



Great lady of the skies - ZK-AWP "Powhaitere" - at Paraparaumu Airport

Although it was wet, the open day at Paraparaumu Airport did not disappoint. Air Chathams had their lovingly restored DC-3 taking people (paying passengers of course) for scenic flights around Kapiti. She is really quite majestic as I watched several take offs and landings. Unfortunately the weather was not the best and visibility would have a bit limited for those that had booked their flights, however it would have made for a wonderful nostalgic flight. This old girl started her life back in 1945 so must have a few stories to tell. I have added a link for those that would like to read a bit about the plane.

<https://www.airchathams.co.nz/uploads/pdf/History-of-ZK-AWP.pdf>



BAC- Strike master

Although a lot younger, built in 1973, the Strikemaster, NZ 6372 also made an appearance. You don't see these too often in Kapiti so it did attract a fair amount of interest. There is a great video on "you tube" of it taking off on a very wet runway . After taking off to the South and doing a circuit, did a nice low pass over the runway , heading south... and then she was gone .

From the Prez:

Hi all,

As you read this I'm somewhere in the UK doing what one does. Sightseeing. I should be with our daughter and her husband in the Ironbridge area. That, however, depends when I got this from Don to send on! Then again, I could be in Gloucester with friends for the weekend.

Hopefully flying conditions have picked up a bit since we left. I'm sure they have.

The days I've been at the field lately have been busy days and it's been great to see those venturing out have some good airtime.

Committee is in good heart as is the club in general.

Let's keep it that way.

Steve

Move that door.



A project that has been on the drawing board for some time was finally kicked off this week (Monday 13th). This involves moving the toilet door from being an internal door from the shed to being an external door on

the Northern end of the clubhouse. The door will be/has been fitted with a combination lock and will give simpler entry and better security for the shed.

The project leader has been Don and the erstwhile talents of John Miller and Ian Crosland have done the damage. Several club members have helped, and Shahab, James and Andrew Farrow were spied screwing/nailing the plywood space fillers in the old doorway.



Steve

Note: From John, to Don : *Today (22 Aug). I completed the exterior cladding, facings etc work to above project . I suggest you organise to have the door and timber work painted as soon as possible, to protect the door, which is now exposed to the elements. Nail holes need to be filled (suggest putty) and all sanded.*

Ed's note.! On behalf of the committee , A huge thank you to John and his helpers for getting this done. I'll get the door closer and lock sorted in due course.

Now -- Looking for a volunteer or two who might be able to help get this last bit done. If you can help please let me know , or just organise it and do it! - Thanks.

The Smith Maiden.



Reported the other month was the attempted maiden of the Smith Mini Plane. John Ellison began this project when he lived in Christchurch. He left CHCH in '81 and at that time the framing had been completed, so it's been a long road to its first flight. The gremlins of last month were banished by putting in a **Dualsky 15 Amp Battery Backer**, purchased from Firebrand. A very clever piece of kit.

Saturday 11th was D Day. Everything was co-operating. Wind, weather, people. I arrived at the strip late in the morning, wanting the sun well out of the way. Assembled the model and decided to just keep going whilst I had my nerve. All checks completed, motor started and warmed up and we were ready to go. The sky was cleared and with Colin as my official test observer, the machine was sent to the Southern end of the strip. High rates were selected (just in case) and we started off on our take off run. The damn thing leapt into the sky without any input from me and with heart in mouth, down elevator employed to get some semblance of normality. With Johnny Miller trimming in some down for me a very comfortable 1st test fly was begun. After a couple of circuits to trim we took it up high and did a stall test. Simply nodded its nose and kept on going. Landing approach was good and the model easily visible, but just as we came across the threshold the motor cut, so first landing was a dead-stick.



Subsequent flights were on dialled back rates, slow idle was adjusted as was expo. It's very stable in the air and now has a very scale like take-off.

Wing incidence on the top wing needs some adjustment.

Although slow idle was adjusted, dead sticks were also experienced on the 2nd and 3rd flights. The 3rd being quite a challenge as I had gone around again and was nowhere on approach.

Turned out the fuel tank is a tad on the small side, so the next flights were shortened and no more issues. It was great to have John there for the first couple of test flights, as it really is his baby. Barry Mansfield, who has watched this plane being built over many years, saw it on the camera and also came up to have a look.

Thanks to all who have helped.

The model now has its Permit to Fly cat 3.

All I need to do now is sit my large model wings badge.

