

A WACO COMES HOME

By Tom Woodburn



It was a spectacular late October Monday, near perfect for flying, and on that day I found myself at 7500 feet crossing the Allegheny Front southeast bound and at the controls of ZQC-6 #4422, NC16203. My friend Dan who was along for the adventure was keeping up with our progress on the iPad running Foreflight. I was quite happy to be pushing my thumb across the sectional and using the ship's compass and my watch to track our advance on Richmond. My way seemed right and proper and with the Appalachians framed by two wings and the Jacobs rumbling contentedly I decided all was now right with the world.



I am not quite sure what fostered my attraction to the WACO type but these airplanes have always held a special interest for me. It is certainly difficult to find a better looking civilian biplane and WACO's faithfulness to the biplane design in the face of the industry's move to the mono-plane definitely makes these airplanes unique. That said, I think my initial interest was piqued by my father's stories of the Central Airport in Richmond Virginia where he worked and learned to fly.

Central operated a mixed bag of airplanes and 3 WACOs; YKS-7 17729, ZQC-6 16202 and UPF-7 39731 were on the field at various times (as were two Ford 4AT Tri-motors but that is another story). Dad flew the UPF-7 and the YKS-7 and these airplanes figured prominently in his tales. H. G. Poynter's AVN-8 from Norfolk also figured into the plot as H.G. would inevitably run the battery flat trying to start the thing and dad was always tapped to prop it. As I remember it dad had little good to say about the N-8 or Mr. Poynter.



I began attending the NWC reunion around 1990 and decided I would purchase a WACO. In 1998 I acquired a 1935 YOC project, 15211 SN 4301, and after two lower wings, one top wing and horizontal stab were built new and the rest of the tail substantially rebuilt circumstances led to my pushing the plane into the back of the hangar. I continued to collect missing parts and poked around the edges of the project but no real progress was made. I did continue attending the reunions to keep my interest up and it was there that I came to know and befriend Jim Wheeler.

Jim and I had a common interest not only in the airplanes but we also flew for the same company. Jim was flying a beautifully turned out 1936 custom, ZQC-6, 16203, and took great pleasure in giving rides and showing off the airplane to anyone interested. A few years before Jim's passing he and I were talking and he looked at me and asked "how's your project coming along?" I allowed as how it was not coming along at all. Jim looked at me intently, and if one was ever the target of the "Captain Wheeler" stare one knew it was time to pay attention, and said "don't make the same mistake I did and wait too long to get an airplane. You don't want to be too old to enjoy it".

Jim's advice struck a chord and is, in a round-about way, how I ended up over the Appalachian Front in 16203.



Proud new owner Tom Woodburn

ZQC-6 NC16203 had been for sale for several years and at the 2018 reunion I approached club member Tim Sherwood who was assisting the Wheeler family in selling the airplane. I began by asking pointed questions about the airplane's condition and while I trusted Jim implicitly any old airplane has quirks and I wanted to know exactly what I was getting into. When satisfied with the condition my wife Jane and I discussed the purchase and then I made an offer that the Wheeler family accepted. Odd thing about the WACO type, you not only purchase the airplane but sign on to the responsibility of taking care of it so as to not disappoint the previous owner or, in this case, owners in the form of the Wheeler children. Tim supervised the annual inspection and prepped the airplane to have it ready for me to pick up when the purchase had cleared all of the paperwork hurdles. A weather watch was started and fortunately the end of my vacation coincided with a short stretch of good conditions so the date was set to leave for Knox.

The trip to retrieve the WACO started on October 21, 2018 with a friend's BE-58P Baron hauling us from Richmond to Starke County airport in Knox, Indiana. Nasty headwinds put us at 3 hours enroute but the ride was smooth at 12,000 feet. We arrived at Knox, opened up the hangar then went to lunch while Tim and Mitzi drove down from Niles, Michigan. Tim and Mitzi helped us get ready and briefed me on the things I needed to know about operating this particular airplane and late that afternoon we said our goodbyes. The Baron headed for Williamsburg Virginia and Dan and I went to the hotel with a plan in place to leave early the following morning.

We departed Knox at daybreak on the 22nd and the first leg was planned to Wynkoop airport to see Brian Wynkoop and give the airplane a once over and check fuel and oil consumption. The second leg was Wynkoop to Culpeper Virginia to show off the plane to some friends and buy some cheaper gasoline. A short 30 minute flight to Hanover County airport finished the 570 statute mile trip in under 4 hours.

Jane was on hand for the arrival and photos were taken.



