NSMAC Newsletter

10.10.10

"Decimal day"

Paul and T-28 Trojan

Hi to all.

Wow, that was a great day at the field today! Started out with no wind at all at 8.30am and a SW breeze started up within an hour. Pretty good considering there was a wind warning in the marine forecast. It strengthened around midday, but not enough to stop planes from flying, so there was a deal of aerial frolicking throughout the day and an excellent turnout of Members.

Simon's work with the mower last week produced a couple of metres extra on each side of the strip, which now boasts a 16m width, plus a good measure of additional length at both ends. *"Way to go, mate - perfect!"*

It was a treat to enjoy the return of the barbecue, courtesy Grant and Mal. The combination of snarlers in the sky and snarlers on the bread was a happy one. Thanks guys ☺.

Left & below - Mal, Grant & Riadh

Below - Brian and Tony in foreground and Gill applying the sauce

Alex has to claim the skill prize for the day. A test flight went wrong on take-off due to reversed aileron controls and gusty conditions, resulting in the plane immediately inverting close to the ground. It blows my mind how Alex managed to keep it level, inverted 300mm up and land it softly on its back in the grass just off the strip, when he had no idea what was going on. A calm display of experience that not many people even saw. The damage was slight and limited to the top of the rudder. A drop of CA glue saw the plane in the air again very quickly. The normally trusty cameraman was so busy admiring the feat and examining the damage that he failed to snap Alex or the plane, so, sadly, no pics ☹.

To mitigate the loss, ***here's happy Mike – right - getting set up, but never up-set.***

It was decided to clean out the shed today.

Below -Grant introducing Broom Dancing to Mal - What lengths some will go to in order to avoid flying in the nasty old wind.

Right - Keith and Riadh admiring the TRI 60 aloft.

(NB: The wind sock is showing the way to the tree)

This 60 size Super Flying Model – Explorer has a Saito 82 4-stroke and Riadh is also very proud of his new Aurora 9 touch screen 2.4 gig transmitter.

Below – Riadh's Great Planes Super Sportster with YS 63 4-stroke, pressurised engine (ignore the Calmato sign on the port wing – he's very confused and, well, he just likes it)

Below – Matthew under full RV8 power on his skateboard – "Yeehaaaaa....."

Right – Steve Collett and his Yak 54 with FS 200 32cc 4-stroke

News from Jason Greenwood – Heli Captain

A 'Down Under Heli Smackdown' event is being scheduled for 11-13th Feb 2011 (final date to be confirmed) at the Hamilton club. This event will feature Curtis Youngblood, one of the all time best RC Heli Pilots:
http://curtisyoungblood.com/aboutcurtis.php
Current World 3D Masters Champion Nick Maxwell may also be attending as well as a cadre of other international pilots. Stay tuned as this is an international level event NOT to be missed!

From Kevin Foote - the organiser:
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The wheels are turning (all be it a bit slow) but things are starting to come together for the next Down Under Heli Smack Down.

I have been talking with Brian from CYB and if all goes well we might even get Curtis Youngblood, Buzzing Brian and the man of the Hour World 3D Masters Champion Nick Maxwell along.

This will be a kick ass event but we will need your support, I will try and keep the tickets under $100.00 but as you can appreciate it is not cheap to fly from Texas to NZ. We will have a heap of Guys from AU coming as well, I have been on the phone with Bill a lot this week and the build-up has started already.

If anyone want to help sponsor the event then let me know asap. It all comes down to funding. Last years event was pretty good and this one will be more good :-)

Brian is looking to tie the trip in with an event in AU http://www.archeli.com.au/forums/sh...ad.php?t=138965
SO if this comes off then the costs can be shared between us and the Aussie boys. Curtis is one of the nicest people you will ever have the chance to meet and is still one of the best pilots the world will ever see, what he doesn't know about helicopters really doesn't matter.
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The latest HOT heli to hit NZ is the Curtis Youngblood Rave ENV 90 which can be run as an electric OR a Nitro (Flybar or Flybarless too)! Hobby Hangar is the sole dealer for NZ and you can buy the heli here:
http://www.hobbyhangar.co.nz/advanced_search_result.php?keywords=rave
and read about it here:
http://www.rcheliresource.com/breaking-next-d-rave-90-photos/

