

Queensland Vintage and Warplane News

Vol. 17/03



A Queensland Vintage Aeroplane Group – Australian Flying Museum Inc.
Publication

QVAG Facebook URL: <https://www.facebook.com/Queensland-Vintage-Aeroplane-Group-Inc-160487164099644/posts/>

QVAG Web Site: <http://qvag.org/index.html>

Front Cover Photo

Lockheed Electra 10B "Ansalanta" VH-UZP. The aeroplane had been imported by Ansett in 1937. Unfortunately on 16 May 1936 the aircraft was severely damaged whilst making an instrument approach to Adelaide's Parafield airport and the aeroplane was deemed a write off.

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A Message from the Editor

Lots of work goes into putting the articles together for this journal. I encourage you all to give me feedback on what you think about it, suggestions for improvement are welcome however most welcome is an article for publication.

You will notice a small section titled “Feedback from Members” in which we published a comment from Life Member Graham Orphan. It’s just a paragraph but gives a bit more of the history of Tiger Moth VH-SSI. Hopefully in future editions we may see this section grow.

In this edition I have attempted to write some of the RAAF history at Bundaberg during WWII. I plan to continue that series covering many of the WWII airfields in Queensland. Lots of research goes into those articles.

A Message from the President

The February committee meeting was held a few of weeks back and it was a great success. QVAG has decided to increase the size of the committee by two to increase the opportunity for greater involvement by the Warbird community.

We are in the middle of refocusing our efforts to include additional activities for the warbird members of QVAG. This increase in the number of management committee positions will be put to the vote at a general meeting to be held on the 11 March.

It is proposed that the management committee fill the new positions by appointment. We have two members in mind for the appointments. The proposed members for appointment have been QVAG members for about three years.

Feedback/News from Members

It was fun to see VH-SSI now turning red. I still think of the green and white scheme as new, as I remember flying with Dave Prosser in that aircraft from Kingaroy to Surfers Gardens - but never got there due to a mag problem in flight, so we ended up in a paddock instead. It was a scruffy old silver lady back then!

Life Member - Graham Orphan



Photo Above: Tiger Moth VH-SSI. Looking at the cars in the background, the photo appears to be taken during the 1980's. Tiger Moth VH-BJE is in the background and this Tiger is owned by Queenslander Warwick Woinarski (Wok). Photo courtesy of Dave Walsh – Thanks Dave!

VH-RSP was sold to Barry Gawne and Tony Ram. Initially I heard that it was going to Tyabb but last I heard was it left Albion Park (where it was handed over) for Mangalore via Wagga Wagga. Perhaps it went on to Tyabb the next day. Barry Gawne used to be a TAA/Australian pilot. I don't know what happened to him after the Pilots' Dispute. As for the Stinson, I'm not sure what I will do next but I don't intend to stop flying!

STOP PRESS

CASA's Civil Register now shows for RSP, Barry Gawne of Balwyn Vic. as the registration holder and Registered Operator. Presumably it is in residence at Tyabb.

Member – Warwick Henry



Member Paddy Martin reports that work on his Sopwith Pup is progressing well. The photo above shows just what is involved in building a WW1 replica. We will be doing a detailed article on Paddy's replica aeroplane in a future edition of this journal.

It happens at other airports than Archerfield

Justin Meadows, Tiger Driver from Cairns, expressed his opinion in a recent post on Facebook

Cairns airport was sold by the incompetent Bligh government in December 2008. Soon after the sale, the new owners announced plans the development of a shipping centre on the western [General aviation] side of the main runway. Cairns Airport Pty Ltd showed immediately that they are not aviation oriented but property developers.

