



The

# Flightline

EAA Chapter 958 San Marcos, TX  
Where every day is a good flying day!

## August 2015 Issue



The Leader In Recreational Aviation

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**Next Chapter Meeting**  
**Redbird Skyport**  
 San Marcos Airport  
 August 15, 2015, 10:00 am  
**Coffee and Donuts prior to the meeting**

**Program:** Aviation Fuels

## Prez Sez

### How Do 958

Having just read my Av/Web e-mail It has once again brought safety to mind. Over the last several months or so I've heard or read of a number of accidents both on the ground and in the air which has caused lost of life and property. The NTSB has just released a statement that GA fatalities are up for 2014. Fatal accidents in the U.S. increased to 253 in 2014. Up from 222 in 2013. The fatality rate climbed to 1.4 accidents per 100,000 flight hours compared to 1.12 in 2013. I've also heard this week that the Just aircraft SuperSTOL demonstrator with company owner and pilot Troy Woodland at the controls went down on a demonstration flight and crashed just after take off from the factory strip. The cause said to be water in the fuel that had been used to top off just before flight. Then a man mowing the turf runway at Frazier airpark near Hollister, California was struck by a Ryan pt-22 That was attempting a landing on the field. The aircraft struck the mower and the operator was killed.

Having read this last bit of info it reminded me that many of our own members live on or operate from turf. So one must stay aware of ones surroundings at all times and focused as to what is happening not just in the air but on the ground. These items should remind us that no matter what one does or where one is, things can and probably will happen. And more often that not, for the worse. Not to harp on the aviation activities but just in daily life things can get bad real quick. This last week a man setting at a red light at Eisenhower Rd. And interstate 35 was shot when, a man pulled up beside him got out of his vehicle with rifle in hand and fired the weapon striking him. One does not know where, when, or how things will happen. Staying in tune with your environment and what is taking place will help kept you and yours safe. (cont. next page)

The meeting will start at 1000 hrs. coffee and donuts will be on the menu again. The Speaker is a representative from Royce Groff oil company speaking on aviation fuel. He is a high hour pilot has owned many aircraft and is currently the owner of an aircraft. He confided in me that he attended Oshkosh this year and has the hots for building a Rans S-20 Raven. He will give a brief on how the fuel is produced, availability, distributed, and recommendations of fuels used with aircraft. Should be very interesting will have a question and answer secession when he's done. For those doing your own maintance this could be someone that could be a supply point for aviation oil. I hope you will all attend and hope to see all on the 15th.

Phillip Steele

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## Google Bringing Down Cost of ADS-B?

From air & Space Magazine

Find a way to keep a fleet of drones from crashing into one another—and the rest of us. Private pilots are about to get a little help from someone they didn't know was a friend: Google. The Internet search giant [announced last March](#) that it plans to develop very, very, very cheap ADS-B transceivers, little avionics boxes that tweet “I am here!” The Federal Aviation Administration has decreed that ADS-B squawkers (the acronym stands for automatic dependent surveillance-broadcast) must be installed in all U.S. aircraft by 2020. (Well, all aircraft flying in controlled airspace.) Those position squawkers enable air traffic controllers and other aircraft with receivers to know an airplane’s location with a GPS-based precision that radar can’t match. But because of its high purchase and installation costs—estimates range from \$4,000 to \$7,000—many private aircraft owners are resisting adopting the technology as long as possible. Google plans to squeeze that cost way down.

Why is Google bothering with ADS-B hardware? Drones. Lots of drones.

## From The Editor

Hello everybody. Seems like just yesterday we were planning for the Redbird fly-in and here it is nearly the end of summer already. Of course every new season brings with it its share of opportunities for the chapter. We hope to have some new speakers lined up and tentatively we will be hosting another Young Eagles program at Redbird. There will be opportunities for members to participate in chapter leadership, we may be able to offer a workshop, and possibly help our members with the completion of their respective projects. And just maybe we can get a chapter contingent together to attend Airventure next year.

And speaking of Airventure – here are some of the stats:

- Attendance: Approximately 550,000, with a total attendance increase of approximately 2 percent.
- Total aircraft: More than 10,000 aircraft arriving at Wittman Regional Airport in Oshkosh and other airports in east-central Wisconsin.
- Total showplanes: 2,668 (up 1 percent over 2014) – including 1,031 homebuilt aircraft, 976 vintage airplanes, 350 warbirds, 130 ultralights and light-sport aircraft, 101 seaplanes, 30 rotorcraft, and 50 aerobatic aircraft.
- Forums and Workshops: A total of 1,048 sessions attended by more than 75,000 people.
- Guests registered at International Visitors Tent: 2,299 visitors registered from a record 80 nations.