The other 'big thing' to happen in heli tech lately has been the advent of flybarless head designs. Specifically this relates to electronically stabilised heads with no mechanical flybar. Until now, the electronics have been SOOOO expensive that these designs were an extreme niche market and used primarily on scale/multiblade headed helicopters. In the last 6 months or so that has changed dramatically and a whole raft of relatively inexpensive electronic flybarless control systems have been released along with native flybarless heads (with the correct geometry for flybarless) and kits being released by just about every major heli manufacturer. The result is that it is now almost the same price to run w a flybar or flybarless. In addition, many of the new systems not only run the stabiliser but can also act as a rotorspeed governor, receiver, tail Gyro and more. One of the more popular new systems is the TotalG:
http://www.rcheliresource.com/total-g-full-specs-are-out-and-futaba-is-in-the-party/ again from Curtis Youngblood.

The Compass brand of heli kits are now starting to be released in either flybarred or flybarless configurations and our own local Hobby City can hook you up with all things Compass:
http://www.hobbycity.co.nz/Soldat/Contact.aspx

Ask for Simon or Andrew at the Albany shop as they are both NSMAC Members!

Flybarless helis have several advantages including fewer parts leading to less rotor drag and subsequently more cyclic power and longer run times, less mechanical damage in a crash, easier, faster and 100% consistent head setups and easier sharing of head setups (just a simple data file) between pilots. The one current negative expressed by some pilots is that the heli does not yet fly exactly like its flybarred cousins, especially for aggressive 3D. The technically challenged may also struggle at first because the setup is now mainly electronic vs. mechanical. In time I'm sure this will change and these issues too will be ironed out just like all of the other electronics we now run on our birds.

Happy flying and see you all at the field! Cheers, Jason Greenwood

Flight Corner

Graham Beagley kindly suggested this topic for Flight Corner – thanks Graham.

A product of someone's vivid imagination.

Photos of this Soviet behemoth, posing as a K-7 designed by Konstantin Kalinin, have been zinging around the Internet lately, eventually landing on the desktops of National Air and Space Museum curators. “If it’s on the Internet, it must be true,” goes the saying.

No dice, says curator Von Hardesty, who specializes in Russian/Soviet aeronautical history. “No Kalinin design on this scale ever flew. A Russian caption suggests that this is a model of a purely hypothetical Kalinin design. K.A. Kalinin, who was later purged by Stalin, did design a prototype K-7 aircraft, a civilian version that flew briefly in the early 1930s. The K-7 was a large aircraft for its time, with seven engines (one pusher), but it did not match the giant Maxim Gorky (ca 1935). Both aircraft were destroyed in crashes.”

Admits an otherwise anonymous “Randy,” posting on a Web site: “They are actually computer-generated graphics, embellished by the artists.”

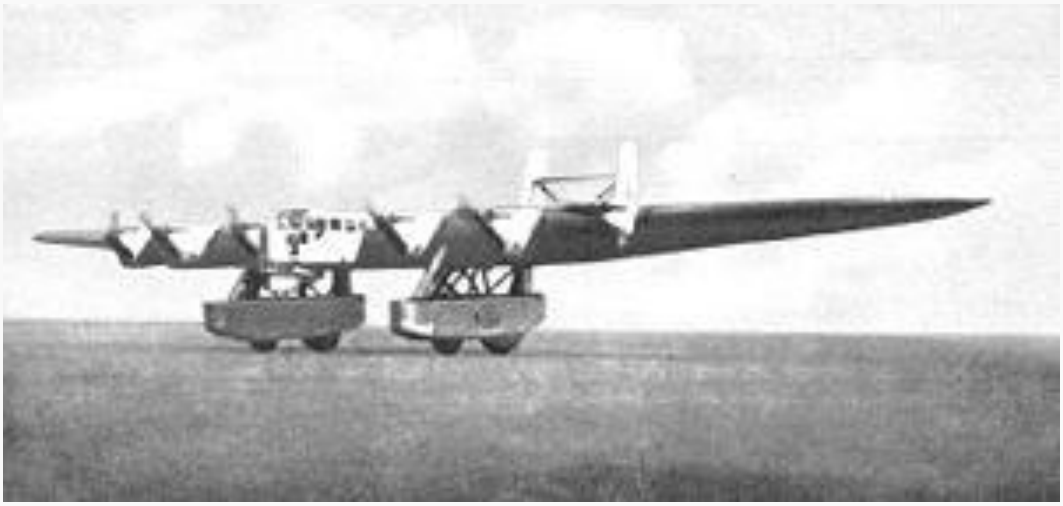
To me, they evoke the grandiose designs of Bruce McCall, as seen on the cover (right) of one of his books.