Looking forward to many more flights.

P.S. The pilot is coming!

Steve

I just happened to be at the field.



Friday 17th I just happened to be down at the field, doing a couple of chores before we headed off. Owen was there having a fly when I arrived, and the wind wasn't too bad, although a tad chilly. Owen headed off and about 30 minutes later up rocked Paul Buckrell. Paul has recently purchased a 3 metre Comp Arf Extra. Whilst he had purchased this 2nd hand, the model had never been certified for it's large model certification, so Paul picked that day to come up with Rod Ford, his Inspector, and put the machine through its paces.



It's an awesome piece of kit and pulled through the sky with a DA 150. Start-up didn't seem to be a challenge and after warm-up and suitable discussions, the plane was soon in the air. The first couple of flight were without incident. It did everything asked of it, including a snap roll on its first flight. Sits in the air like it owns it.

After the 2nd flight Paul was visibly more relaxed for the 3rd.

The 5 test flights all completed without issue.

I'm looking for to seeing more of this beast in the air!

The only challenge for Paul is that the 5-litre petrol can he has just doesn't fill the tank enough times!

I also hear talk about smoke systems and the desire to paint the sky with it.

Pauls 2.4 metre extra was purchased by Clive Waters for Oliver, and I look forward to seeing that young man emulating James in times to come.

Steve

Rally 2019

Ernie completed the Rally poster and rally advert recently so I could get into the Flyers World before I went away. They look great. Each year we are asked by GWRC to confirm rally dates as the rally info is included in their Summer Programme of events for the parks. Again, I notified early as we often get the request during the time I will be away. A copy of the poster was also sent for info purposes.

GWRC are looking at pushing a Park open day for Sunday 10th March, involving all the stake holders in the park. So for us, this is great news as there will be a lot of publicity around that weekend and our rally.

License Application.

It's been a long road. Longer than it should have been. However, I am pleased to advise that the application review process has been completed and the License assessment signed off. This been forwarded to those in charge of drafting the License (Jigsaw Consulting). Wayne Boness and I both asked to have this done before I went away (he goes away in a period that overlaps my trip), but it isn't going to happen. So, when I return, it should be all go.

Until a draft license is put in front of me, we won't know what conditions, if any, may be requested.

Steve

August's Club Night

Another really good turnout. The Kotare room is proving to be a great venue, and since the biscuits were upgraded to include some chocolate coated ones, attendance has improved. Special thanks to Cath (Ian's wife) who provided a batch of great tasting muffins.

The Andrews A1 Special :

In the March 2018 edition of the newsletter Ian did an article on the Andrews A1 Special , if you have a look back , you'll see a couple photo's of the full size and the scale airframe that Ian had built.

Well the model has now been completed. Those that were at club night would have seen what a good job he made of building the scale version. The photos don't do it justice, so you'll have to get down to the strip and have a look at it . I'm sure it will look very good in the sky.



QE Park Improvements /Future plans

Wayne Boness gave us an in depth talk at what has been done in the park and what is still in the planning stage to be done. There is definitely a lot more going on behind the scenes than what we see just driving to the strip. A lot of groups are involved with getting projects underway and this is why some things take a long time to get started. However looks like some interesting things underway. I can't remember everything but if you are interested in more about the Fauna and Flora in the park, Wayne is the man to speak to.

Upcoming club night - September.

