

# WACO Classic News - Third Quarter 2012



## Newsletter Highlights:

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## Show calendar:

**AOPA Summit** Oct 11-13  
Palm Springs, CA

<http://www.aopa.org/summit/>

**Sun-n-Fun** April 9-14  
Lakeland, FL

<http://www.sun-n-fun.org/>

**WACO Aircraft**  
15955 South Airport Road  
Battle Creek, MI 49015  
269-565-1000  
[FlyWaco@WacoClassic.com](mailto:FlyWaco@WacoClassic.com)

[www.WacoGear.com](http://www.WacoGear.com)

## Cross Country to Palm Springs with AOPA

Without a doubt, flying across the country in the WACO is one of the most thrilling and magical experiences I have ever had. Early this October, AOPA Senior editor Dave Hirschman and a photographer are



*Mars at 30 feet from a WACO (also known as New Mexico)*

flying from the factory in Battle Creek, MI to the AOPA Summit in Palm Springs. They plan on documenting the trip and preparing broadcasts for the Summit and AOPA Web Site. Dave has invited all WACO YMF owners who are planning to fly their airplanes out or are just looking for a truly memorable adventure, to join him along the way. The route is flexible, and will be determined by who is talking part and what interesting experiences present themselves along the journey. Contact Dave at:

[Dave.Hirschman@aopa.org](mailto:Dave.Hirschman@aopa.org)

***“There is no better airplane to excite people about what's great about aviation than the WACO YMF-5D”***



<http://groups.yahoo.com/group/wacoclassic/>



## New Production Engine Update

Progress on the new production Aluminum engine cases used by WACO Classic in the new D model has been slower than hoped. A report late last week indicates that the final machining operations are nearly complete and new cases will be shipping in the next few days. The Jacobs R-755 has two unique cases, one design for the older 275 HP (R-755-B2) engine used on the "C" models and prior WACOS, and the newer 300HP (R-755-A2) that's used in the new WACO YMF-D. While there are "A2" cases of old stock available, they are made out of magnesium. These cases have proven to be prone to cracking and other service problems. WACO Classic only uses the more robust Aluminum case in our aircraft. Photos below of the first new production aluminum radial engine cases made in over 40 years.



## WACO Owners Group

Recently a new WACO Pilot and Owners user group was started by WACO owner and Pilot Ernie Betancourt on Yahoo. Ernie owns serial number 87, a beautiful RED YMF and is a very active aerobatic pilot in his WACO. The website is a good resource to discuss your airplane, get ideas from others and learn more about operating your airplane.

Waco YMF group address: <http://groups.yahoo.com/group/wacoclassic/>

Great Lakes owners also have a website, located here: <http://groups.yahoo.com/group/greatlakesbiplane/>







### ***The Great Lakes by Waco Classic Project Update August 29 , 2012***

*The WACO Great Lakes team consists of 10 members, with project manager Rich Hunter taking the lead in coordinating assembly of the first conforming aircraft. Team leaders for each assembly stage have been determined and they are actively working on aircraft in their areas of responsibility.*

*The project is moving into high gear, with nearly all of our vendors online, all of the engineering updates approved and drawing updates mostly complete. Approximately 90% of all component parts for the first several aircraft are in stock, with the balance on order or in design review.*

*Some recent specification changes include finalization of the brake design and selection of Grove Wheels and Brakes as vendor and changes to Transponder and Radio vendor, this was done primarily for weight and performance improvements. We have added and refined our optional equipment list, new options include a composite prop from MT and an electronic Attitude Indicator.*

*The first airframe (sn. 1200) is in primary assembly; at this stage we install many of the internal systems, bulk heads and other internal components. Engine attachment was completed recently, along with landing gear installation. The wings have started assembly. We have started welding the first customer airframe sn. 1201 and component parts for sn. 1202*

#### **AIRCRAFT SPECIFICATIONS**

***Model Designations: 2T-1A-2***

***Standard Equipment Price: \$ 245,250***

- Type Certificate: A18EA Revision 11
- Crew: 2
- Day & Night VFR
- Length: 20 ft 4 in, Wingspan: 26 ft 8" , Height: 7 ft 4"
- Empty weight (approx): 1,220 lb, Gross: 1,800 lb
- Power plant: Lycoming AEIO-360 Fuel Injected 180 hp
- Propeller: Hartzell Aerobatic Constant Speed
- Inverted Fuel and Oil system

