

WAMASC Newsletter



December 2019

Colditz Cock



Aeromodelling History



Season's Greetings



should any individual have anything at all they would like to contribute, share or add to this newsletter, please feel free to contact the [editor](#) through the [Club Secretary](#) via ✉ secretary@wamasc.com.au – enjoy

Colditz Cock

To say that truth is often stranger than fiction would be an absolute understatement in this strange aviation tale concerning the 'Colditz Cock'. The story would also have become so much more remarkable should things have carried through to fruition – read on.

Firstly the amazing **Colditz Cock** was the code name and nick name for a makeshift glider that had been secretly built by a group of daring POW's during their incarceration at Colditz Castle during WWII in a bid to escape to freedom (that is for two (2) of the most important inmates).

Without the inclusion of their fellow Foreign Coalition Allies, more than 100,000 British soldiers, sailors & airmen alone, were captured by the Germans during the Second World War. Many, not all, ended up being imprisoned (incarcerated) in one of the various types of German war camps that were scattered across Europe – there were separate camps for different kinds of POW's to cater for all.

Oflag IV-C was often referred to by its location name of **Colditz Castle**. The Castle overlooked the scenic countryside of Colditz, Saxony and was one of the most noted German Army POW camps available for captured enemy Officers (Oflag is a bastardisation and shortening of the word Offizierslager, meaning '**Officers Camp**').

Oflag IV-C was situated internal of the impenetrable thousand-year-old Colditz Castle. A locale in Germany made most famous during WWII as it housed only high-profile enemy Officers.

Overlooking the town of Colditz in Saxony it was right at the core of Nazi Germany. Colditz was 400 miles (650km) away from any frontline. Its thick walls and cliffside with a shear drop of 150 feet (75m) straight down to the River Mulde made the castle practically impenetrable and basically escape-proof unless a person was physically let out through its portcullis – or so the Germans thought. They had not banked on the ingenuity and cunning of their inmates (foe).



Colditz Castle

Reiterating that the Germans considered this particular prison camp to be one of, if not, the best, high-security and escape-proof facilities (prison) on hand they were often left red faced and very embarrassed as Oflag IV-C accumulated the highest number of **successful escape** attempts on record.

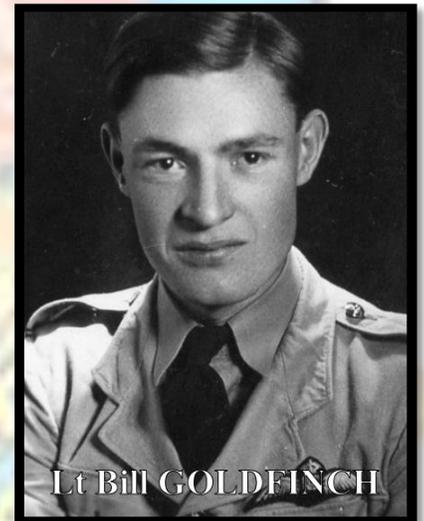
This record was not lost on the creative prisoners and inmates who repeatedly tested its holding prowess. It was to become one of the unwritten laws and duties of each and every prisoner to ‘do everything in one’s power to aggravate the enemy and escape’. One of the most amusing escape schemes from Colditz Castle included an improvised glider made by a group of British prisoners. A scheme that started at the same time as the events of ‘**The Great Escape**’ at Stalag Luft III. The courage and effort that those brave men put into building a tunnel was an inspiration for many. However; the higher echelons of the Allied high command were a little dubious at first discouraging their soldiers from trying to escape – a repeat performance due to the fall-out after being captured was not warranted, nor something to be seen again.

‘The Great Escape’ had resulted in the execution of 50 prisoners.

On the other hand, the glider plan that the prisoners in Oflag IV-C came up with was **encouraged**. Probably because the higher echelons thought it would be more of a pastime activity that would ease the minds of the prisoners and ease tension from the daily routine of a prison. Who knew that they would be so serious about it?

It was Lieutenant **Tony ROLT**, a car racing legend in the UK, who proposed building a glider. He somehow observed that the castle chapel roof line was hidden from the view of the guards. Being an engineer, ROLT realized that he and the other POW’s could use the roof’s surface to launch a glider that could fly across the River Mulde. After speaking with his fellow prisoners and inmates the plan was set in motion.

