President's Column:

Spring is officially here! Hurray! Temperatures are warmer, days are getting longer (noticeably), daylight savings time has kicked in, so the darkness is biased to mornings. The low clouds and rain are relentless. But I find my disposition is getting better. I actually got to go flying on one of the only 5 days of sunshine we've had since the first of the year. That did me some good. Granted, my performance wasn't all that great, but that's why we practice. And the heater in the twin worked! Third time in a row! I think I'm beginning to figure that thing out: start it before takeoff, don't turn it off in flight (just regulate the temperature). Now I've got to try it at some significant altitude (something about density as I recall), but then there's that low clouds and rain thing again.

Work on the Mooney Mite has lagged, as my employer demands more of my time. I'll be on travel again at the end of the month, so Mark will have to cover for me. The chapter is in good hands. The program will be Doug Happe talking about his RV-7, first (and more) flight test. This program is left over from the snowstorm we had last month. It should be very good, and I'm sorry to miss it.

Last month, I had the opportunity to visit Toulouse's version of the Museum of Flight. It's called "Aeroscopia". Very nice museum. Not quite as large a collection as MOF, but they have 2 Concorde, 2 Caravelles (the first jet I ever rode on), the prototype A300, many cold-war fighters, many French airplanes (of course), an original SuperGuppy, and more. What was even better, we got the "insider" tour, directed by Dominique Chatrenet, retired VP of Flight Controls and Chief Architect of Airbus. The museum's restoration facility is immediately adjacent to the museum (unlike MOF, which is 40 miles away), and we got a tour of that facility as well.

Besides the fact that they had a C310, the highlight for me was the tiny Deltaviex, a research airplane developed by ONERA (kind of like...
WHERE DO WE MEET THIS MONTH?

Meets 4th Mondays 7:00 pm
17605 SE 288th PL, Kent
The Mellema Hanger

MARCH PROGRAM
Doug Happe will tell us about his new RV-7

Program
Doug Happe will tell us about his new RV-7
the French NASA) for research in aerodynamic blowing. (To read More, [Click Here](#)) The wing was about the same size as the horizontal tail of our C150! I didn't have a camera with me, but my colleague from Cessna took a couple of pictures. If you can read French, the poster has some information.

Enjoy the program, I'll look forward to hearing about it.

Fly safe,
Brian

**Kitfox Update:**

Starting to work on the Kitfox again. Using NACA ducts to provide cabin air and fiber glassed ducts to each side of the cowling. Built the cabin heat box and connected it to the exhaust. The instrument panel is in place and wiring is underway.

Steve Little

**Pietenpol Update:**

Hello 441,

Progress continues on my 1931 Pietenpol Air Camper project. I've been finishing up the die for the center-section access hatch. It is going well and I look forward to the aluminum parts that will be pressed using this die!!

Having fun and enjoying the learning...... :-)

Jake

**Darin Andersons CNC Adventures:**

CnC finally makes a move. Yep, the CnC is moving under its own power now. Next up...a few test cuts/drawings.

Tuesday, February 28, 2017
Chapter 441 is fortunate to have two tech counselors. Feel free to call Brian (253) 369-0489, or Dave Nason any time. You don't need to wait for some significant milestone in your project. Remember, this is not an "inspection".

The shop doesn't need to be cleaned for a visit. All are quite used to looking at pieces, parts, and assorted bits, and will be happy to answer questions, offer advice, and generally talk about projects, building, flying, or whatever.

TECH COUNSELORS AND FLIGHT ADVISORS

GUESS THAT AIRPLANE; GUESS THAT ENGINE

This month's entry:
Go to Page 7 for the answer to Februaries airplane

This month's entry:
Go to Page 9 for Februaries Engine

DISCLAIMER: The “SLIPSTREAM” Newsletter is published as a clearing house for ideas, opinions, experiences and member information. No responsibility or liability is expressed or implied. Anyone using or purchasing parts or product is doing so at his or her own risk, and is
March 16, 2017 - An endorsement for the privatization of air traffic control was included in a budget proposal released by the White House on Thursday morning, a move that would put the future of general aviation and its long-term access to the National Airspace System at risk.

