



AOPA



Long Way to Long Beach by Dave Hirschman / AOPA

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The first time I ever saw a Waco Classic biplane, the mere sight of round-engine aircraft conjured up a recurring fantasy involving summertime cross-country flights and sleeping under the wings at night.

The recently concluded “Long Way to Long Beach” trip in a Waco YMF-5D far surpassed anything my limited imagination could have dreamed up. The sights, sounds, and sensations of a low-level, coast-to-coast biplane trip were thrilling to the core—and the people AOPA staff photographer Chris Rose and I met along the way were gracious, friendly, and incredibly welcoming to a pair of warmly dressed strangers.



Dave Hirschman—AOPA (living the dream)

And it wasn't our magnetic personalities that won them over. Simply showing up in a rumbling, nostalgic airplane like the Waco brings out the best in fellow aviators. They offered tips for navigating mountainous terrain, ATC, as well as meals, transportation, and accommodations.

Show calendar:

Sun-N Fun
Lakeland, FL

March 29 to
April 3, 2011

www.Sun-N-Fun.org



AirVenture
Oshkosh, WI

July 25 to 31, 2011

www.AirVenture.org

Our challenges were limited to predictable things such as numbing cold over the Appalachians, crosswinds and thunderstorms in the Plains, high density altitudes

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Around the World in a WACO YMF-5D ?

Every now and then we get an inquiry from an intrepid aviator contemplating what is possibly the ultimate adventure in an airplane, a flight around the world. Could it be done in a WACO Classic YMF? Yes, it is possible. In fact it was half done in the early nineteen nineties by the original owner of Classic WACO serial number F5C040, the first YMF-5C. He got as far as India where he contracted a life-threatening illness while being delayed. He was unable to continue the flight and the airplane was disassembled and shipped back to his home base in Canada.

We have a new Address:
(we did not move, the road did)
15955 South Airport Road
Battle Creek, MI 49015

The most important element in any successful flight, to the next town for a burger or to the next continent for a great adventure, is fuel. Gotta have enough to get to the next runway. Almost isn't good enough. Crossing the North Atlantic involves 600 to 800 nautical miles legs. So, for a WACO with a normal range of about 400 nautical miles, additional fuel would have to be carried. For an 800 NM leg it would be wise to have enough for 10 hours endurance which is 150 gallons. A 75

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Photo AOPA

Around the World in a WACO (continued from page 1)

gallon tank in the front cockpit would do the trick. An external belly tank is an option but don't forget the added drag would most likely reduce airspeed and add to fuel consumption. Probably best to put it inside. Obtaining avgas on the trip could also be a challenge depending on the route chosen. Although Jet A is available almost anywhere on the globe, avgas is not. Auto gas is an option but might be risky. The quality could vary greatly and even be downright dangerous. Careful planning is needed here.

Other than providing for additional fuel capacity, the WACO wouldn't need any other modification with the exception of perhaps additional oil capacity to match the added endurance. A second oil tank would suffice. A well run in Jacobs will average a pint of oil consumption per hour. At this rate, the standard 5 gallon oil tank would, in theory, be adequate even for a 10 hour flight but you might not want to rely on theory over the Atlantic. I have known flights behind these engines where oil consumption on one leg was one pint or so and on the next leg twice that amount. When it comes to getting to that next runway, oil is just as important as gas.

A flight around the world in a plane such as the WACO can probably be done only from west to east and when considering the Atlantic part of the flight, summer months would likely provide the best weather. Survival gear is a must, although a raft might not be possible unless it could be incorporated in the front cockpit along with the added fuel tank. We have been told (by those who know from experience) that a WACO floats for less than 20 minutes so you need a really good exit plan. Even with a raft, you will need to wear an emersion suit, otherwise known as a Gumby. The water is cold. Always.

Once across the big pond, flying throughout Europe is relatively easy but expensive. Flying throughout the EU countries is fairly seamless. France is especially enjoyable in a WACO with many beautiful grass flying fields. Your adventure would continue eastward beyond this writer's experience but would have to ultimately take you to extreme Eastern Russia and the Bering Sea where you could cross into Alaska. Once again, finding avgas might be a challenge in this part of the world.

Would I do it you ask? Not today but twenty years ago I had my bag packed and ready to go.