Flight Lieutenant’s **Bill GOLFINCH** and **Jack BEST** were the men chosen to lead the dangerous project. The two of them were lucky enough to find a book in the prison library that would provide the basic information for building a glider: **Aircraft Design** by **C.H. LATIMER-NEEDHAM**. Soon they started to assemble the plane in the lower attic of the chapel. Bill and Jack had the help of



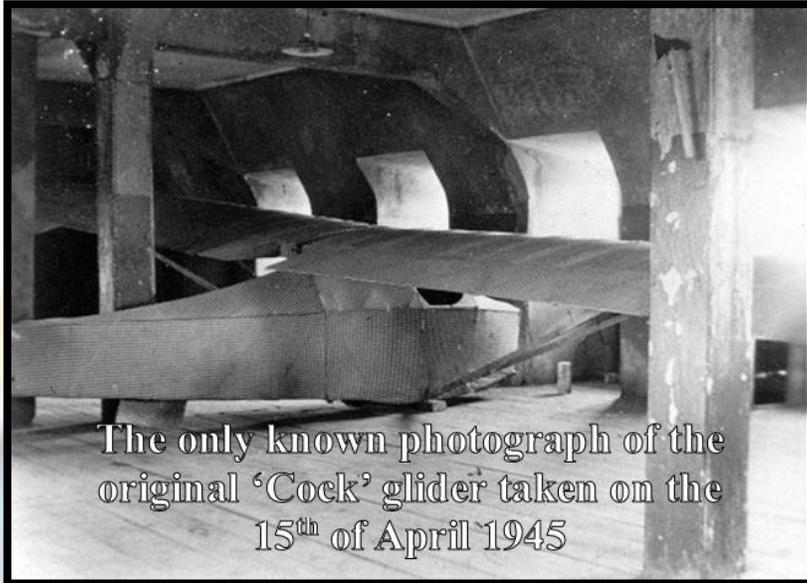
Lt Bill GOLDFINCH

12 other soldiers who were nicknamed the ‘**12 Apostles**’. A false wall was built in the attic to hide their workshop. They were in a good position because German guards were looking down for tunnels in the ground, not for hidden glider-workshops up in the attics. They were quite safe up there, but still, they organized lookouts and created an alarm system to warn the builders.

They had it all planned. The materials they used in the construction of their two-man escape glider included bed slats, cotton sheets, electric cable, table knives, nails, wooden boxes – they had to bribe a guard to obtain casein glue and a metal drill. Covering material was sealed, stiffened and shrunk with porridge (gruel).

Launching their machine was perhaps more difficult than building it. Their plan was to construct a runway from tables and to use the castle’s sloping roof to gain momentum and speed to launch it.

Risking their lives building and creating such a device was well worth it if you asked a British POW. The final product was a sort of miracle considering the conditions under which it was built. The 20' (6.1m) long glider weighed 240lb (109kg) and had a wingspan of 32' (9.75m). **All that was left to do was to schedule the take-off.**



The only known photograph of the original 'Cock' glider taken on the 15th of April 1945

After they had made all of the necessary preparation, they scheduled the take-off for the spring of 1945, but by then the **liberation army** was getting closer to Colditz Castle. Although they were almost freed, the soldiers decided to keep the glider ready for flight in case the SS decided to execute them as a sign of warning to approaching American troops.

The 'Colditz Cock' never saw its maiden flight. Not because it was unfit to fly, but because the American Army liberated the camp on the 16th of April 1945.

In more recent years, British television Channel

4 decided to test the glider and commissioned a **full-scale replica**. The Colditz glider managed to fly off successfully on its first attempt.

BEST, GOLDFINCH and about a **dozen** of the veterans who had worked on the original glider were present during the attempt. It was probably a very rewarding experience and glorious sight for them to witness conclusion.

Another radio-controlled replica was built in **2012** by **Tony HOSKINS**. To make the whole experience more genuine, they did it in the same attic where the original was made. The model was flown from Colditz Castle and managed to fly over the River Mulde.

The fate of the original glider is not known as the castle was in the zone controlled by the Russians. The only evidence of its completion was the photograph taken by an American war correspondent during the liberation.



Full Scale Replica on display at the UK War Museum



A History of Aeromodelling in Australia

The **Museum of Australian Aeromodelling** actually exists. For those who are unaware, a brief snippet of Australian aeromodelling history is available and can be found on-line. Very cleverly, and for posterity, a lot of good people have done a lot of hard work and made the effort to electronically record a lot of old memorabilia so that it is never lost.



Museum of Australian Aeromodelling

The Museum of Australian Aeromodelling exists as a 'virtual' on-line exhibition published on the Internet as a subsite of the **Monash University, Lawrence Hargrave Website**. Navigation to this site can be obtained by

following the link provided (Ctrl + Click and enjoy): http://www.ctie.monash.edu.au/hargrave/tribute_09.html .