***(Continued on page 7)***



## Safety Notice SN-038

### Proper grounding of aircraft during refueling operations

Applicable Aircraft: All Waco YMF series and Great Lakes 2T series

Issued: August 2, 2012

The generation of electrical static charge is a natural phenomenon that occurs to aircraft as they fly through the air. An arc produced in the presence of flammable vapors and liquids is a hazardous condition and may produce a dangerous fire or explosion resulting in serious injury and death. This may occur during the refueling process when an improperly grounded aircraft comes in contact with a refueling hose.

The only approved grounding locations on WACO Classic YMF and Waco Classic (Great Lakes) 2T-1A-2 series aircraft is the engine exhaust stacks. Care should be taken to ensure a proper electrical contact, corroded or coated exhaust stacks may not provide sufficient ground. Electrical conductivity between the exhaust stack and airframe should be periodically checked using a conductivity tester.

Under wing tie down lugs are not grounded to the airframe and should not be used for grounding purposes.

**Owners and Operators are encouraged to review all safety notices and service information located at the support page on the Waco Classic Aircraft website. Link: <http://www.wacoaircraft.com/support/>**

## Employee Focus—Julie Bunday

Julie has been the controller here at WACO for the last 4 years. She had a little trouble getting used to wearing jeans to work, but now we doubt she'd want to go back to corporate attire.

She's married and has 2 little girls who keep her busy after work with dance classes and soccer matches. Her husband is a pilot. One thing you might not expect about Julie is that she's a big football fanatic. In her house, she's the one glued to the the TV when football is on.

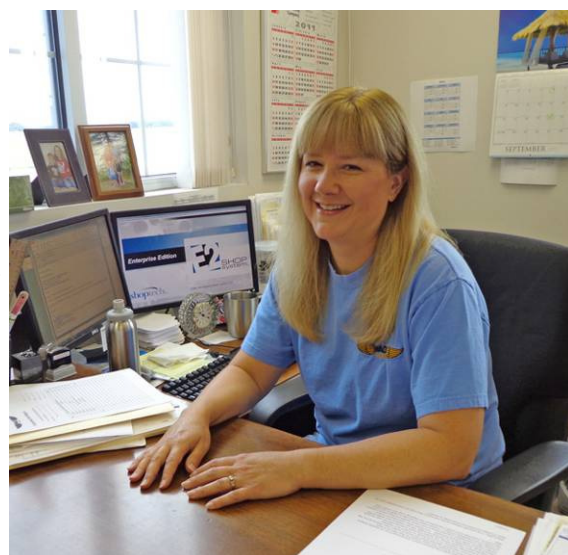




Photo AOPA

## S-Tec 55x available for WACO-YMF-5D.

Customers will have the option of fitting a very robust 3 axis autopilot from S-Tec. The model 55x offers enhanced servo control and is a true 3 axis autopilot that can fly vertical guidance for ILS or LPV (WAAS) GPS approaches. Additionally, electric trim is standard with the autopilot installation. The autopilot is available for both new production aircraft and as a retrofit to older aircraft. When retrofitting to aircraft prior to 2011, a new trim system is required at an additional cost. (Note: STC approval expected mid September 2012)

System Fifty Five X: features and functions

- GPSS (GPS Roll Steering)
- Altitude hold with optional altitude trim
- Course intercept capability
- NAV mode
- Dual mode-HDG/NAV & HDG/APR
- VOR/LOC/GS/REV/GPS coupling with 3 gain levels
- VOR/LOC/GS/REV/GPS course deviation and NAV flag warning
- Digital vertical speed command
- Pitch trim annunciation
- Control wheel steering
- DG/HSI compatible
- Remote annunciator
- Automatic or manual electric trim



## Cool Stuff:

- The WACO YMF-5 is now available for Microsoft Flights Simulator. Carl Dye, WACO Chief pilot provided performance data and reports to the software engineers, enabling them to produce a very realistic program.

