit projects.

They also introduced two new sizes for its cockpit "Flipper" LCD, a seven-inch widescreen version and a 10.2-inch widescreen version.

Flight Display Systems also offered a closer look at its Club CMS, a lightweight version of the company's cabin management system designed for King Air, Citation, Hawker and other business aircraft. The four-passenger system includes a Flight Display moving map, iPod cable adapters, two seven-inch widescreen LCDs and four individual seat controllers.

To learn more, visit [www.flightdisplay.com](http://www.flightdisplay.com) or call 678-867-6717.

### FreeFlight Systems

FreeFlight Systems of Waco, Texas, announced that the company's RANGR 978MHz ADS-B transceiver, designed to meet TSO-C154c requirements, will feature subscription-free datalink weather.

Also, the company expects STCs for several Class 1 and 2 aircraft to be completed third quarter 2011.

RANGR transceiver collects position, velocity and other aircraft information from aircraft GPS, altitude sensor and pilot control inputs through configurable RS-232/422/485 serial, ARINC-429 serial and/or discrete interfaces. It transmits the data once per second through non-diversity or diversity antennas. The pilot receives status information about the RANGR via the configured serial links and/or discrete signals.

To learn more, visit [www.freeflightsystems.com](http://www.freeflightsystems.com) or call 254-662-0000.

FreeFlight Systems' RANGR transceiver



Continued on following page

## NEW PRODUCTS

*Continued from page 47*

### Garmin International

Garmin of Olathe, Kan., unveiled its new GTN 650 and GTN 750 series touchscreen avionics. The panel-mount units received FAA TSO authorization in

March and are STC-approved on a broad model list covering most Part 23 fixed-wing aircraft.

The GTN 750 features a 6.9-inch screen while the GTN 650's screen measures 4.9 inches. The units feature new capabilities for nav/comm GPS systems, such as touchscreen operation, graphical flight planning with victor airways and high-altitude jet routes, remote transponder, remote audio control (750 series only),

SafeTaxi and electronic chart capabilities (750 series only).

In addition, both units offer an enhanced, higher-resolution picture (GTN 650 — 600-by-266 pixels; GTN 750 — 600-by-708 pixels) that has five times more pixels than the GNS 430W and 530W, respectively.

The desktop-like menu interface includes intuitive icons, animation and audio and visual feedback so pilots quickly know how the system is responding to their input. To help make entering data easier, both units have a finger anchoring bezel around the side of the display and fingerboard at the bottom of the screen.

The standard GTN 650 and GTN 750 feature a 10-watt COM, and a field upgradeable 16-watt version also is available. In third quarter 2011, Garmin will deliver a GTN 725, similar to the GTN 750, but is a

GPS-only unit. Also, a GTN 625 will be available that is a GPS-only unit, and a GTN 635 that is a GPS unit with VHF Communications radio. All units are SBAS/WAAS enabled.

To learn more, visit [www.garmin.com](http://www.garmin.com) or call 913-397-8200.

### Heads Up Technologies

Heads Up Technologies of Carrollton, Texas, unveiled its new In-Flight Entertainment System designed specifically for small- to mid-sized cabins. The system integrates high-definition monitors, Blu-ray players, ultra-thin passenger controllers, satellite radio as well as other options.

Audio and video are managed with an ultra-thin passenger control panel that integrates into cabin interiors, eliminating the need for additional loose components, such as handheld remote controls. The passenger control panel features an integrated headphone jack and can be plated to match existing interiors.

The system supports up to four independent passenger controls, while an executive system provides capacity for eight. Passengers can easily select between audio and video sources, such as Blu-ray players, gaming equipment, satellite radio, MP3s and more. All monitors are high-definition and support wide-screen formats.

Satellite radio comes standard, and an auxiliary panel



Garmin's GTN 750 series



Heads Up Technologies' In-Flight Entertainment System

device provides for attachment of other media, such as gaming equipment and other personal audio/video entertainment devices. The system's design reduces parts count by up to 40 percent from traditional systems, while providing cleaner video images.