Statistics taken at the end of 2003 showed that as part of the 'Hargrave' site, the museum had an audience of over 500,000 visitors a year and suggested that this may exceed a million in the future. That future is now, and institutions such as the **MAAA** should be very happy as it gives a great word picture as to how many people are interested in the sport of aeromodelling. In the jargon of the **World Wide Web**, the site receives some 5 -10 million so called 'hits' annually. It's a long way down the track from 2003 when those statistics' where initially taken and the site has grown from strength to strength. Now sixteen years later, in 2019, a vast assortment of historical aeromodelling knowledge and memorabilia has now been stored for prosperity in the **Pandora Archive** at Australia's National Library in Canberra., ACT. The site is quite user-friendly presenting much information for the aeromodelling enthusiast catering with the likes of plans for building aircraft, contact information, articles, pictures, and biography's etc. For your convenience links are provided below (Ctrl + Click and enjoy): 

- ❖ **Lawrence HARGRAVE - Australia's Father of Aviation** [Biography](#) | [Gallery](#) | [Papers](#) | [Legacy](#)
- ❖ **The first men to build and fly an all Australian aeroplane** [John and Reginald Duigan](#)
- ❖ **An Aviation Timeline** [An Aviation Timeline](#)
- ❖ **Aviation Biographies** [\[Australian\]](#) | [\[Rest of the world\]](#)
- ❖ **The story of the UAV, the Unmanned Aerial Vehicle** [Unmanned Aviation](#)
- ❖ **UAV Pioneers** [Reginald Denny and Walter Righter](#)
- ❖ **Explorations into Unmanned Aerial Vehicles** [Aerobotics](#)
- ❖ **Flying Wings** [Flying Wings](#)

While navigating to some wonderful pictures using the http://www.ctie.monash.edu.au/hargrave/tribute_09.html link, as shown on the previous page, much can be revisited from **1947** through to **1952**. A word of warning is that, unfortunately, the site has not been updated since the 16th of December 2002 and as such is a little outdated – however, the essence remains. That said; the website authors have presented a selection of cuttings from a vintage aeromodelling scrapbook belonging to **Max HAYSOM**, President of the **VARMS** (**Victorian Association of Radio Model Soarers**), Melbourne. It is worth remembering that these types of sites, or any other such medium,

can only exist with the input from others who take the time to do so. Should one wish to be relegated to history and have their club recorded for posterity all one has to do is make contact and pass on some information. For further information and simplicity please find the following <http://www.ctie.monash.edu.au/hargrave/index.htm> link for the **Lawrence Hargrave Website**.

As homage to those who paved the way, I present a look at the past using pictures from the wonderful Monash University, Lawrence Hargrave Website and for your convenience provide hyperlinks to much aviation information. As Molly MELDRUM would say “do yourself a favour” and have a squiz – it’s well worth a look.



Australian Modellers Group Circa 1947

Submission of items for the Museum - should you have a model (or models), or any other aeromodelling paraphernalia, which you may consider is/are of historic significance and worthy of inclusion to the museum, please contact the curators via [email](#) providing a 100-200 word brief description of the model(s) or object(s) place in Australian Aeromodelling history. Should the curators consider the item(s) noteworthy and suitable for display, you will be provided with a more detailed outline of the format in which the items should be submitted.



Modellers from six clubs, who gathered for the 1947 Garnham Trophy at East Kew (Victoria)



Taken from the site are some rather unique pictures depicting model aircraft of the day. It seems not much has changed, with the exception of the technical advancements such as radio control. Judging from the look on **Arthur SMITH's** face (pictured above, left) the same feelings abound post a mishap. The excuse of 'dumb thumbs' cannot apply as the aircraft are all 'Free-Flight', so I don't know what one would say. The same adage applies though - no matter how many you plant they just will not grow. One must take their hat off in appreciation at the ability to build and fly an uncontrolled object that remains airborne for a duration.

The **10cc Brown Spark Ignition engine** (pictured adjacent right) was the rage and monster of the day. It can be seen mounted and fitted to both **J FULLARTON's powered boat** (pictured above, centre of page) and the, so called, **speed model** built by **Jack HEARN** (pictured on the top left of the next page). It is worth noting that the **HEARN** family of **Jack, Keith** and **Bruce** were all exceptionally avid modellers.