Arrival at Hanover County

The flight itself was uneventful and the airplane behaved and performed as I expected. Instead of a narrative I thought I would list some statistics, observations and highlights of the flight.

In preparation for the trip I called around for suggestions for a trip kit to keep in the airplane. Items I included were: spare tailwheel tire and tube mounted on a wheel and tools to change same, sparkplug removal tools and 2 spare plugs, a tool kit with basic tools as well as safety wire and cotter pins, air chuck for the tailwheel tube filler, oil spout for the oil jugs, chocks, tie down kit and a GATS jar fuel tester. And oil.

The weather was forecast to be cold the night prior to departure so I stopped at the Tractor Supply and picked up a 1500 watt forced air heater. We opened an accessory door and aimed the heater into the area below the oil tank and behind the engine and left it overnight. This saved considerable time the next morning for the oil to warm up and kept me from embarrassing myself by failing at a cold weather start.

The first leg to Wynkoop was planned as an airplane condition check, fuel and oil consumption check and that my first landing would be on grass. Gas consumption was as expected at 16 gph for 3500' cruise and no leaning. Oil consumption was high, 3 ½ quarts for 1 ½ hours flight time. I expected this as the airplane had been flown little over the past two years. The second leg was flown at 7500' due to forecast turbulence and because I wanted solid cruise numbers. I climbed initially at 110 mph gradually reducing to 100 mph by 7500'. These speeds gave good engine temperatures and excellent visibility over the nose.

Cruising at 1950 rpm, 20.5 inches MP, 1 inch below max cruise mp, and with the engine leaned fuel consumption was 15 gph and the oil consumption dropped to 1 quart per hour. Given the

conditions I could have carried this power setting to 9500' and done even better on the true airspeed and fuel burn. True airspeed was in the 135 to 140 mph range. Ground speed topped out at 180 mph.



Home sweet home!

The 1935 and 1936 custom cabins are equipped with mid-chord split flaps on the upper wing. WACO cabins and customs in particular are very clean airplanes and these flaps are quite helpful. They definitely increase the glide angle and help get the nose out of your line of sight when on the approach. I learned on the first landing not to trim for slow speed prior to extending the flaps. If you trim for say 80-90 mph on downwind then select the flaps on you will be stiff arming the column to keep the nose down and flying speed up. This was quite thrilling. I found it best to trim for 110 then just to hold back pressure while slowing. When you select the flaps at 80 mph or so the ship settles into a nice 70 mph glide without touching the trim.

Takeoff and landing was straight forward. The 100 inch Hamilton Standard is, as you would expect, a powerful gyroscope and it is best to change pitch attitude gently when slow. I let the tail come up on it's own to a tail low attitude and let the airplane fly off. There is a hint of a dead band in the rudder with the tail low both on takeoff and landing but it is perfectly manageable. The ailerons are powerful and their adverse yaw effect can help counter a swerve when the rudder is not enough. Landings on asphalt are tail low in deference to the old tailwheel tire. Three points on grass are wonderful. In cruise the airplane is stable and controls are light. The airplane is a delight to fly and when flown well makes you look good.

While the electric fuel gauges work I found that a dip stick is a better way to accurately measure fuel on board (worked on the DC-3 so why not?). I purchased a Universal Fuel Hawk 11 inch dipstick

and calibrated it per the instructions. I now have a chart that is dead on accurate. With 18 gallons in the 47 ½ gallon tank fuel is just visible at the bottom of the filler neck baffle box. From this zero dipstick reading I can measure fuel accurately in 3 gallon increments. Below 18 gallons and you are guessing.

It is going to take me a long time to get a coat of wax on this airplane. My goodness it is big. And I have had to recalibrate my fluid quantities when placing orders. Fortunately I have an oil distributor close by with excellent prices and he didn't even blink when I ordered 16 gallons of oil yesterday. The Jacobs needs a bit of tightening up in the hose and gasket department but nothing more than routine maintenance. I don't mind burning oil but I do mind wiping the stuff off of that big belly.

Insuring the airplane was interesting. Some companies wanted time specifically in a ZQC-6. Others kept asking silly questions about instrument ratings and such which I tired of quickly. The company I selected was happy with my 13 hours of generic WACO time and based on my other experience required no additional check out. They were wonderful to work with. It pays to look around.

So I now own a WACO and it's a custom cabin no less! For a long time I have enjoyed the generosity and friendship of many WACO owners who have kept up their encouragement and a few brave souls have even let me fly their ships. Now it's my turn to share the airplane with anyone interested. I would like to think Captain Wheeler would be pleased.



ZQC-6 NC16203 when owned by Jim Wheeler

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