The STC for Part 25 aircraft and production deliveries are anticipated in second quarter 2011, according to David Groos, senior vice president of sales and marketing for Heads Up Technologies. DAC International will provide worldwide aftermarket distribution of the system.

To learn more, visit [www.heads-up.com](http://www.heads-up.com) or [www.dacint.com](http://www.dacint.com) or call 972-407-1131 or 972-980-4890.

### **Honeywell International**

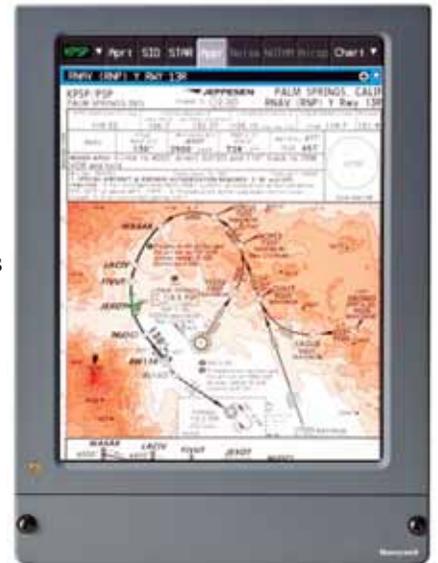
Honeywell of Phoenix, Ariz., announced it is partnering with Aspen Avionics to create a multi-function, touchscreen cockpit display for general aviation aircraft. Honeywell plans to bring the 5.7-inch, open-interface Bendix/King KSN 770 to market before the end of 2011.

"Honeywell's Bendix/King KSN 770 has an architecture that interfaces with more than 90 percent of general aviation aircraft flying today," said Rob Wilson, president of business and general aviation at Honeywell Aerospace.

Honeywell also announced it received FAA TSO for its version 6.1 flight management system software for Honeywell's FMZ-2000 flight management system. STCs are available on the Challenger 601 and the Falcon 900B. Additional aircraft model STCs including Falcon 900EX/C, Hawker 800XP and Gulfstream V and IV are anticipated in 2011. About 2,500 aircraft will be eligible for the upgrade.

Additionally, Honeywell provided details on its Primus Elite upgrade; a retrofit flat-panel display upgrade designed to meet existing requirements as well as planned growth functionality. The LCD upgrade is designed for legacy aircraft equipped with the DU-880 (8 inch by 8 inch) or DU-870 (8 inch by 7 inch) cathode ray tube displays. The new upgrade saves 6 pounds per display and requires less than 15 days downtime.

*Honeywell's Primus Elite*



Primus Elite DU-875 received certification on the Global Express. Additional certifications are scheduled for later this year on the Falcon 900EX/C, Citation X and Legacy 600. The Gulfstream PlaneDeck LCD upgrade, Primus Elite DU-885, will be available for the GV beginning third quarter 2011. Follow-on upgrades for the GIV and GIV-SP will be available beginning in the fourth quarter this year.

To learn more, visit [www.honeywellbusinessaviation.com](http://www.honeywellbusinessaviation.com) or call 602-365-3099.

### **International Communications Group**

International Communications Group of Newport News, Va., introduced a new cordless cabin telephone system called e-Phone for the business aircraft market. Based on digital enhanced cordless telephone technology, the e-Phone system provides telecom features such as intercom calling, conferencing and call hold.



*Continued on following page*

## NEW PRODUCTS

*Continued from page 49*

It incorporates additional capabilities such as active cabin-noise reduction, Bluetooth compatibility and advanced power control, which extends battery life with an auto shutoff feature.

ICG's e-Phone utilizes digital VoIP technology and provides SIP calling via Ethernet connections, allowing it to independently handle two simultaneous calls and support up to four handsets, with each having its own unique telephone number. It also supports two-wire analog connections to legacy communication systems.