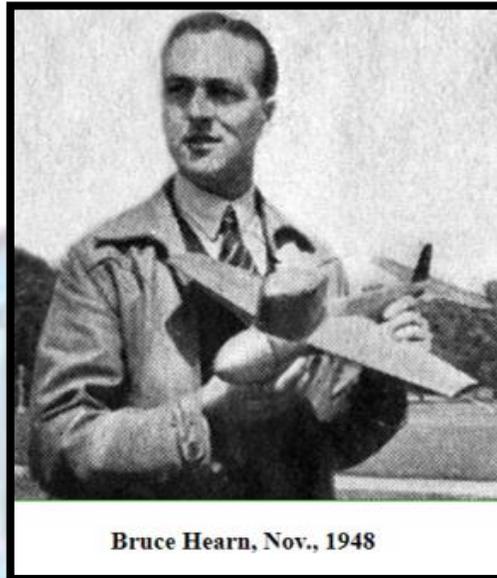


Take note of the aerodynamic cowling fitted around the speed model engine to negate airflow resistance and gain more speed. **Jack HEARN** modified the 10cc Brown Spark Ignition engine which evolved into the 10cc **HEARN Tempest** engine after liaising with the manufacturer. He set many speed records with his aircraft which on 'take-off' was launched from a dolly as it had no wheels fitted (another deliberate design feature used for streamlining).





Keith HEARN, c. July 1948



Bruce Hearn, Nov., 1948

One of the biggest and annoying problems encountered with 'Free-Flight' model flying was the time spent **recovering aircraft**.

A lot of time had to be spent searching backyards and streets etc. Enter a device called the '**Dethermalizer**' which used either a pneumatic or burning fuse timer apparatus to initiate and deploy a parachute for **runaway** aircraft.

Aircraft still went MIA and a burning fuse was not conducive to the dry Australian weather conditions. A copy of the

Dethermalizer article from the 1948 November edition of **AIRCRAFT magazine** is on the next page and makes for some interesting reading. It's a little smuggled in places but conveys a great word picture regarding the operating environment of modelling at the time.

Arthur SMITH poses in the picture (below left), holding a rather modern looking 'pusher prop' rubber powered aircraft. It is quite remarkable that a **1949** vintage aircraft design can be seen with **winglets** fitted outboard to the main wing outer ends. Note the large horizontal stabilizer fitted at the front of the aircraft sporting the same dihedral angle as the main wing fitted which is fitted at the rear of the aircraft. This configuration and unique conceptual aircraft looks like something dreamt up from the mind of modern-day aircraft designer and retired American Aerospace Engineer noted for his originality in designing light, strong, unusual-looking, energy-efficient aircraft – **Elbert Leander "Burt" RUTANE**. Maximum dihedral effect is evident and an obvious requirement for sustained long term flight stability with a 'Free-Flight' uncontrolled aircraft. The emphasis is on absolute light weight construction and one can identify the dope and tissue covering that brings back a lot of fond memories. I am sure there was much hangar rash and damage caused from mishaps during operation, handling, transportation etc. of such flimsy and fragile aircraft. I also wonder what the job of the **CFI** or **Flight Instructor** would be like. I guess it would be just a case of "OK – let her go" while releasing your aircraft, standing back and watching how long it stays airborne. It



Arthur SMITH, May, 1949



Aug 1950

National junior stunt champion, John Lamont, with his winning Super Skylark powered with a Frog 500.

MODEL FLYING, like golf, can be spoilt by many miserable hours of searching. Jim Fullarton, a former Australian Wakefield winner, says this can all be overcome by fitting your model with a—

Dethermalizer

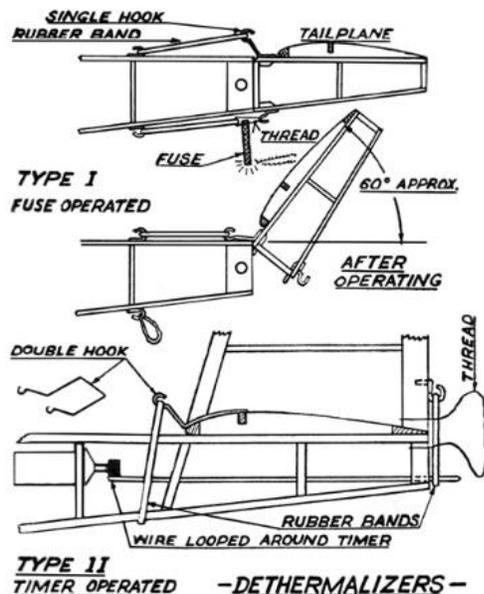
At contest after contest we witness the unhappy sight of modellers pacing up and down suburban streets for hours — looking over back fences, onto roofs — followed by the inevitable advertisement in "lost" column. All this trouble for models which could have been kept in sight with the help of dethermalizers.