Queensland Warbird and Vintage Aeroplanes - Calendar of Events

Date	Event
Saturday 11 March	QVAG General Meeting 0830 hrs. (to authorize increase in management committee numbers from 6 to 8-)
Saturday 11 March	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 12 March	WBMA Breakfast at Watts 0800 – 1000 hrs
Sunday 12 March	QVAG Management Committee Meeting 1200 hrs.
Saturday 8 April	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 9 April	QVAG Management Committee Meeting 1200 hrs.
Saturday/Sunday 22/23 April	TAVAS Great War Flying Display
Saturday 29 April	Gayndah Orange Festival Breakfast Fly-in – 9-20sm
Saturday 13 May	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 14 May	QVAG Management Committee Meeting 1200 hrs.
Tuesday 30 May – Sunday 4 June	Red Thunder QVAG Building Watts Bridge
Saturday 10 June	Rolleston Flyin
Saturday 10 June	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 11 June	WBMA Breakfast at Watts 0800 – 1000 hrs.
Sunday 11 June	QVAG Management Committee Meeting
Sunday 25 June	QVAG Grass Roots Fly-in – Gatton Airpark 0900 – 1300 hrs.
Saturday 8 July	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 9 July	WBMA Breakfast at Watts 0800 – 1000 hrs.
Sunday 9 July	QVAG Management Committee Meeting 1200 hrs.
Saturday 12 August	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 13 August	QVAG Management Committee Meeting
Saturday 9 September	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 10 September	QVAG Management Committee Meeting
Saturday 14 October	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 15 October	WBMA Breakfast at Watts 0800 – 1000 hrs
Sunday 15 October	QVAG Management Committee Meeting 1200 hrs.
Saturday 11 November	QVAG 2 nd Saturday Evening In Month BBQ
Sunday 12 November	WBMA Breakfast at Watts 0800 – 1000 hrs.
Sunday 12 November	QVAG Management Committee Meeting 1200 hrs.

Tech Notes on Wood used in Aircraft Construction

Author: Garry Button

Gary has been involved in maintaining wooden aeroplanes for an extended period of time and is highly respected for his knowledge on the use of wood in aeroplanes. Gary doesn't claim to be an expert and is giving us the benefit of his years of experience. However as always if you are unsure do not solely rely on the information below - consult an expert of the subject. Much of Gary's experience was gained whilst being involved in the maintenance of Tiger Moth aeroplanes.

Gary's experience has been around over 1000 hours on Luton Minor's, 1000 hours on Beechcraft Stagger wing, 500 hours on insurance work. At least 1000 hours working on vintage sailplanes. That gives total of 3500 hours and in addition Gary has another 6000 hours Tiger work. That gives a total of over 9500 hours working on wooden aeroplanes. Note: A lot of Tiger hours were insurance work.

How to store aircraft Timber,

It is best to have it in a shaded dry place as possible and away from dampness. Do not place timber in such a position that it will cause bending or twisting because over time it will have a SET FIX.

Never store unsealed timber in direct sunlight or with a moving sun over it. What happens is possible surface cracking. When the atmosphere reaches 100% humidity (rain) say for a week then full sun shine for the next week. Over time the timber is changing from its STANDARD atmospheric moisture content expanding its surface area.

The standard (atmosphere) moisture content for timber is around 12% to 14%. If your piece of timber has that moisture content it is now said to be seasoned.

A very good example of this is to keep wet for 5 minutes a dressed piece of seasoned timber, then go and place it in direct full sunlight until dry and do it again. In time surface cracks will appear because the timber cells cannot adjust fast enough to this sudden change of expansion and drying.

Normal movement of seasoned timber,

To prove this with UNSEALED seasoned timber cut a 5 mm wide x 20 mm deep slot in the edge of a 3 mm thick piece of plywood and fit a dressed piece of strip timber the same size. Each day remove the strip wood and what will happen is it will expand and be tight on wet days (high humidity) and on other days (low humidity) it can be loose. I would use this method to confirm what my humidity gauge reads.

Never store timber in a hot dry environment because if the moisture content falls below this 12% to 14% all the timber cells start to break down as the moisture content keeps falling, it is totally destroyed with NO STRUCTURAL use. It can show No signs of damage. If this were placed in an aircraft it would FAIL WELL BELOW load limit.