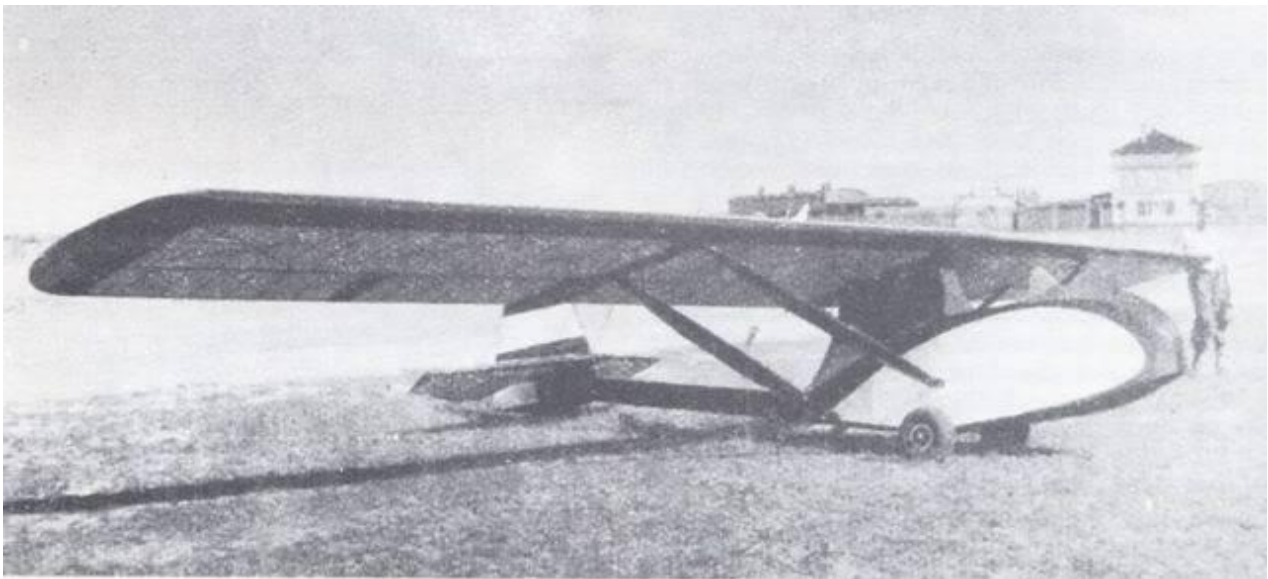
Show and tell. Bring anything that you may be working on or would like to talk about, or need help with. I'm sure there will be plenty of advice available. If you have something you would like to present . Let me know and I'll get the word out before then.

Gruse Bo 15/1 by Bob McGrath

The Gruse Bo 15/1 was one of many light aircraft developed (though not designed) by the Nazi regime as part of its *Volksflugzeug* project.

The Volksflugzeug (People's Aircraft) project was a [Third Reich](#) scheme for the mass-production of a small and simple aircraft during the 1930s although the idea pre-dated the Nazi Party by a few years and was initially inspired by aircraft such as the Ford Flivver. The project was one of the attempts of the Nazi regime to use consumer technologies as a propaganda tool. Other notable examples of "volks" projects included the *Volkswagen* (car), [Volksempfänger](#) (radio) and *Volkskühlschrank* (refrigerator).

Several other aircraft of the late 1920's & early 1930's such as the Etrich Sport-Taube and early Klemms were more successful and better known than the Gruse, of which only one example was known to have been built. The single seat Gruse BO 15/1 was designed and built by the August Gruse Maschinenfabrik in 1933 and was equipped with a Köller M3, 13 kW (18 hp) engine driving a two bladed pusher propeller, its empty weight was 186 kg and maximum flying weight was 306kg. The prototype was test flown by fighter ace Ernst Udet. Its original civilian aircraft registration D-YGYF can still be found on the German civil aircraft register.



There are many sources of data on the Gruse which state various specs, some of these are erroneous and these have been repeated in different articles over the years. The most glaring of these is the aircraft registration that is often stated as D-YOYF together with an incorrect dry weight.

The original aircraft has been reported as having a red and white fuselage with the black, red and white colours of the East Prussian area on the fin and doped & varnished linen on the wings however it has been photographed in other plainer schemes, probably at different stages of testing or construction.

Gruse-Hochdecker Bo 15/1.

Der abgestrebte Hochdecker der Maschinenfabrik August Gruse, Schneidemühl, ist für Sport und Uebungsflüge gedacht und mit einem Köllermotor oder mit dem Vierzylinder „Igel“ von Grade ausgerüstet.