See here: <http://www.alabeo.com/index.php>

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INCOMINGS

**NEW**  
**WACO**  
**YMF-5D**

**NEWS**  
WACO YMF-5D/5D RELEASED  
Featuring Superior material stress and  
reflections with custom environment  
sounds.

ALABEO IS ACCEPTING PAYPAL  
PayPal and Credits are the currently  
payments options.

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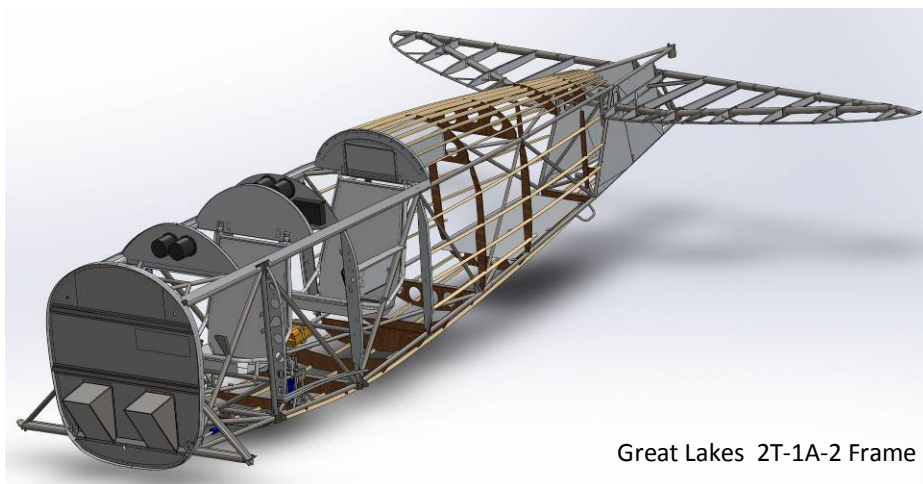




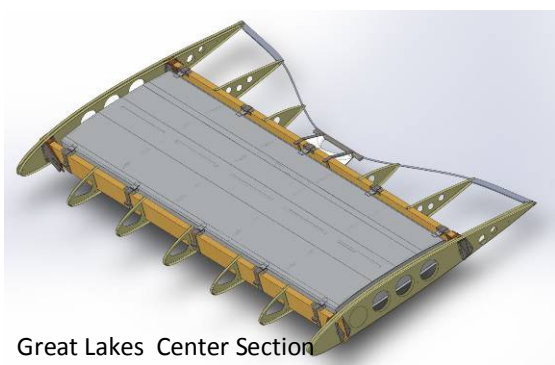
Photo AOPA

## Digital Airplanes ?

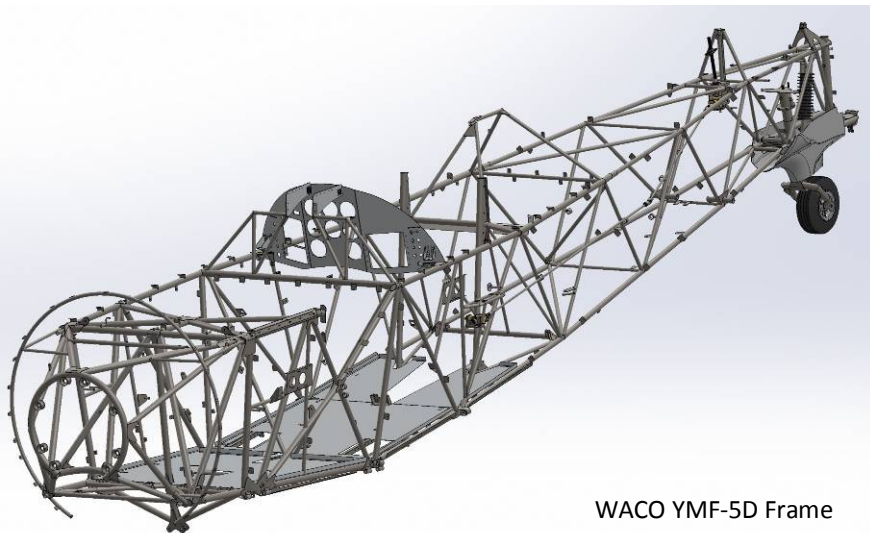
Over the last year WACO Engineers Nate and Adam have been redrawing both the WACO YMF and Great Lakes 2T-1A-2 using an advanced 3D CAD software program called SolidWorks. Having digital representations of both aircraft greatly simplifies integration with our vendors and functionality testing of component designs. A good example of this is the new brake design for the Great Lakes. By drawing the new system in SolidWorks, all of the motion and function of the design could be tested on the computer prior to actually cutting metal. When the design was finalized the digital files were simply emailed to our laser shop and arrive back at Waco perfect and ready to install.



