

KANSAS WING **OX5 NEWS**

Harold Walter President	2022
Joe Latas Vice President	2022
Jay McLeod Secretary	2021
JoAnn Bailey Treasurer	2022
Harry Clements Membership	2021



Doug Moler Programs	2022
Dale Krebs Marketing	2021
Bobbie Walter Governor	2021
John Winter Governor	2022

JUNE 2020 – VOL 2

HAROLD AND BOBBIE WALTER PLUS JOE LATAS, EDITORS

OX5 AVIATION PIONEERS KANSAS WING

Because of the coronavirus and restrictions that currently, there will not be an OX5 Board meeting nor a general all member meeting. Until this particular virus ceases to be the threat that applies now.

Meeting/Program: The OX5 Kansas Wing Board and general meetings have been cancelled for now, due to the coronavirus.

It is time to change the photo of Harold Walter. The previous one was taken by Sharon Brown, the wife of Cessna's previous Chief Production Test Pilot, Mort Brown.

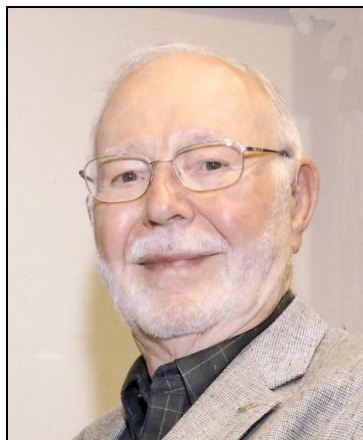


Photo by Paul Bowen

The photo presented here was taken by special aerial photographer, Paul Bowen during receipt of the FAA's Wright Brothers Master Pilot Award. Paul is

noted for his expertise in shooting aerial shots of airplanes. He is especially noted for his photos showing the airplane just above a cloud layer, and showing the wing tip vortices on top of the clouds.

Paul has given a excellent programs for our OX-5 Kansas Wing organization.

President's Message: Harry Clements gave an excellent presentation at our March meeting concerning a particular problem discovered during the certification of the Cessna 180. Carbon monoxide was discovered in the cabin during flight. Considerable effort was expended in an effort to determine the source, other than coming from the engine. It was discovered that the engine exhaust was passing along the bottom of the fuselage and then entering an aft opening where the variable

incidence horizontal stabilizer was located.
A small solid bulkhead was installed as a seal. The carbon monoxide was stopped from entering the airplane.

Experience has shown that there are often show-stoppers that occur during the development phase of the airplane. This newsletter includes an interesting article about the Pratt and Whiney engine development written by our Secretary Jay McLeod.

Harold Walter, President KS Wing OX5 Aviation Pioneers

Treasurer: Please mail or see Treasurer, JoAnn Bailey, to pay OX5 Kansas Wing annual dues of \$10. Please note: The fiscal year begins on January 1.

JoAnn Bailey
1736 S. Emporia
Wichita, KS 67211

JoAnn Bailey, 316-258-4956

OX5 National dues are \$30. Make check payable to *OX5 Aviation Pioneers*, and mail to:

OX5 Aviation Pioneers
PO Box 769
Troy, Ohio 45373

OX5 Kansas Wing dues are collected by Treasurer JoAnn Bailey. Addresses for both JoAnn and National dues are shown above.



"Flight training at Prince Aviation with Cessna 172's"

Photo courtesy of Vladimir Jovanovic, executive director, Prince Aviation

Cessna 172: 64 years since 1956 and still in production.



The nation's largest firefighting plane has been cleared to fly. The Forest Service has signed a temporary agreement with the owners of the so-called SuperTanker, a retrofitted 747.

Photo courtesy of the U.S. Forest Service: forwarded by Scott Politte, Center manager Flight Safety International Wichita, Ks.

Pratt and Whitney R-1340 Wasp Aircraft Engine By Jay McLeod

OX5 Aviation Pioneers is an organization formed around an early aircraft engine and its importance to the design and performance of military and early commercial aircraft. This is a brief history of one of the aircraft propulsion systems that followed the OX5 engine and paced the performance and development of aircraft that have come along since.



Pratt & Whitney R-1340 Wasp

We do not have the space here to cover all the engines that have played a roll in this story. A major step forward was made by the Pratt and Whitney model 1340 Wasp which began in 1925. The 1340 was a 9 cylinder, single row, air cooled radial engine with power ranging from 410 to 600 horsepower depending on the model during the period it was built and in service.

The engine provided a substantial increase in power at a time during the Golden Age of aircraft development that was badly needed. In 1919 Fredrick Rentschler played an important roll in the formation of the Wright Aeronautical Corporation which produced the Wright Whirlwind model J-5C which developed 220 HP and had a reputation for

reliability and was widely used in military and commercial aviation during the late 1920's. This engine powered Charles Lindberg's Ryan monoplane in which he flew the North Atlantic in 1927.

Rentschler was keenly aware of the urgent need for more powerful engines for both commercial and military applications and had ideas for providing that need.

With his background in the production of the Wright Whirlwind radial engines, Rentschler assembled a team of engineers and machinists, contacted the Pratt and Whitney Company, an old line machine tool manufacturer and arranged initial financing in December of 1925. The first design began in a garage in New Jersey and later moved to Hartford Connecticut.

The first 1340's tested at 410 HP and proved to be so successful that the U S Navy ordered 200 engines in October of 1926. Rentschler and his team began design work immediately on the more powerful model 1690 Hornet engine of 525 HP.

These engines contributed much to the advancement of aircraft design and performance and were a financial success beyond imagination for the young Pratt and Whitney organization.

Shown below is a Douglas BT-2B aircraft of the 1930's which was powered by the 1340 Wasp engine producing 450 HP in service with the U S Army Air Corps as an instrument trainer about 1930—a typical application.