DO NOT place timber or wood parts against metal wall sheets in a hangar unless that wall is FULLY shaded all day. If placed against a western wall in summer months the temperature within a 100 mm on the inside will have a temperature much higher than away from the wall.

The same applies to aircraft plywood.

Bolts in timber

This is one of the areas where I have found many mistakes. When a bolt and nut are OVER tightened it causes compression of the timber.

It is WRONG to believe that it must be as tight as? A nut is there to stop the bolt from coming out because the bolt is there to act in SHEAR load for much of the design loads. There are vertical (structural) bolts as in the Tiger Moth top wings which are in TENSION and the bolt / nut is not over tightened.

Washers on bolts

Washers are there to spread the load over the timber and give the nut a hard surface to turn on.

A.N. washers should always have the radius side to the timber to prevent the sharp side touching the timber. An over tightened nut will make this washer cut into the timber.

When using the thin spring shrinkage washer de Havilland use which is a cup shape, the correct nut tension is when this washer is depressed 1/2 way in height. Never put a washer on if it is flat, it has been WELL OVER TIGHTENED. NEVER place a cupped washer directly on timber.

Rust on Bolts

No one wants rust on any aircraft bolt, yet it is a part of life and surface rust say on the head of a bolt does not mean it is not serviceable. What about internal RUST that you cannot see. Go and ask your LAME. A check he or she will most likely do is a turn test of the bolt and nut together. If it is hard to turn then let's go they will feel for lumps as it turns, if they feel limps then that is caused by RUST not DURALAC.

Compression Failure,

Timber has no fatigue life; it will flex in an aircraft the same as if it was while growing over many years in the ground.

When timber goes past flex it goes into OVER LOAD If this over load is to great COMPRESSION LOAD WILL happen. Why does it happen? It happens because 1/2 of the timber is in TENSION and 1/2 is in COMPRESSION. Timber can cope with COMPRESSION yet hates being OVER compressed and the cells of the wood fail.

What does compression failure look like?

Most common look is a staggered line on the surface running at 90 degrees to the grain line. NO compression Failure looks the same only the pattern. Only a trained eye will find one. Just ask your LAME.

Tiger Moth wing tip strike in the 3 point landing

One of the first things your LAME will be looking for during an annual inspection is witness marks on the lower wings surface at the rear spar tip bow of each wing If they find any sign of a tip strike (or cover up)

This is not good because the rear spar hits the ground first. Any ROLLING motion towards that wing will make it worse.

You have set yourself up for a REAR SPAR COMPRESSION FAILURE at the inboard end of the aileron at the spar on the top side. The bending load at this inboard end can or will happen at the routed out section of the spar. If COMPRESSION failure has started then over time this spar WILL fail due to NORMAL flight loads. It may take the next flight or months later as the flight load hours build up.

Tiger Moth Tail Slide, (NOT APPROVED) from a wrong stall turn.