"The primary intent was to develop a device that allows the aircraft passenger to make a seamless transition from the office on the ground to an office in the sky without really noticing a difference," said Jeff Saucedo, ICG's vice president of OEM sales.

The analog voice channels offer a fall-back when digital communication systems are not available or have possibly failed, according to Saucedo.

To learn more, visit [www.icg.aero](http://www.icg.aero) or call 757-947-1030.

## Laversab

Laversab of Sugar Land, Texas, unveiled its 6500-HA Automated Air Data Test Set for testing and calibrating altimeters, airspeed/Mach indicators, climb indicators, flight data recorders, air data computers and EPR indica-



*Laversab's 6500-HA Automated Air Data Test Set*

tors. It offers higher accuracies of 0.001 inHg on the static output and 0.002 inHg on the pitot output over the previous model 6500. Using "profiles," the operator can perform a test using a single key on the front-panel keypad. The test set is available now.

"The unit is extremely easy to use, accurate and reliable, and comes with first-rate customer support," said Nandu Balsaver, Laversab's owner. "The unit meets the latest RVSM requirements and requires calibration only once a year. It's ideal for replacing mercury manometers and water columns for calibration of air data instruments, air data computers and pitot-static testers. With an optional 6500-PVS (pressure vacuum system) the 6500-HA becomes the ideal test set for instrument repair shops."

To learn more, visit [www.laversab.com](http://www.laversab.com) or call 281-325-8300.

## Mid-Continent Instruments

Mid-Continent Instruments of Wichita, Kan., announced True Blue Power, its new line of power products for general aviation. The products, which are housed in a blue casing, expand the company's offerings to include aircraft inverters and emergency batteries.

Thirty percent smaller than traditional inverters, the MD50 500VA Static Inverter supplies in-flight power for a variety of cabin accessories such as laptops, cellphones and MP3 players. The inverter is TSO certified and delivers 500 watts of power.

Mid-Continent Instruments also announced that the company has received TSO certification for its MD15 2-inch altimeter and MD25 2-inch airspeed indicator.

"The MD15 altimeter and MD25 airspeed indicator complement our 4200 electric attitude indicator and complete the 2-inch standby package," said Brett Williams, engineering manager for Mid-Continent Instruments.

The 2-inch, three-pointer altimeter is offered in 20,000-foot and 35,000-foot models and includes options such as a barometric scale in inches of mercury or millibars and a left- or right-hand baro set knob. The instrument is FAA TSO-C10b certified.

The 2-inch airspeed indicator comes in multiple ranges: 160, 200, 260, 300, 350 and 400 knots. Range markings can be



Mid-Continent Instruments announced True Blue Power, its new line of power products for general aviation.

added to meet specific aircraft requirements. The instrument is FAA TSO-C2d certified for fixed-wing or rotorcraft operation.

Both instruments have anti-reflective glass, which enhances visibility and reduces pilot fatigue. Units have a field-replaceable LED or incandescent light tray available in 5, 14 and 28 VDC. The MD25 and MD15 are typically rear-mounted and can be installed individually or as part of a three-unit standby package with the 4200 attitude indicator.

To learn more, visit [www.mcico.com](http://www.mcico.com) or call 316-630-0101.

### Nav-Aids

Nav-Aids of Montreal, Quebec, introduced a new test adaptor for the new B.F. Goodrich SMART multifunction probe.

The test adaptor connects in seconds and all at once to the pitot, static and alpha (angle of attack) ports of the aircraft air data probe.

With input from aircraft manufacturers, Nav-Aids has developed a complete kit with test hoses and support accessories, enabling the avionics technician to perform air data tests per the maintenance manual.

Test adaptors and complete air data accessories kits are available for the ERJ 170/190, Falcon 7X, G 650, HondaJet, Learjet 85 and Phenom 300, according to Joseph Galliker, technical sales manager for Nav-Aids.

To learn more, visit [www.navaidsltd.net](http://www.navaidsltd.net) or call 514-332-3077 or 877-332-3055.