However, most modellers are waking up to the importance of these gadgets, and we now see a fair sprinkling of them at model plane meets.

At one time the problem of models being lost out of sight was threatening to put an end to all free flying competition. Modellers knew that to win a contest they had to risk losing their models which were worth anything up to £20. Their only hope was that it would be found by someone honest enough to return it.

Now the model flyer can set his machine to come down just whenever it suits him and contest rules are framed with an upper limit of 10 minutes to discourage the fly-away type of contestant.

There are two main types of dethermalizer in use; the principle of both being to spoil the glide and bring the model down quickly.



The English favor a parachute attached to the tail and stowed in a box in the fuselage. At the appointed time it is released by a complicated series of springs, trapdoors and similar devices.

The extra drag of the opened chute brings the model down in a steep glide.

Much simpler is the tall "Pop-up" type illustrated on this page for which we are indebted to that American master modeller Carl Goldberg. This makes the model sink fast on a level keel in a completely stalled condition.

The tension of the rubber bands which normally hold the tail on gives the necessary movement. This action can be set off either by a time fuse or a pneumatic timer.

Alan King has discovered that a type of loose woven sandshoe lace makes the most reliable fuse and burns at the rate of 60 seconds to the inch.

The fuse is the most suitable for rubber powered and diesel models. You can easily prepare them by soaking soft string in a saturated solution of saltpetre in water and then drying it out. All chemists sell saltpetre.

A loop of cotton is served (not tied) through the end of the fuse. This connects the rubber band to the lower tail hook and when the fuse burns through the cotton the tail snaps up and another model is saved to fly again.

A small piece of mica or aluminium foil cemented to the underside of the fuselage will protect it from flying sparks.

The best time to light the fuse is just as you are completing the winding of the rubber. If it is windy a cigarette or another piece of fuse will be more convenient than a match.

Timers are usually mounted in the rear of the fuselage and connected so as to withdraw the pin which holds the rear rubber bands as shown in the illustration. A piece of thread tied to the trailing edge limits its upward travel to the correct angle which is about 60 degrees.

The use of dethermalizers introduces a new factor to test the skill of the model flyer. He must now try to estimate how long it will be before the prevailing wind takes his model out of sight and set his fuse or timer accordingly. Competitions will no longer be won by one freak flight, but by three long flights—in between a lot of cross-country running.



Wakefield trio (above, L-R):
Allen Thomas, third; Alan King, first; Jim Fullarton, second.

Victorian Wakefield Team, Feb., 1952



Alan King, 'Dooling 29', Nationals, 1951

RADIO-CONTROL—AT LAST

The honor of flying Melbourne's first radio control model goes to a trio of well-known local flyers. Arthur Smith, whose name is on a lot of prewar trophies, built the model, a standard "Rudderbug"; national stunt winner, Reg Cooper, did the radio work, and the whole project was organised by Jack Hearn. Commercial E.D. radio equipment is used, and a Frog 500 provides the power.

The model has made a number of successful flights, its first public appearance being at the Lara meeting on Oct. 15, where it flew convincingly throughout the day. Jack, who has flown everything from indoor models to DC-3's, says it reminds him most of handling a full-sized sailplane. Present plans are to fly the model at the Adelaide national meeting.

Seasons Greetings

A Merry Christmas & Happy New Year to All

On behalf of the Club Chairman, his Committee, and all our brethren - a very Merry Christmas to you all and your families.

We trust you have had a good year. Please look after yourselves and one another during this festive time as we want to see you all back safely in one piece at the field recharged in the upcoming New Year of 2020.

A special mention goes out to all the dedicated people who have worked and supported the Club so diligently behind the scenes throughout the year – thank you. Not everyone has always shared good health over the year, yet, have soldiered on and performed an admirable task. Thank you for juggling both family and personal commitments in between Club requirements.

To our members especially. There is no such thing as a magic fairy and things don't just happen without you making it happen. Thank you all for your attendance at the working bees, your input and attendance at all social occasions.

We all could spin some yarns and tell some stories as could any group of differing individuals who come together during the week and each weekend. There is no doubt we are a band of brothers who all have one thing in common and that is **aeromodelling**.

Finally; in appreciation, a very big thank you to all our respective partners for putting up with our aeromodelling antics.

Merry Christmas and a Happy and prosperous New Year.





SAFE FLYING

“You Learn More From Failure Than From Success. Don’t Let
It Stop You. Failure Builds Character.”