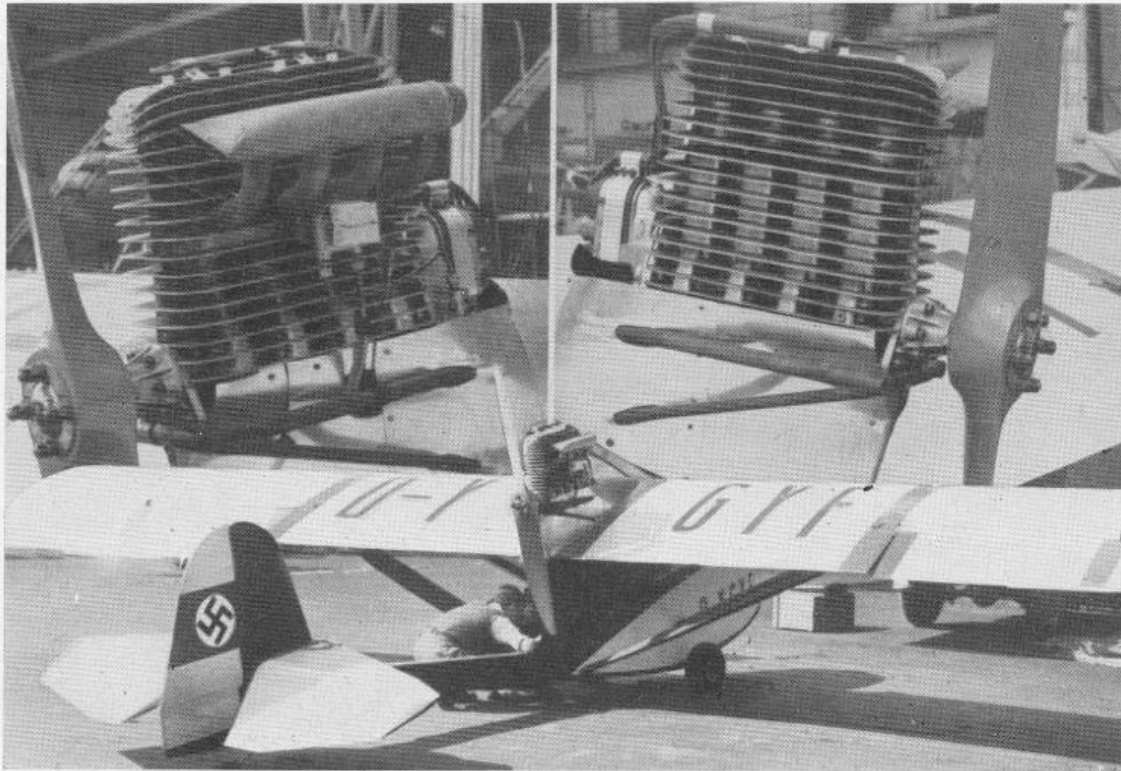
Flügel zweiholmig, durchgehend gleiches Profil, Enden leicht abgerundet, 14° Pfeilform. 2 Streben nach Rumpfunterkante.

Rumpf fünfeckig, läuft an der Flügelhinterkante in eine senkrechte Schneide aus. Leitwerksträger als Sperrholzkasten ausgebildet. Leitwerk freitragend.

Fahrwerk mit zwei Niederdruck-Ballonreifen 380×150 , durchgehende Achse, Spurweite 0,95 m. Schleifsporn am Ende des Leitwerkträgers.

Triebwerk: Köller-Motor oder Grade „Igel“ über dem Flügel, auf einem Stahlrohrbock gelagert. Druckschraube.

Spannweite 10,8 m, Länge 6,3 m, Höhe 1,63 m, Fläche 15 m^2 , mittl. Flächentiefe 1,39 m, Flügelstreckung 1:7,8, Leergewicht 186 kg, Fluggewicht 306 kg, Höchstgeschwindigkeit mit 18 PS 100 km/h,



Gruse-Hochdecker. Oben: Einbau des Grade-Motors. Links Auspuff- und Vergaserseite, rechts Ueberströmseite. Die Leistung des Vierzylinder-Zweitakters beträgt etwa 20–25 PS.

Photo: Archiv „Flugsport“.

The Model

This was not the prototype that I intended to build and it was during research about the Curtiss-Wright CW1, which I intended to build, that a friend mentioned this unusual type. My focus shifted to the Gruse and I discovered that there was a free plan in one of the German model aviation magazines, though this model was rather heavy and not what I wanted at all. The search continued and a plan for what was called a “Rossiten Motor Trainer 1934” was found on Outerzone. The plot thickened as the plan was based on an earlier plan from the 1958 Aeromodeller annual for an aircraft called the “Rossiten Motor AS” designed by Kurt Schnittke. A search of planes named Rossiten revealed that the prototype

concerned was, in fact, the Gruse Bo 15/1. Further research led to considerable modification of the Outerzone plan to better reflect the prototype. One aspect of the model that appealed was its difference from the usual run-of-the-mill foam or conventional cabin types that seem to pervade the flying fields. What I wanted was a semi-scale model that could be powered by a light electric motor running a 2S battery of minimal capacity that would be capable of soaring flight so as to extend battery life. It was important to me that the construction should reflect the era of the prototype but I didn't want to be impractical either. It was decided to omit ailerons as they are un-necessary for this type of model and just add complexity without benefit.



