



RAeS HAMILTON Branch Newsletter Dec 2020.

Hi all,

Welcome to the Dec 2020 newsletter. Hope that everyone is in high spirits building up to Christmas. This is the last newsletter for the year and what a year it has been, yeah right, but we did get through it. Thank you everyone for your attendance, help, understanding and patience. You know who you are, branch members, division members and industry supporters.

If I don't get the opportunity to see you beforehand, have an enjoyable and safe festive season. I hope to see you at the AGM in February.

As a reminder, we are at operating under COVID-19 Alert Level 1.

If you want to re-familiarize yourself with the Alert Level 1 requirements, the following link will be useful.

<https://covid19.govt.nz/alert-system/alert-level-1/>

Christmas Dinner

The date for the dinner is Wednesday 16th December. Dinner will be served at 7.30pm sharp but you are welcome to come in earlier for a drink and chat. We will be there from 7PM. The cost is \$30 per head. Non-alcoholic punch will be available and alcoholic drinks will be available from the bar at Club prices.

Our events are informal, the aim is to be comfortable and relaxed so smart casual attire will suffice.

Please bring cash on the day and pay Brian who will be at the door.

Email Warwick at warwickfrankjones@gmail.com or phone 027 307 5308 or 855 5480

November Site Visits

We visited Central Aero, Flight Structures and WestPac Air Ambulance. Thank you to Paul Waterhouse, Jon Kerr and Massey Lynch for supporting the visits. Thanks to Des Underwood for coming down with a group of BOP branch members and thanks to John Mounce for coming from Auckland. Below are a few snaps shots taken during the day.



CENTRAL AERO



The photos show the Central Aero maintenance hangar. As you can see, it is a highly active operational maintenance area and we visited during a very busy period that was effectively put on hold whilst we were shown around. Working left to right and top to bottom.

1. In the first photo we see Paul telling us about service limits and the work that can be carried out to repair propeller blades, including explaining about dynamic balancing and it is done.
2. Ron and Hugh are inspecting a privately owned PZL – 101 Gawron derivative that will eventually be restored to flight worthy condition. https://en.wikipedia.org/wiki/PZL-101_Gawron
3. John and Hugh discussing the Cresco with Paul. The Cresco is powered by a Pratt & Whitney PT6A-34AG, rated at 750 SHP. The aircraft in the background is a Fletcher conversion, this is fitted with a PT6 A-11AG, rated at 550SHP.
4. John taking a closer look at the Cresco.

If you want to know more about Central Aero, please link to <https://www.centralaero.nz/> .



FLIGHT STRUCTURES



The photos show the Flight Structures Sora fuselage mock-up and the manufacturing hangar. Working left to right and top to bottom.

1. In the first photo we see the visitors inspecting the some of the components produced by the flat bed gantry. Flight Structures is a Part 146 and a Part 148 organisation, it is an approved design, certification and manufacturing organisation in the true sense in that it can provide approved functional turnkey solutions to many of its customers.
2. Brett Purchase, Development and Workshop Manager, discussing the discipline of product development and how it is applied at Flight Structures.
3. Jon Kerr, CEO, discussing the operational objectives of the Sora, as a utility aircraft. Some of you will recognise the LD3 cargo container inside the cabin and although this is a strong hint as to the intended purpose of the aircraft, there is also the F-45 Fire Catcher, the firefighting variant.
4. Clyde James, Chief Draughtsman, explaining the design and manufacture of the full scale mock-up of the Sora.

The mock-up was manufactured and assembled in its entirety by Flight Structures. The low profile fuselage frames are machined rather than using the more traditional fabrication methods. The design and manufacture of the frames use a CAD / CAM tools allowing for better dimensional control and repeatability. In addition to the improved / streamlined design manufacturing cycle, the tools give the engineers more scope to optimise the design. The fuselage is assembled using matched hole tooling, or determinate assembly.

If you want to know more about Flight Structures, please link to <https://www.flightstructures.co.nz/> .



WESTPAC AIR AMBULANCE



The photos show our visit to the Westpac Air Ambulance site. Their number 1 aircraft was out on a “Job” so we were not able to see it nor meet Massey Lynch, the operations manager / captain. He was at Whakatane waiting for a connection with a St Johns ambulance. He did arrange for Permal Samy to show us around. He is a certified Flight Nurse and ICU Nurse at Waikato. At the beginning he was somewhat apologetic because he thought he might not be able to satisfy our quest for knowledge. As it turned out, he was more than capable of holding his own when it came to answering our questions. I thought that, if he was this good at covering aircraft operational questions, it would then follow that his knowledge in his chosen profession must be many orders of magnitude greater. His relaxed demeanour would also suggest that patients would be in good hands. He certainly fitted the profile of the unassuming hero.

Working left to right and top to bottom.