Carl Dye—Chief Pilot and General Manager of the Waco Classic Aircraft Company

Master Waco Welder— Doug Gerred

Doug has shared his talent with Waco for 15 years as the Manager of the Welding Department. He is an FAA certified welder and a fantastic trainer and leader.

Doug is the father of 3 girls, 22, 23 and 24, is an avid bicycler and works on Hot Rods in his spare time.



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Applying Lean Manufacturing to Aircraft Production

What is this guy taking about—the current Waco is a design has been in production for 25 years, don't they know how to build it yet? The answer is of course Yes and No— but we are still learning, exploring and improving the airplane, production process and methods, always trying to improve. Here at Waco Classic we have been focusing on reducing or eliminating the seven wastes of manufacturing. They are:

Overproduction

Producing more goods than the customer needs

Transportation

Anywhere where goods are moved within a process

Waiting

Where waiting time occurs, traditionally where one process waits for another to finish before it can start.

Inventory

Typified by stock or materials that are not being used in the process or current activity.

Motion

Poor planning and organizational layout often cause motion waste – for example if you commonly use a tool on the other side of the shop that you have to walk to retrieve multiple times during your job, that is waste.

Over Processing

Where steps occur in the production process that do not add value to the end customer this is termed over processing.

Defects/Rework

The process results in an error or requires rework.

I can honestly say that every new airplane we deliver is the best we have ever delivered and that next will be even better.

Pre-Loved WACO YMF-5's on the Market

We have decided to sell N369AS, our D Model Demonstrator, photos and detailed specs are at Controller and Trade-a-Plane. This was the airplane flown by Dave Hirschman from Fredrick, MD to Long Beach, CA for the AOPA Summit. (See story on page 1) The airplane will be replaced by a newer and updated demonstrator that we recently took in on trade. We have a few other listings and details can be found at our Brokerage and Restoration subsidiary's website; www.CentennialAir.com.

General specs on N369AS:

This WACO is a beautiful example that has been meticulously maintained and operated by the factory as its D model demonstrator. Features: Numerous D model upgrades, 300 HP A2 engine with a 1400 hour TBO, Mt Propeller, Landing Gear update, Cowl Door Update, D Model Oil filter and Oil Cooler design, Fresh leather and interior updates, Smoke System, New tires, Brakes and D model tail wheel, TTAF:~800, TTE: ~400 TTP: ~400

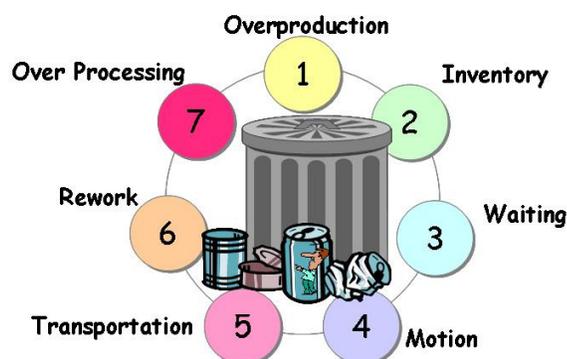
N369AS link: <http://www.trade-a-plane.com/detail/1129889.html> (Note: Photo of N369AS with smoke ON—next page)

N424NC link: <http://www.trade-a-plane.com/detail/1132859.html>

N836W link: <http://www.controller.com/listingsdetail/aircraft-for-sale/WACO-YMF-SUPER/1998-WACO-YMF-SUPER/1180529.htm>

More here: www.CentennialAir.com

The 7 Wastes



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in the Southwest, and turbulence over the desert. But even at those uncomfortable moments, Rose and I were glad to be where we were. We're incredibly fortunate to have had such an opportunity, and the deck always seemed stacked in our favor. The airplane ran perfectly from a mechanical standpoint during the entire 20-plus flying hours it took to cover 2,300 nautical miles; the weather was clear almost the entire trip and provided rare tailwinds going west on day one; and the technology (Garmin 430 and 696 with satellite weather, SPOT tracker, and IFR instrumentation) provided tremendous situational awareness and peace of mind. Some low-tech gear also proved essential, namely wool socks, a neck gaiter, and foam earplugs.