Shortly after, EAA CEO and Chairman Jack J. Pelton released a statement in strong opposition to the proposal, which is similar to the ATC privatization proposal introduced last year in Congress.

“Under such a system, ATC would be overseen and managed by a board made up of commercial interests, with the nation's airlines having the most powerful and numerous voices,” Pelton said. “These interests would inevitably drown out whatever token representation and economic impact GA would have on such a board, creating an ATC system that would serve commercial interests with the greatest financial resources.”

To Read More, Click Here

Cubs to Gather at AirVenture for 80th Anniversary

March 16, 2017 - A gathering of Piper J-3 Cubs will be held at EAA AirVenture Oshkosh 2017, July 24-30, in celebration of the iconic aircraft type’s 80th anniversary. The J-3 is one of the most successful designs in aviation history, immediately recognizable by its signature Cub Yellow paint scheme and striking black lightning bolt stripe. To many people, the term Piper Cub is synonymous with general aviation.

Darin

EAA News:

CNC assembly begins and yes...another flight.

This week Jeff, Martin and I flew down to Tillamook to visit the blimp hangars. We were aware that there used to be a museum there and were surprised to find that it is still there.

Work on the CNC is progressing and I'm enjoying working in the warm house. I've basically completed the structure and now I'm researching the electronics. The kit doesn't have much for instructions when it comes to the electronics.

EAA News:

ATC Privatization Proposed in White House Budget
Originally built for primary training, the J-3 was intended to be a lightweight and affordable option for those who were itching to fly even in the midst of a poor economy. After its introduction in 1937, more than 20,000 Cubs were built, thousands of which are still flying today.

To Read More, Click Here

EAA The Green Dot Podcast

A podcast for those who fly for the love of it or are simply fascinated by the world of flight. The Green Dot features EAA news, general aviation topics, history, personal experiences from the hosts and a variety of guests, and anything fun, interesting, or cool in and around the world of flight.

To listen, Click Here

B-29 Doc to Attend AirVenture

The fully restored B-29 Boeing Superfortress named Doc will attend its first EAA AirVenture during the convention in Oshkosh, July 24-30, 2017. The historic aircraft made its first flight in July of 2016, more than 15 years after arriving in Wichita to be restored.

To Read More, Click Here

Chapter Gram

Aluminum Can Built Mini Max

In his 82 years of life, Ron Detert has not gone a day without longing to be airborne. In his own words, “I am 82 years old, and still anxious to fly!” However, life has not always dealt Ron the cards needed to own a personal airplane and become a pilot. But with the help of some ingenious fundraising, EAA Ultralight Chapter 75, EAA Chapter 640, and the rest of the Wausau aviation community, Ron has been able to chase his lifelong dream.

In 2002, he decided it was time to begin down the path of owning his own airplane. However, with an ill wife at home and limited funds, Ron thought to himself, “I have to build my own, but how?” He settled on building his own MiniMax, but was in need of more money and resources.

To Read More, Click Here

EAA Chapter 5 Gets the Wright B Flyer Back in the Air

An all-volunteer group that flies a look-alike of the Wright brothers’ first production airplane is building a replacement aircraft with major help from EAA Chapter 5 in Middlefield, Ohio.

Since 1982, Wright B Flyer Inc. has flown and displayed the Wright “B” Flyer, a modern airplane built to resemble a Wright Model B — America’s first mass-produced airplane, manufactured in the Wright brothers’ Dayton factory and elsewhere under license beginning in 1910.

To Read More Click Here

Editors Corner:

Our meeting last month was cancelled due to the weather. The program will be Doug Happe talking to us about his RV-7.

My time has been spent re-acclimating to the work world. I am now walking with a cane when necessary and have finally gotten off of the no driving list.

I even went out into the garage and opened up one of the shipments from Aircraft Spruce that I had received in early November. I marked off some of the strap material and started to cut the straps to rough length. As I set down the second piece, I noticed that the band saw blade had started walking forward. I began to think that I should kill the saw, but decided to keep my arms and body away from the saw (I would have to reach around the saw, much too close to the blade) and as I stepped back, the blade snapped. Fortunately, it did not fly around as I had
Guess that Airplane:

Yakovlev Yak-15

The Yakovlev Yak-15 (Russian: Яковлев Як-15; NATO reporting name: Feather, USAF/DOD designation Type 2) was a first-generation Soviet turbojet fighter developed by the Yakovlev design bureau (OKB) immediately after World War II. It used a reverse-engineered German Junkers Jumo 004 engine. Along with the Swedish Saab 21R, it was one of only two jets to be successfully converted from a piston-powered aircraft and enter production. 280 aircraft were built in 1947. Although nominally a fighter, it was mainly used to qualify piston-engine-experienced pilots to fly jets.