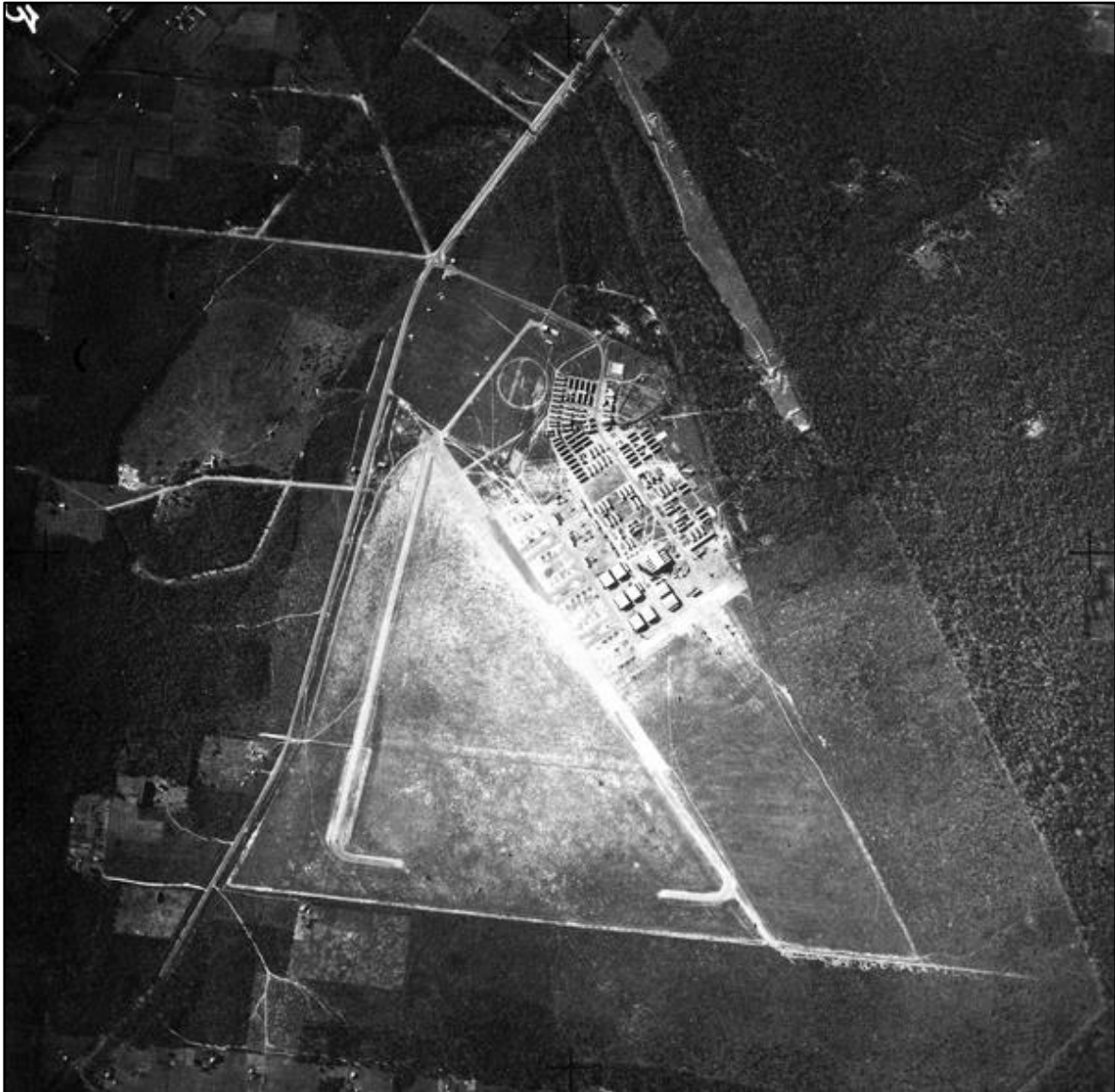
If this happens then expect a compression failure in the fin post. Report it to your LAME. Why because you will never keep the rudder in line with cable tension and the surface area of the rudder above the hinge line puts loads on the fin spar at the top bolt. If not reported and rectified the FIN SPAR WILL FAIL.

Wood built aircraft are as safe as metal aircraft. You can have many thousands of hours over many years and still have a fully serviceable aircraft. Any aircraft can be over stressed even on its first hour of flight if not flown within its design limits.

RAAF Base Bundaberg

Compiled by Ross Stenhouse

The Bundaberg Aerodrome was officially opened on 12 December 1931, by the Minister, the Hon. Frank Forde, M.H.R., as a civilian airport.