**See you at the meeting!**

# Give Flight Helps Chapters and Members Take Flight



**July 25, 2015** - Ron Wagner, retired EAA employee and chairman of the Give Flight tent, predicts that by the end of EAA AirVenture Oshkosh 2015, more than 2,500 people will have participated in the Give Flight project.

The goal of Give Flight is to have five sets of aircraft wings built in less than one week then shipped out to five EAA chapters across North America for incorporation into a completed aircraft.

Ron said throughout the history of AirVenture, there have been a few instances in which EAA partnered with aircraft companies to build an airplane from the ground up.

Those companies approached EAA again and it was decided that the tradition would be brought back, but with a twist: get the membership involved. They wanted to demonstrate to chapters and members that homebuilding is both affordable and fun, especially as a team.

“They came up with the idea to build these five sets of wings and give them to chapters across the country,” Ron said. “So they made an announcement, took an application process, got chapters to apply to receive the wings—so we came up with the concept of Give Wings.”

As of Saturday morning, Ron said one set of wings had already been shipped out. If plans hold, those wings are coming back.

“In 2017, 2018, we’re going to try to get all five of those chapters to fly those wings to Oshkosh and have a big reunion,” he said. “It’ll be a great demonstration of how a chapter can really do this.”

Volunteers at the Give Flight tent have been particularly excited about the number of families participating, according to Ron.

“(Usually) the father or the mother is very interested in aviation, but to be very successful in the homebuilt project, particularly if you’re at the age where you have a family, you have to get the family involved and enthusiastic because it takes a chunk of your time and money and space in your home or workshop,” he said.

So far, Ron said the program has been a success because it has encouraged members to start their own homebuilding projects. “It’s very gratifying to see the number of people that come back and have said ‘Well, I went home and ordered my kit after I pulled that rivet and I’m starting on a project now,’” Ron said. “Most of the people who have done that have come back and helped us volunteer because they’re so enthused.”

The Van’s RV-12 wings go to Chapter 27 of Meriden, Connecticut; Chapter 555 of Las Cruces, New Mexico gets the Sonex Waix wings.

Three sets of wings were donated by Zenith, with 750 Cruiser wings destined for Ottawa, Ontario, Canada Chapter 245 and Bolingbrook, Illinois Chapter 461, while CH650 wings are being sent to Chapter 84 of Snohomish, Washington.

Aircraft Spruce and Specialty donated each chapter a \$500 gift for their project.

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## Continental Builds on an Innovation Growth Plan

By James Wynbrandt



Jimmy Tubbs of Continental explains engine options.

Photo credit:  
Phil Weston

**July 26, 2015** - Continental Motors CEO Rhett Ross said the company has a simple plan for future growth: “Innovate, innovate, innovate,” he told a crowd at the company’s display here at EAA AirVenture Oshkosh (Booth 229-234).

As part of the plan, Continental announced completing acquisition of Engine Components International, Precision Machined Parts, Airmotive Engineering Corporation, Aircooled Motors, Sterling Machinery and Process, EC Services, and the Titan engine line from Danbury Aerospace (DA). The acquisition bolsters Continental’s move into engines for experimental aircraft through the Titan brand, which offers four- and six-cylinder engines ranging from 145- to 305-hp.

Ross said going forward Continental will incorporate “next generation electronic engine controls across our full range of products,” and expand into higher horsepower engine families.

The Mobile, Alabama-based company is currently expanding engine maintenance capacity at its facilities in nearby Fairhope, Alabama, where it plans to offer airframe maintenance, repair and overhaul (MRO) services for aircraft ranging in size up to mid-size business jets. The company is also evaluating an MRO location in Europe.

Commenting on the global market for its products, Ross said, “North American and Europe are very mature, they’re not really growing,” with the general aviation piston market in the U.S. expanding half a percent annually. “But there are still some 200,000 aircraft and engines in service, and the same thing on a smaller scale in Europe. [But] we see huge growth opportunities in Africa and China.”

Continental, owned by AVIC (Aviation Industries of China), is also “investigating locations in China to establish a maintenance center that will have the same capability” as its U.S. facility, with particular emphasis on diesel engine work. Though the China market isn’t growing as quickly as anticipated, Ross said the company will eventually add manufacturing capacity there. Citing the “classic hockey stick growth chart” of auto sales in China, he said, “We don’t think we’re anywhere near the hockey stick curve yet, but we have to plan for that.”

Continental also recently debuted a new, production-ready version of its diesel powered CD-230 engine. The improved 4-cylinder, air- and oil-cooled 230-hp engine has a 9,800-foot critical altitude and 20,000-foot service ceiling. Performance limits in hot day operations at full power have been increased to 113°F, and operational capabilities in cold weather are also enhanced.