Nav-Aids' test adaptor for the new B.F. Goodrich SMART multifunction probe



### PS Engineering

PS Engineering of Lenoir City, Tenn., introduced its new PAR100EX system, a 760-channel, VHF communication radio that's fully integrated with the aircraft's audio control panel. The PAR100EX system combines an audio control panel and audiophile stereo intercom with IntelliVox, Bluetooth connectivity and a remote-mounted VHF aviation communications transceiver.

The system saves cockpit space, weight and money over separate stand-alone systems, according to Gary Picou, PS Engineering's vice president.

Ideal for the experimental and light sport aviation market, the unit will be FCC-approved but not hold FAA approval for aircraft certified under standard airworthiness requirements.



PS Engineering's PAR100EX system

PS Engineering also announced that the company is taking a new approach to designing its new PAC35 audio panel. The buttons aren't labeled; instead, the bezel label provides the nomenclature, allowing the installer added flexibility. The basic unit has 14 buttons that can be assigned different functions.

"In the past, changing a button nomenclature was expensive," Picou said. "Labels are comparatively cheap, and we have a great relationship with the supplier, so a variety of common labels can be augmented with custom artwork for any application imaginable. Well, almost any."

The PAC35 will support up to seven transceivers and seven switched receiver inputs, which are indicated by the button color as selected transmitter, selected receiver, or not selected. The unit has a stereo intercom with music input, and includes Bluetooth connectivity for music and phone.

Continued on following page

## NEW PRODUCTS

*Continued from page 51*

The PAC35 will be available fourth quarter 2011.

PS Engineering also announced two new audio panels — the new PMA8000C with a third transceiver and the PMA8000D for dual audio installations. The audio panels will be available late 2011.

To learn more, visit [www.ps-engineering.com](http://www.ps-engineering.com) or call 865-988-9800.

### Rockwell Collins

Rockwell Collins of Cedar Rapids, Iowa, showcased its new Ascend Aircraft Information Manager, offering secure, remote and wireless data transfer capabilities for Pro Line 4- and Pro Line 21-equipped aircraft.

“The Ascend Aircraft Information Manager replaces the current method of manually transferring information via USB or laptop, saving time and labor for aircraft operators, while ensuring the integrity of the information,” said Steve Timm, vice president and general manager for information management at Rockwell Collins.

Operators of Pro Line 4 or Pro Line 21 aircraft will be able to access the aircraft information manager service by adding the Rockwell Collins IMS-3500 informa-

tion management server to their aircraft.

The aircraft information manager is capable of securely uploading flight-critical database updates such as flight management system, terrain awareness warning system, surface management system, electronic charts and user documentation to the aircraft anywhere in the world, as well as downloading maintenance information post-flight.

Flight departments can monitor the progress and confirm successful installation of uploads by logging on to the Ascend web portal.

To learn more, visit [www.rockwellcollins.com/ascend](http://www.rockwellcollins.com/ascend) or call 319-295-4085.

### San Luis Avionics

San Luis Avionics of San Luis Obispo, Calif., Part 145 repair station, avionics test equipment manufacturer and distributor, announced its new Integrated Avionics Test Panel designed for avionics technicians and repair stations.

Engineered to increase avionics test and repair capabilities, the IATP is a self-contained test panel with a built-in power supply designed for today’s modern integrated nav/comm GPSs and displays. It meets leading avionics manufacturers’ specifications, including



San Luis Avionics' Integrated Avionics Test Panel

prescribed test loads and test points, to quickly test and identify equipment status.

“There are more than 90 test procedures and up to six sub-tests each on a GNS 430W to put an 8130 tag on the unit,” said Don Dominguez, general manager of San Luis Avionics. “With this test panel, you can perform them all, in accordance with the manufacturers’ maintenance manual.

“We did extensive research, questioning bench technicians, and asking them what they wanted in a test panel, and combined that with the manufacturers’ testing requirements to come up with an easy-to-use test panel, with a simple layout. It took a little extra time to engineer and develop the IATP, but we believe it was worth the effort. A test panel designed for technicians, by technicians.”