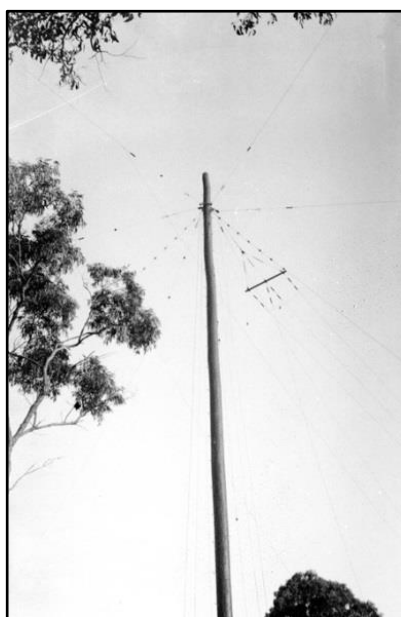
With the outbreak of Second World War, it was decided as part of the Empire to requisition Bundaberg Aerodrome and develop it as a RAAF Flying Training School.

Known as RAAF Station Bundaberg it was initially used in 1941 by No. 12 Elementary Flying Training School RAAF (12 EFTS), until 12 EFTS relocated to Lowood Aerodrome on 12 January 1942. No. 8 Service Flying Training School RAAF then operated from the base.

Units Based at Bundaberg

- No. 32 Squadron RAAF ('B' Flight) - 1 May 1943 – 4 September 1944
- No. 66 Squadron RAAF - 20 May 1943 – 6 January 1944





Two of the photographs on this page of the HF transmitting station and part of its antenna system installed at Bundaberg.

The photograph on the bottom left is of the Adcock-type HF/DF (High Frequency/Direction Finding) station installed at RAAF Station Bundaberg.

The strategic location of RAAF Station Bundaberg meant that it was often used as a refuelling point by aircraft transiting up the east coast of Australia.



Image above: USAAF Martin Marauder line-up at Bundaberg



Image above: RAAF Ventura A59-51 that had an undercarriage collapse whilst landing at Bundaberg.



Image above: RAAF Catalina at Bundaberg



Image above: Lockheed Electra 10B "Ansalanta" VH-UZP imported by Ansett in 1937 and photographed here during WWII at Bundaberg. Unfortunately on 16 May 1936 the aircraft was severely damaged whilst making an instrument approach to Adelaide's Parafield airport.



Image above: USAAF Republic P47 Thunderbolt at Bundaberg.



Image above: USAAF B25 Mitchell at Bundaberg



Image above: Douglas DC2 at Bundaberg. The aeroplane belonged to ANA

No. 12 Elementary Flying Training School

No. 12 Elementary Flying Training School was a RAAF pilot training unit of World War II. It was established in October 1941 at Bundaberg Airport and provided introductory flying training to new RAAF pilots. No. 12 Elementary Flying Training School relocated to Lowood Airfield on 12 January 1942. Due to arrival of the United States Army Air Corp at Lowood in March, the aircraft, staff and trainees were allocated to other units, with the unit being disbanded in April.¹

No. 66 SQN

No. 66 Squadron was formed at RAAF Station Bundaberg, Queensland, on 20 May 1943 from elements of No. 8 Service Flying Training School, and was the last of the three new Anson-equipped squadrons to be raised. It received its first Anson's on 2 July, began flight training on 26 July and conducted its first operational patrol the next day. Pilots from the squadron ferried more Anson's from RAAF Base Laverton to Bundaberg in early August, and it reached strength with 18 aircraft on the 8th of that month. A flight of Beaufort aircraft from No. 32 Squadron was also attached to the unit.²

From late July 1943 onwards the squadron escorted Allied shipping travelling off the east coast of Australia. These patrols were uneventful, and the squadron did not see any Japanese submarines or ships. No. 66 Squadron aircraft also exercised with Royal Australian Navy ships east of Moreton Island on 29 and 30 August. While several of the squadron's Anson's were involved in accidents, only one was written off. In November 1943 the Government decided to reduce the military's ASW force as no Japanese submarines were known to have operated off Australia since June. Accordingly, No.