The engine is aimed at markets where avgas is either prohibitively expensive or unavailable, and is suitable for both fixed- and rotor-wing applications, and for OEM and retrofit installations. Ross said Continental already has interest in the engine from aircraft manufacturers that he declined to disclose. “Unfortunately, OEMs get very worried about pre-announcing,” he said. “They don’t want to hurt current sales. I can say they are large and interesting customers.”

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## Dynon adds ADS-B Options and Advanced Panelware

By James Wynbrandt



**July 20, 2015** - Dynon Avionics, manufacturer of glass panels for experimental-amateur built (E-AB) and light-sport aircraft (LSA), is announcing news across its entire product line here at EAA AirVenture Oshkosh. But the major product unveiling is the SV-GPS-2020, a 2020-compliant ADS-B GPS position source for its SkyView and Advanced AF-5000 series of glass panelware. Priced at \$590, Dynon calls the new GPS receiver/antenna “the industry’s most affordable” solution for compliance with the FAA’s mandate. The mandate requires aircraft operating in airspace that requires a transponder to have ADS-B (automatic dependent surveillance-broadcast) “out” capability as of January 1, 2020.

As a drop-in replacement, aircraft equipped with Dynon’s current SV-GPS-250 receiver require no additional wires, coax, or installation of new boxes. When combined with Dynon’s SV-XPDR-261 Mode S transponder (\$2,790), SkyView and Advanced Flight Systems meet all mandate requirements. The system also supports input from Dynon’s SV-ADSB-470 traffic and weather receiver.

Dynon is also debuting the first wave of accessory products that complement builders’ major avionics purchases. The accessory products include an autopilot level button, dual ADAHRS (air data/attitude/heading reference system) mounting kit, pitot/static/AOA pneumatic installation kit, panel module faceplate blank, ADS-B harness, transponder harness, and transponder, and ADS-B antennas.

Meanwhile, Dynon (Booth 4034) has also expanded its presence at AirVenture, creating a Builder Central tent and aircraft exhibit space outside Hangar D. Staffed by Dynon's Builder Central Team, AirVenture attendees can get avionics transition help and builder advice. The outdoor exhibit also features aircraft built by Dynon Avionics and Advanced Flight Systems employees.

The Woodinville, Washington, company is also highlighting its Quick Panel Systems, offered through its Advanced Flight Systems division. These turnkey, ready-to-install instrument panels are custom built for builders "who would rather leave their whole panel to the experts," says marketing manager Michael Schofield.

Dynon has also dropped the price of its D2 Pocket Panel, a self-contained EFIS designed for use in any aircraft, to \$1,095, and is offering even lower "show special" pricing through its dealers here at the fly-in. Built with the same solid-state attitude technology as in other Dynon products, the D2 is designed to serve as a portable standby system for GA pilots, for use in the event of a vacuum pump or gyro failure that would create a "partial-panel" situation. Stocking dealers at AirVenture include Aircraft Spruce, Pacific Coast Avionics, and Gulf Coast Avionics.

Dynon also unveiled free software updates for both SkyView and the AF-5000 platforms (13.0 and 12.0, respectively). SkyView 13.0 system software adds predictive terrain alerts to its synthetic vision, support for additional en route charts for customers outside of the U.S., and French and German language packs. For pilots who fly behind the Rotax 912 iS powerplant, the software update provides new information including throttle position, cold start assistance, and eco/power mode indications. The upgrade will be available shortly after this year's AirVenture.

Advanced Flight Systems' new 12.0 system software for the AF-5000 series adds inset windows, allowing pilots to place small windows in their PFD (primary flight displays) depicting traffic, flight plan, profile view, G-meter, and video. The update also provides enhanced support for Avidyne's IFD540 and IFD440 navigators and ForeFlight Mobile applications, as well as access to charts and other data from Seattle Avionics. AF-5000 series 12.0 software is available now.

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## Free EAA Webinars

August 12 - 7 p.m. CDT  
Chapter Chat: Tax Exempt Basics for  
Chapters - Part 2

Presenter: Patti Arthur

August 19 - 7 p.m. CDT  
When the Engine Goes Silent...  
FAA Wings Credit

Presenter: Larry Bothe

August 26 - 7 p.m. CDT  
Flying with Your iPad using WingX  
Pro7 - Part 2

FAA Wings Credit

Presenter: Jim Sweeney

September 9 - 7 p.m. CDT  
Eagle Flights: Making New Pilots  
Presenter: Brian O'Lena

September 16 - 7 p.m. CDT  
What's the Spin on Stalls?  
FAA Wings Credit

Presenter: Prof. H. Paul Shuch

September 23 - 7 p.m. CDT  
Electronic Ignition for Aircraft Engines  
FAA AMT & Wings Credit

Presenter: Klaus Savier

September 2 - 8 p.m. CDT  
All About Alterations  
FAA AMT & Wings Credit  
Presenter: Mike Busch