Great Lakes 2T-1A-2 Frame



Great Lakes Center Section



WACO YMF-5D Frame



## GREAT LAKES AIRCRAFT SPECIFICATION

(Continued from Page 2)

### Performance

- G Limits: +5.40 to -4.00
- Maximum speed: 133 knots (153 mph) at sea level
- Cruise speed: 105 knots (120 mph) (max cruise)
- Stall speed: 50 knots (57 mph)
- Range: 260 nm (300 mi)
- Service ceiling: 17,000 ft
- Rate of climb: 1,400 ft/min
- Wing loading: 9.59 lb/ft<sup>2</sup> Power/mass: 0.1 hp/lb

### Airframe

- Rugged 4130 Steel Fuselage frame of American or German tubing, Epoxy Coated, internally oiled
- Aluminum Sidewalls (Left & Right Sides)
- Aluminum Ailerons (4)
- New Design Oleo strut main Landing Gear
- All Stainless control cables and flying wires
- Disk Wheels & Brakes by Grove
- Front & Rear Heater
- Exhaust System, Stainless Steel
- Wheel Pants, light weight composite
- 4130 Steel Interplane and Cabane Wing Struts
- Dacron Fabric Covering, PPG Polyurethane Paint
- 3-Color standard paint schemes

### Instruments, Avionics and Cockpit items

- JPI EDM 930 Deluxe Engine Analyzer - Color Display
- Dual Flight Control System
- Seat Belts with Shoulder Harness (Hooker brand)
- Throttle/Mixture/Prop Lever Quadrant
- Hydraulic Toe Brakes, Rear, heel brakes front
- Map Case – Front & Rear
- Storage area behind seat, rear cockpit
- Dual Cockpit cover, water resistant canvas, black

### Avionics & Electrical

- VHF Com Radio
- MODE-S-TRANSPONDER
- JPI EDM 930 Electronic engine instrumentation
- Garmin AERA 500 WAAS GPS installed in Panel Dock

- Airspeed Indicator, Altimeter, G Meter
- 30 Amp Alternator and volt electrical system
- Aerobatic battery
- Circuit Breakers - Side Panel Mounted
- LED Navigation Lights
- LED Strobe Lights & LED Beacon
- Illuminated Placards
- Optional LED Landing Light
- Key Operated Ignition Switch
- 406 Mhz ELT

### Optional Equipment and Accessories

#### Airframe

- |   |          |
|---|----------|
| • 2-Blade MT Composite Prop (Save 15 lbs)   | \$ 7,950 |
| • Electronic Ignition By ElectroAir         | \$3,800  |
| • Leather seating surfaces                  | \$ 670   |
| • LED Landing Light (installed in cowl)     | \$ 925   |
| • Plot Canopy Option (date TBD)             | \$ TBD   |
| • Ground APU Plug                           | \$ 685   |
| • Mirrors (Left or Right) each              | \$ 190   |
| • Water bottle / cup holder (non-aerobatic) | \$ 65    |
| • Front Cockpit Zip in Cover                | \$ 685   |
| • Custom Paint scheme                       | \$ 2700  |
| • Banner Kit                                | \$ 1,750 |

#### Avionics

- |  |         |
|--|---------|
| • Front Cockpit Airspeed and Altimeter | \$ 1420 |
| • Front Cockpit JPI-930 Engine Display | \$ 4925 |
| • Electronic Attitude Indicator 3"     | \$ 3200 |