Douglas BT-2B

This is but the earliest history of the great Pratt and Whitney organization as it played a major roll in winning of WWII, and continues today in the manufacture of aircraft propulsion systems in commercial and military applications used throughout the world.

Editor's note: Jay McLeod's squadron had 9 of these airplanes, including this one. Jay flew this model on a cross-country in 1938.



"Walter Extra (aerobatic airplane) and Matterhorn" courtesy Andrew Birch, Aviator



Photo by Harold Walter

Merle Walter creating a propeller hub for the Curtiss OXX-6 engine, a later modification of the OX-5 engine, located at the Kansas Aviation Museum.

Windy Day -- By Harold Walter

Sunday morning, the temperature was quite mild, but the wind was a bit breezy. It was a good day. Let's fly! My brother, Myron, and a friend, Claude, came along to the field. It would be necessary for them to hang on to the wing tips to prevent the wind from flipping the airplane over when it was on the ground -- if there was too much wind. The airplane was an Aeronca C-3.

When we arrived at the field, the wind was blowing stronger than anticipated. At altitude the wind normally blows at a higher speed than at ground level. I hadn't flown in this much wind before. I told Myron, "I think I'll fly it alone for the first hop and get a feel for this wind."

I checked the airplane in preparation for flight, started the engine, and let it warm up facing into the strong wind. Myron and Claude firmly held the wings. I nodded for them to release the wing tips, applied power and was off the ground in about twenty feet.

I climbed to a thousand feet above the ground. The airplane was barely moving against the wind. I slowed a little and we stopped moving forward. The speed of the airplane was exactly the speed of the wind. I held it there for a while and then pulled the nose up to slow even more. The airplane moved backward.

"Hey, this is great." I've never done this before.

I pushed the nose down to speed up and move forward. I pulled the nose up to

stop. I pulled up more to move backward. I did this, back and forth for an hour.

I landed and Claude got into the airplane with me. We took off and again performed the wind maneuvers.

I said to Claude, "I believe the wind is strong enough that I can land with no forward speed -- like a helicopter."

We hovered just above the landing point at one thousand feet. The power was reduced and we began to descend. It was working just like we expected it to. We had no speed relative to the ground.

As we neared the ground, I changed my mind about a complete standstill at touchdown. I lowered the nose and the airplane fell like a rock at the same time. I pushed the nose down to pick up speed and added power. There was not enough time for the speed to increase or for the power to take effect before we would contact the ground. Just before we slammed onto the ground I pulled the stick

all the way back to raise the nose. We hit the ground very hard, but in a flat attitude. I saw no structural damage, and was even surprised that I didn't blow a tire. Only my pride was damaged.

Because of the strong wind, I next felt that I could takeoff and land in the same spot without turning around. I took off, climbed to about 800 feet and slowly moved backward. Speeding up the process I changed headings a little to the right and then left, snaking back and forth and moving backward. The airplane backed to the point where I performed a landing in the spot where I had taken off.

The next day I chatted with Mr. Greenwood, who lived across the street from my home. He said, "I saw you trying to get out of that air-pocket and I thought that you were never going to get free of it."

Photo below: **Windy day** – L to R – Claude McIntire, Harold Walter, Velma Forbes, Myron Walter (photo by Clara Walter)



From the Grandson of Harold & Bobbie Walter:

Joe Leiker 18 hrs Just so I never forget..... April 3, 2020



- Gas prices in Wichita, KS is \$1.54
- School cancelled - yes, cancelled for rest of year
- School staff step up to the plate, literally, by preparing meals and feeding kids through it all. ♥
- Senior class 2020 left school for Spring break not knowing it would be the last time they'd roam the halls with their classmates.
- Textron on 4-week furlough
- Self-distancing measures on the rise.
- Tape on the floors at grocery stores and others to help distance shoppers (6ft) from each other. - Plastic partitions to help keep the checkers safer.
- Limited number of people inside stores, therefore, lineups outside the store doors.
- Essential businesses taking temperatures of staff and patrons at the door.
- Non-essential stores and businesses mandated closed.
- Parks, trails, entire cities locked up.
- Entire sports seasons cancelled.
- Concerts, tours, festivals, entertainment events - cancelled.
- Weddings, family celebrations, holiday gatherings - cancelled.

- No funerals
- No masses, churches are closed and broadcasting live on Facebook.
- No gatherings of 50 or more, then 20 or more, now 10 or more.
- Don't socialize with anyone outside of your home.
- Children's outdoor play parks are closed.
- We are to distance from each other.
- Shortage of masks, gowns, gloves for our front-line workers.
- Shortage of ventilators for the critically ill.
- Panic buying sets in and we have no toilet paper, no disinfecting supplies, no paper towels, no laundry soap, no hand sanitizer.
- Shelves are bare.
- Manufacturers, distilleries and other businesses switch their lines to help make visors, masks, hand sanitizer and PPE.
- Government closes the border to all non-essential travel.
- Fines are established for breaking the rules.
- Stadiums and recreation facilities open up for the overflow of Covid-19 patients.
- Press conferences daily from the President and the governors. Daily updates on new cases, recoveries, and deaths.
- Government incentives to stay home.
- Barely anyone on the roads.
- People wearing masks and gloves outside.
- Essential service workers are terrified to go to work.
- Medical field workers are afraid to go home to their families.

This is the Novel Coronavirus (Covid-19) Pandemic, declared March 11th, 2020.

Why, you ask, do I write this status?

One day it will show up in my memory feed, and it will be a yearly reminder that life is precious and not to take the things we dearly love for granted.

We have so much!

Be thankful. Be grateful.

Be kind to each other - love one another - support everyone.

♥ We are all one! ♥

Copy and share.