To learn more, visit [www.sanluisav.com](http://www.sanluisav.com) or call 805-783-0430.

### Sandel Avionics

Sandel Avionics of Vista, Calif., announced it has added WireWatch, a wire-strike avoidance feature, to its ST3400H HeliTAWS terrain avoidance system.



WireWatch has been added to Sandel’s ST3400H HeliTAWS terrain avoidance system.

Comprising a detailed database and a proactive alerting capability, WireWatch helps helicopter pilots avoid transmission lines and other hard-to-see hazards.

Sandel’s ST3400H HeliTAWS is a three-ATI terrain safety system that uses the company’s

TrueAlert adaptive algorithms to understand pilot intent and provide terrain alerting. With TrueAlert, pilots can take off, cruise, hover and land at off-airport locations

without triggering nuisance alerts, while still receiving the benefits of Class A terrain and obstacle warnings during the entire flight. The system is completely automatic and does not require pilot management during flight.

HeliTAWS also offers off-airport landing capability; a high-resolution 3-D terrain display; Class A HTAWS functionality; and growth features such as NVIS compatibility and now WireWatch. In addition to helicopter emergency medical services, HeliTAWS is suited for demanding missions such as oil rig operations, tactical military support, airborne law enforcement and search and rescue.

To learn more, visit [www.sandel.com](http://www.sandel.com) or call 760-727-4900.

### Shadin Avionics

Shadin Avionics of St. Louis Park, Minn., announced the first two prod-

ucts of the company’s new AIS-450 Trident Digital/ Synchro Data Converter

Platform. Available now, the units function individually as a single-channel ARINC 429 to synchro heading and a three-channel ARINC 429 to synchro heading, pitch and roll. Both products hold TSO authorization.

The AIS-450 hardware is configured with digital and discrete I/O in addition to the three-channel ARINC 407 three-wire synchro output for making the digital-to-synchro conversion. The platform supports customer-defined configurations.

The AIS-450 can be used for, but is not limited to, ARINC 429 label 314 or 320 to synchro heading output;

Shadin Avionics’ AIS 450 Trident: ARINC 429 to 1 or 3 Channel Synchro Converter



*Continued on following page*

## NEW PRODUCTS

*Continued from page 53*

ARINC 429 labels 314 or 320, 324 and 325 to synchro heading, pitch and roll output; ARINC 429 to ADF, DME synchro; ARINC 429 or serial to selected course waypoint bearing; and serial-to-synchro.

The unit offers a synchro output accuracy of better than +/- 0.1 degrees, according to Brian McMillan, Shadin Avionics' director of engineering.

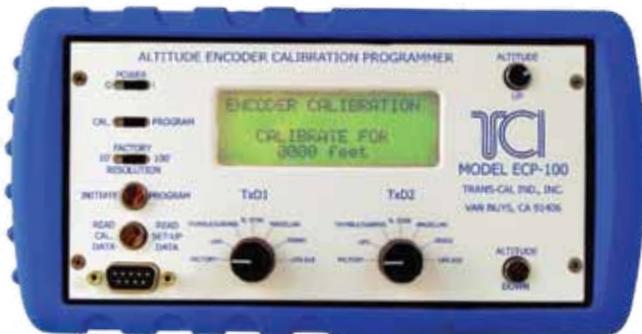
To learn more, visit [www.shadin.com](http://www.shadin.com) or call 952-927-6500.

## Trans-Cal Industries

Trans-Cal Industries of Van Nuys, Calif., unveiled its new ECP-100 Altitude Encoder Calibration Programmer and its ATS-350 ICAO Altitude Data Test Set.

The ECP-100 provides avionics technicians the ability to assign serial port protocols and 100-foot or 10-foot resolution, as well as program the calibration curve on Trans-Cal altitude encoders via the RS232 port.