From Wikipedia:-

Kalinin K-7

From Wikipedia, the free encyclopedia

K-7



Role	Heavy bomber
National origin	Soviet Union
First flight	1933
Number built	One

Kalinin K-7 (Russian: Калинин К-7) was a heavy experimental aircraft designed and tested in the Soviet Union in the early 1930s. K-7 was of unusual configuration with twin booms and large underwing pods housing fixed landing gear and machine gun turrets. In the passenger version, seats were arranged inside the 2.3 meter (7 ft 7 in) thick wings. The airframe was welded from *KhMA* chrome-molybdenum steel. The original design called for six engines in the wing leading edge but when the projected loaded weight was exceeded, two more engines were added to the trailing edges of each wing, one right and one left of the central passenger pod.[1] However V. Nemecek states in his book, *The History of Soviet Aircraft from 1918*, that there was only one further pusher engine added; this agrees with the specification supplied far below.

Designed by World War I Aviator Konstantin Kalinin with a wingspan close to that of a B-52 and a much greater wing area, the K-7 was one of the biggest aircraft built before the jet age. It was only one engine short of the B-52 as well, having the curious arrangement of six pulling on the wing leading edge and one pushing at the rear.

The K-7´s very brief first flight showed up instability and serious vibration caused by the airframe resonating with the engine frequency. The solution to this 'flutter' was thought to be to shorten and strengthen the tail booms, little being known then about the natural frequencies of structures and their response to vibration.

K-7 first flew on 11 August 1933. Then on 21 November 1933 the aircraft crashed due to structural failure of one of the tail booms, killing 14 people aboard and one on the ground. Although two more prototypes were ordered in 1933, the project was cancelled in 1935 before they could be completed.[1]

On the 11th flight, during a speed test, the port tailboom vibrated, fractured, jammed the elevator and caused the giant aircraft to plough into the ground, killing 15. Undaunted by this disaster, Kalinin's team began construction of two further K-7s in a new factory, but the vicissitudes of Stalin's Russia saw the project abandoned, and in 1938 the arrest and execution of Kalinin on trumped up espionage and sabotage charges.

Specifications (K-7)

Data from Shavrov 1985[1]

General characteristics

- **Crew:** minimum 11
- **Capacity:** 120 passengers in civilian configuration
- **Length:** 28 m (91 ft 10 in)
- **Wingspan:** 53 m (173 ft 11 in)
- **Height:** ()
- **Wing area:** 454 m² (4,886.8 ft²)
- **Empty weight:** 24,400 kg (53,793 lb)
- **Loaded weight:** 38,000 kg (83,776 lb)
- **Powerplant:** 7× Mikulin AM-34F V-12 piston engines, 560 kW (750 hp) each

Performance

- **Maximum speed:** 225 km/h (121 knots, 140 mph)
- **Service ceiling:** 4,000 m (13,123 ft)
- **Wing loading:** 84 kg/m² (17 lb/ft²)
- **Power/mass:** 103 W/kg (0.06 hp/lb)

References

- Gunston, Bill. "The Osprey Encyclopaedia of Russian Aircraft 1875 – 1995". London, Osprey. 1995. ISBN 1 85532 405 9

1. ^ [a] [b] [c] Shavrov V.B. (1985) (in Russian). *Istoriia konstruktskii samoletov v SSSR do 1938 g. (3 izd.)*. Mashinostroenie. ISBN 5-217-03112-3.

Sign off:

That's it from me. All the best for a good week at the coal face and keep your toes crossed for a fine weekend and fun at the field. There seem to be new and different planes appearing and it's a pleasure meeting up, sharing info and enjoying the flying. On that subject, several of us are thinking it would be great to have Club evenings maybe 4 times a year, so we can meet, discuss issues, have workshops on different subjects and socialise. Roll on the AGM . It would be good to float the idea and see whether there's support for it.

Cheers, Stan

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