¹ https://en.wikipedia.org/wiki/No._12_Elementary_Flying_Training_School_RAAF

² https://en.wikipedia.org/wiki/No._66_Squadron_RAAF

66 Squadron was disbanded on 8 January 1944 and its personnel were transferred to No. 8 Service Flying School, No. 1 Operational Training Unit and No. 71 Squadron.

No. 71 SQN

No. 71 Squadron was formed on 26 January 1943 at RAAF Station Lowood, Queensland, from aircraft and aircrew drawn from No. 8 Service Flying Training School. The squadron was organised into flights located at RAAF Stations Amberley and Bundaberg in Queensland, and RAAF Stations Richmond and Coffs Harbour in New South Wales.³

No. 8 SFTS



Image above: Crashed CAC-6 Wackett trainer aeroplane in a sugar cane field.

No. 8 SFTS received its first aircraft in January 1942: 27 Avro Anson's released by other units. The same month, No. 12 EFTS transferred to its permanent home at RAAF Station Lowood. The standard intake of pilots at No. 8 SFTS each month was 50, and the initial course of students graduated in March 1942. By July that year, the total number of aircraft operated by the school had increased to 87.

No. 8 Service Flying Training School (No. 8 SFTS) was formed at RAAF Station Bundaberg, Queensland, on 14 December 1941, under the control of No. 2 Training Group. Its inaugural commanding officer was Wing Commander I.C.C. Thomson. The new school was reported to have cost £300,000 to establish, and joined No. 12 Elementary Flying Training School (No. 12 EFTS), which was already based—temporarily—at Bundaberg.



Image above: RAAF Anson AX439 aeroplane after head on collision with a RAAF Beaufort aeroplane A9-276



As can be seen from some of the illustrations for this article flying accidents were commonplace at training establishments and No. 8 SFTS was no exception; taxiing collisions, crash landings in the surrounding cane fields, and runway overshoots were regular occurrences.

³ https://en.wikipedia.org/wiki/No._71_Squadron_RAAF



Photo above: RAAF Beaufort A9-440 being recovered after a wheel up landing

At least two aircraft were damaged each month in the early part of 1942. The school's first fatality, however, was from drowning, when staff was called out to assist victims of local flooding in February, and an aircraftman died during an attempted rescue.

On 1 June 1942, an Anson crashed into the sea off Bargara, near Bundaberg; the pilot and two other crew were reported as missing, believed killed. Three more aircrew were lost when an Anson apparently went down in the sea on

5 October. On 25 February 1943, an Anson crashed during a night-flying exercise, killing both pilots. The school suffered a ground fatality on

25 April 1944, when a mechanic walked into the spinning propeller of an Anson he was servicing. Two more pilots were killed when an Anson dived into the ground on 8 December, following an apparent structural failure.⁴



⁴ https://en.wikipedia.org/wiki/No._8_Service_Flying_Training_School_RAAF

Life at the RAAF station Bundaberg



Life at the station wasn't all hard work there were lighter moments as these two photographs show. The girls on the left look like a few scrubbers to me however the WAAAF's I photographed at Neilsen Beach in the photo below look pretty.



The RAAF Bundaberg photographic section's personnel pose for a photo.



Unfortunately life at a RAAF flying training base could be very short for the unfortunate ones. The photo opposite shows an honour parade is being held for a member of an aircrew that didn't make it. The coffin can be seen on the back of a truck. Many were buried in the Bundaberg cemetery.



Post WWII



dismantled. To find photographs of a RAAF base being dismantled is rare.

The Department of Civil Aviation took over Bundaberg Aerodrome on 31 July 1946. Most of the buildings on the aerodrome were removed. These two photographs show the station being



Bundaberg City Council took over the airport in



June 1983. A new terminal was opened on 9 May 1986. In 2009 runway 32 required the clearing of vegetation on the southern approach.

A major extension to Bundaberg Airport was completed in March 2010, making the runway jet capable and also including an expanded Terminal.



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