For a flatland flier like me, the mountains provided the jaw-dropping highlights—and the splendor of following the Colorado River and the canyon contours it's carved from Moab, Utah, to Page, Ariz., at daylight was beyond description. The fall colors and foggy river valleys of West Virginia, the seemingly endless Plains, and the imposing mountains and canyons of the Four Corners also left their mark before we reached our destination on the blue Pacific.

The Recreational Aviation Foundation, especially its president, John McKenna, was a valuable ally. McKenna provided contacts, places to stay, steaks, beer, and elk sausages, and flew his Cessna 185 with the door off as a photo platform on two spectacular flights above the incomparable canyons of southern Utah.

This inspiring, exhausting, and completely unforgettable flying adventure is drawing to a close for Rose and me. But it's just beginning for the AOPA "A Night for Flight" auction winner.

Fuel stops:

Clermont County Airport, Batavia, Ohio, I69
 Jefferson City Airport, Jefferson City, Missouri, KJEF
 Col. James Jabara Airport, Wichita, Kansas, KAAO
 Dalhart Airport, Dalhart, Texas, KDHT
 Mid-Valley Airpark, Las Lunas, New Mexico, E98
 Cortez Airport, Cortez, Colorado, KCEZ
 Canyonlands Field Airport, Moab, Utah, KCNY
 Bullfrog Basin Airport, Glen Canyon, Utah, U07
 Kingman Airport, Kingman, Arizona, KIMG
 Santa Paula Airport, Santa Paula, California, KSZP

2,300 NM

Average speed: 105 knots

Flight time: 22 hours, 30 minutes

Fuel consumption: 320 gallons (14.8 gph)

Oil consumption: three gallons

Video of trip at this Link: http://www.aopa.org/aopalive/?category=&watch=U0OHZ0MTqNvX6hAdAWg0b_EfICG3qows

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Recent Changes and Updates to the YMF-5 D

One of the great aspects of buying a new Waco D model is that the airplane is continuing to evolve, as our engineering team of Carl and Rich are continuously making improvements to the airplane. The introduction of the Waco YMF-5D model early this year was the biggest change in the airplane since the introduction of the Waco YMF-5C model in 1992. For 2011, D models have three improvements that are in the works, they are: 1) redesigned trim system, 2) new adjustable rudder & brake pedals 3) new easy access air filler doors on the wheel pants.

The completely redesigned trim system incorporates a gear box and torque tube, this design replaces the expensive and maintenance prone cable system.

The new rudder pedals offer linear adjustments over a greater distance, allowing easy fitting to a wider range of pilot sizes, additionally the angle of the brakes no longer change as a result of moving the pedals.

The new spring loaded door on the wheel pants greatly simplifies checking tire air pressure.



What makes the new WACO D model one of the safest airplanes flying?

Today's new Waco D model is the safest airplane ever produced by WACO Classic and may be one of the safest airplanes flying in general aviation today. The reasons are simple –advanced technology that's clearly presented to the pilot in an easy to operate method. A few of the many features include:

- 4 - LED Landing and Taxi lights – Super bright with an integrated wig-wag feature and nearly unlimited life – many customers leave them on all of the time for traffic avoidance. Most general aviation aircraft have 1 landing light.
- New LED strobes, beacon and Nav lights- a tower controller recently described the airplane as a flying Christmas tree – from 5 miles away! The new LED lights are dramatically brighter during the day when compared to older technology.
- The new JPI engine instrumentation immediately alerts the pilot to any out of range condition – both on the main display and on the dedicated alert screen.
- Terrain alerting system standard on all aircraft – alerts pilot to obstacles (towers, building) and terrain, optionally available Garmin 696 adds audio alerts to the system.
- Traffic Systems – Garmin's GTS-800 or L-3's SkyWatch traffic system displays on the standard Garmin 430w and features a 12 mile ring of active traffic alerting with audio call outs such as: "TRAFFIC – 2 o'clock, 3 miles, high"
- Standard 460 MHz ELT with GPS interface
- Well balanced handling characteristics combined with aerobatic performance when needed.
- 5 point Hooker seatbelts with optional parachutes.
- Easy ground handling and landing characteristics.
- **Incredibly strong modern structure and systems combined with a time proven design.**