1. Permal showing us around the “spare” aircraft. This was also a Mitsubishi MU2. He also explained the difference between the 2 aircraft.
2. Noel exploring the cockpit of the aircraft. Noel is an experienced flight instructor.
3. This photo shows the airframe of the front section of an MU2. The aim is to convert it to a flight simulator.

If you want to know more about the Air Ambulance, please link to <http://westpacairambulance.org.nz/> .



ARDMORE 2020

Sunday the 6th of December at Ardmore Airfield a few thousand people witnessed a great spectacle of vintage aviation in hot summer weather with a slight breeze blowing from the west right down the main runway. This was Warbird's first open day since the lockdown and was one of the best we have ever been to, and we have attended most of them over the years.

So with the conditions being very good, most of the WW1 aircraft flew, with the only exception being the new Albatross DV1 which was still awaiting CAA authorisation and clearance. So, the first segment consisted of the Bristol Fighter, Bristol Scout, RAF BE2, Fokker Triplane, Siemens Schuckert, (this is the only one flying in the world) and it's very noisy but gets along. The Ryan PT22, MXS and Harvard 92 did a solo aerobatics display and the Extra 330 had a race with a McLaren supercar and I think the car won. The second segment featured a pair of Cessna Birddogs, Piper Cub, Zlin, Beaver, Spitfire TR9, and the Roaring Forties Harvard aerobatic team. The final segment had the Tiger Moth duo, CT4 Airtrainer (DGY) P-40 Kittyhawk, and the T-28 Trojan flown by CFI Dave Brown, this one belongs to Brian Hall (ChCh), and differs from the other two on the NZ register by being powered by a P&W R-2000, not the Wright R-1820, and it looks great with a big spinner and a great bright paint job. The DC-3 was giving flights all day to those who wished to experience the joys of flight around Auckland on a lovely summer day. After this the usual airfield attack took place with the Harvards and the Yak doing the attack and the Spitfire and P-40 Kittyhawk doing the airfield defence with plenty of loud pyrotechnics adding to the effects.

The P-51 Mustang is still undergoing maintenance and the Catalina is somewhere else. Below are some photos courtesy of Peter Ryan with some descriptive notes.



The Spitfire in the hangar is the one Avspecs are working on, and the P-40 Kittyhawk is the one Pioneer Aero are working on.



Green/camo bi-plane is a Polikarpov, which was just on static display.



Chuck Yeager: February 13, 1923 – December 7, 2020

https://en.wikipedia.org/wiki/Chuck_Yeager

We remember one of the most celebrated characters in aviation.



“Yeager in front of the [Bell X-1](#), which, as with all of the aircraft assigned to him, he named Glamorous Glennis (or some variation thereof), after his wife.”

United States Air Force officer, flying ace, and record-setting test pilot who in 1947 became the first pilot in history confirmed to have exceeded the speed of sound in level flight.

Yeager's career began in World War II as a private in the United States Army Air Forces (USAAF) in 1941.[a] After serving as an aircraft mechanic, in September 1942, he entered enlisted pilot training and upon graduation was promoted to the rank of flight officer (the World War II USAAF equivalent to warrant officer), later achieving most of his aerial victories as a P-51 Mustang fighter pilot on the Western Front, where he was credited with shooting down 11.5 enemy aircraft (the half credit is from a second pilot assisting him in a single shootdown).

After the war, Yeager became a test pilot and flew many types of aircraft, including experimental rocket-powered aircraft for the National Advisory Committee for Aeronautics. As such, he became the first human to officially break the sound barrier on October 14, 1947 when he flew the experimental Bell X-1 at Mach 1 at an altitude of 45,000 ft (13,700 m), for which he won both the Collier and Mackay trophies in 1948. He then went on to break several other speed and altitude records in the following years.

Yeager later commanded fighter squadrons and wings in Germany, as well as in Southeast Asia during the Vietnam War. In recognition of the outstanding performance ratings of those units, he was promoted to brigadier general in 1969, retiring on March 1, 1975. Yeager's three-war active-duty flying career spanned more than 30 years and took him to many parts of the world, including the Korean War and the Soviet Union during the height of the Cold War. Throughout his life, he flew more than 360 different types of aircraft.



AVIATION EVENTS

After the Xmas holidays we get back into things on the aviation calendar with:

1. The SAA Fly-In at Ashburton on the 5th-8th of Feb.2021.
2. Then it's the Art Deco wk/end at Napier on 19th-21st of Feb.2021.
3. Wings Over Wairarapa at Masterton on 26th-28th Feb.2021.
4. Yealand's Classic Fighters Omaka, Blenheim, Easter wk/end 2nd-4th April.2021.

Christmas Dinner

TIME: Wednesday 16th Dec 7:00PM

VENUE: The Glenview Club, 211 Peacocks Road, Glenview, Hamilton 3206

[Google Map link](#), <http://glenviewclub.co.nz/>

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