The fuselage is a pod and boom type with the boom being constructed by sheeting a blue foam core with 1 mm balsa using aliphatic glue. Teflon tubes within the foam carry 1 mm carbon control rods. Pod formers were attached to the boom and curved side longerons added to carry the 1.5 mm fuselage sheeting. Due to the rather limited working space the two 9 gram servos were added before the pod sides were sheeted. Adding the wing seat and side panels completed the fuselage. The undercarriage on the F/S was rudimentary and the model is faithful to this.

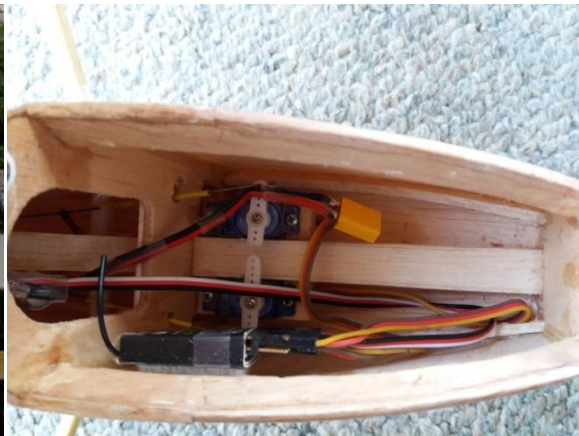
The tailplane is of conventional strip construction and is attached to the boom using a 3 mm plastic bolt and a locating pin to stop rotation. The control surfaces are tape hinged as this is light and easy.



The wing is conventionally constructed using a tin template to cut the ribs from 1 mm balsa and balsa spars. The root detail is a tad tricky as two music wire joiners have to maintain the correct dihedral and wing sweep angle while also passing through the 1/8 ply motor pylon and keeping this properly located between the wing roots. Struts are music wire with balsa fairing and are functional in both tension and compression. The wings and tailplane are covered with Litespan as this is durable and easy to work with; it also replicates the probable colours of the period.



Power is provided by a 1Ah 2S LiPo driving a 6 x 3E prop on a 10 gram motor, this setup draws a couple of amps and provides sufficient thrust for realistic scale-like flight plus a margin for avoiding stupidity. The engine pylon fairing is a lemonade bottle shrunk over an MDF pattern and sprayed with a rattle can to simulate aluminium. The model's AUV is 360 grams (12.7 oz) including the battery which gives a wing loading of 7.4 oz/ft², a tad high but OK.



Flying

The test flight took place in fine conditions with a light breeze of a couple of knots. The first flight was uneventful and after a gentle hand launch the model proved responsive and flew well with no trim input required. After a couple of quick circuits and a low pass to admire my handiwork I could not resist attempting to see how the thermal performance was (after all it was a motor-glider); I was not disappointed! A total of four flights of six or seven minutes consumed half the electrons in the battery (472 mA) so my hope for economy was also satisfied. I am very happy with the model so far and think that one of about 4 metres span would be a unique project for the future.

So!! What's going on in your shed? ... Words by Ian Crosland, Photos by Alastair Rivers

This is the third of a series that Alastair and I are doing for the newsletters over the winter period. So if you would like us to do an article on your latest or any interesting project then contact Alastair or myself.

Alistair & Ian's visit to Colin Taylor's workshop .

Colin has been building models since he was 9 years old and certainly knows what he is doing and size doesn't seem to matter. His latest project is a 1942 vintage 1/2 scale Swiss Elfe / P2 glider, imported from Poland as a short kit with a span of 5.1 mtrs and length of 2.4 mtrs. The CNC components are a work of art. Attached is a photo of a full size radio controlled and as you can see was rather small to carry a person. Colin made a jig to support the keel and notched to take the frames. An aluminium tube through the centre of the frames supported at both ends to hold frames up right and in line until stringers were glued in place and then removed, photo shows jig and tube. Colin plans to cover the aircraft in Solartex, the tinted clear type over the open structure. The photo of the box of bits is one of two of a 1/3 scale 6 mtr PWF101 also a glider which is his next project. Colin's Gliders are a pleasure to see on the ground and in the air.



And that's it for this month.

Thanks to those that sent in their contribution.

If you have any articles or photos to share, please send through to Steve or myself.

If I missed something you sent me, just send me another email reminder, and I'll try fit it in sometime.

Till next time.

Fly hard... land soft.

Cheers

Don