"The ECP-100 offers a quick, rugged and reliable method to set serial port protocol assignments — message and baud rate — and calibrate Trans-Cal altitude encoders without using a PC," said John Ferrero, president of Trans-Cal. "Trans-Cal encoders are the only altitude encoders in the industry that can transmit two different serial data protocols simultaneously, and also allow digital adjustment of the calibration curve."



*Trans-Cal Industries' ECP-100*

The solid-state ATS-350 test set offers ICAO pressure altitude data display and testing in a single box. Featuring a rugged design for use on the bench and in the aircraft, the test set's ICAO code input is diode-isolated to prevent the test set from interfering with other systems connected to the altitude encoder.

The ATS-350 incorporates an audible alert and relay output triggered at either 100-foot or 1,000-foot altitude code transitions.

To learn more, visit [www.trans-cal.com](http://www.trans-cal.com) or call 818-787-1221.

## TrueNorth Avionics

TrueNorth Avionics of Ottawa, Ontario, introduced an advanced broadband data router that provides faster airborne Internet and email performance for business aircraft. The company incorporated what it calls

Stage2 technology, improving performance up to 400 percent over other systems, according to Mark Van Berkel, president, CEO and founder.

The router, which creates a cabin Wi-Fi hot spot for use with smartphones, laptops and other wireless devices, is available in two configurations — a compact, stand-alone version that can be added to existing broadband systems and an ARINC-sized 4MCU LRU that combines Stage2 technology with a cabin communications and networking system.

It's also available to operators with a Simphone OpenCabin airborne telecom system via an upgrade to their system's LRU. The first certified installation is currently underway on a Gulfstream GV aircraft.

TrueNorth also introduced the Simphone Master Console for large aircraft, which features a full-color, touchscreen graphical display of all the aircraft's communications links



*TrueNorth Avionics' Stage2 router*

and stations. Gore Design Completions in San Antonio, Texas, is currently installing the console on a variety of Airbus business aircraft.

In addition, TrueNorth also announced a DO-160-qualified wireless handset with TSO-compliant, high-capacity lithium-ion battery as well as new applications for its Simphone OpenCabin airborne telecom system.

To learn more, visit [www.truenorthavionics.com](http://www.truenorthavionics.com) or call 877-610-0110.

### **Universal Avionics Systems Corp.**

Universal Avionics of Tucson, Ariz., announced it plans to certify and release a FANS 1/A-compliant UniLink UL-800/801 Communications Management Unit in 2011. The CMUs provide a flexible growth path for business, transport, regional and government/military operators.

Featuring Future Air Navigation System and VHF Data Link Mode 2 capabilities, the UL-800 and UL-801 enable digital high-speed datalink communication between the flight crew and air traffic control using satellite and VHF datalink technology.

The units offer controller-pilot data link communications, automatic dependent surveillance—contract (ADS-C) capabilities, departure clearances, flight management system flight plans and textual/graphical weather reports, allowing the operator to fly routes that save fuel and shorten flight times.

The UniLink's VHF data radio enables text-based airline operational communication/airline administrative communication and flight information services messages over the VDL Mode 2 network. Customers can select two configurations: UniLink UL-800 for use with the aircraft's onboard VDR or UL-801 with an internal VDR.

The VDL Mode 2 network, a high-speed and high-capacity digital communications network, provides 13 times the message capacity than aircraft communications addressing and reporting system. Use of VDL Mode 2 tends to be more cost-efficient than ACARS, as service providers encourage users to transition to the new network, according to Robert Clare, Universal Avionics' director of North American sales and marketing.

To learn more, visit [www.uasc.com](http://www.uasc.com) or call 800-321-5253. □



Universal Avionics' UniLink UL-800/801 Communications Management System

*The ever-popular New Product Introductions at the AEA International Convention & Trade Show in Reno, Nev., were live-streamed across the Internet by the Aero-News Network. To watch the presentations, visit the AEA website and select the presenting business of your choice at [www.aea.net/aeatoday.asp?ID=108](http://www.aea.net/aeatoday.asp?ID=108).*