Development and description

On 9 April 1945, the Council of People’s Commissars ordered the Yakovlev OKB to develop a single-seat jet fighter to be equipped with a single German Jumo 004 engine. To save time, Yakovlev based the new design (known as the Yak-3-Jumo or Yak-Jumo) on the latest version of his successful Yakovlev Yak-3 piston-engined fighter. The piston engine was removed and the jet engine was mounted underneath the forward fuselage so that its exhaust exited underneath the middle of the fuselage. To
GUESS THAT AIRPLANE, CONTINUED:

To Read More:
WikiPedia  Click Here
You Tube,  Click Here
Warthunder, Click Here
Military Factory, Click Here

General characteristics

Crew: one
Length: 8.7 m (28 ft 7 in)
Wingspan: 9.2 m (30 ft 2 in)
Wing area: 14.85 m² (159.8 sq ft)
Empty weight: 1,852 kg (4,083 lb)
Gross weight: 2,638 kg (5,816 lb)
Fuel capacity: 590 kg (1,300 lb)
Powerplant: 1 × Klimov RD-10 turbojet, 8.8 kN (2,000 lbf) thrust

Performance

Maximum speed: 786 km/h (488 mph; 424 kn)
Combat range: 510 km (317 mi; 275 nmi)
Service ceiling: 12,000 m (39,000 ft)
Rate of climb: 21.6 m/s (4,250 ft/min)
Wing loading: 197 kg/m² (40 lb/sq ft)

Armament

Guns: 2 × 23 mm Nudelman-Suranov NS-23 cannon with 60 rounds each

A steel heatshield was added to its bottom. The deeper forward part of the fuselage gave the aircraft a "pod-and-boom" configuration. Very few changes were made to the metal fuselage other than at the aircraft's nose. This was recontoured to accommodate the armament of two 23-millimeter (0.91 in) Nudelman-Suranov NS-23 autocannon, an additional fuel tank above the engine and the engine itself. No changes were made to the wings other than the elimination of the air intakes for the oil cooler and the bending of the front wing spar into an inverted U-shape to clear the engine. The vertical stabilizer was slightly enlarged, but the tailplane was unmodified. The conventional landing gear was also unmodified other than the tailwheel which now used several steel leaf springs as shock absorbers. The Yak-Jumo carried a total of 590 kilograms (1,300 lb) of fuel.
Curtiss-Wright Cyclone 22 (XR-4090)

The Cyclone 22 (military R-4090), built by the Wright Aeronautical Division or Curtiss-Wright Corporation (hereinafter Wright), is one of the more enigmatic large reciprocating engines of the WWII era. It was one of the few 11-cylinder-per-row radials ever built, and appears to be a design that was hurriedly cobbled together in response to Pratt & Whitney’s X-Wasp program that evolved into the Wasp Major (military R-4360). Little information exists on the Cyclone 22, primarily because Wright literally threw it all away as the company exited the aircraft engine business. What remains was pilfered from dumpsters by dedicated employees determined to save the history of the company they loved, or is part of the correspondence between Wright and the U.S. Army Air Corps.

To Read More:

Enginehistory.org  Click Here
WikiPedia:  Click Here
OldmachinePress.com:  Click Here
World of War: Click Here

General characteristics

Type: Air-cooled 22 cylinder two-row radial piston engine
Bore: 6.125 in (155.6 mm)
Stroke: 6.3125 in (160.3 mm)
Displacement: 4,092 cu in (67.06 l)
Length: 91 in (2,300 mm)
Diameter: 58 in (1,500 mm)
Dry weight: 3,230 lb (1,470 kg)

Components

Valvetrain: One inlet and one Sodium-cooled exhaust over-head valves per cylinder, driven by pushrods and rocker arms.