



FEBRUARY 2013 NEWSLETTER

PO Box 1678 Woden ACT 2606
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A few words from the chair

Your committee has been busy since the last Newsletter, and several of the things we have been working on are coming to fruition.

The Swan Hill PPP has just been held. Dave Laughton did a brilliant job organising this event and with his partner Rae Percival acting as chief caterer and bus driver, everyone involved had an excellent weekend. The worst part about the weather on the weekend was the forecast. It was enough to discourage anyone from flying. However, the reality was near perfect conditions. If you are interested in doing a PPP later this year, Dave and Tony have another one in the pipeline. Keep a lookout for it via the web page or on the e-mail.

As I write this we are also getting ready for the Avalon Airshow. However, the Newsletter will have arrived in your mail after the event. Thank you to the volunteers who have "manned" (personed??) the tent on behalf of the society. Special thanks must go to David Law for all of the work he has undertaken in organising our involvement in this event. Thank you also to everyone who dropped in to say hello during the show.

David Ind has also been very busy over the past few months organising both the Kimberley Fly Away and the upcoming trip to Clare Valley. (See inside for more details) Thank you, David.

Memberships have been steadily growing and we welcome the following new members into the fold:

Leigh Barling
Darren Heiberg
Terry Boocock
John Cameron
Paul McCaw
David Porter
Scott Patterson



All of your committee members have been working hard on your behalf, contributing Idea's and promoting the society wherever they can. Thanks everyone.

Members are reminded that Piper has put out a "mandatory service bulletin" requiring a Stabilator Control System Inspection on most of our aircraft. It is believed that this will soon be issued as an AD. Speak to your LAME if you require any further details.

Remember it is your society, come along to one of our events, or better still contact us with any ideas of other events we could arrange or indeed simply support and become part of.

Safe Flying

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MORE In Your EFB!
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Clare Valley Vineyards Tour &

Barossa Air Show April 12th, 13th, 14th 2013

Come along and join us for a weekend of Wine & Wings at Clare Valley in South Australia, landing at Australia's newest aerodrome at Clare Valley north of the township. The weekend will include a trip to Rolands Flat and in the spectacular vineyards followed by a day at the Barossa Air Show 2013. Sunday evening a BBQ with some members of the newly formed Clare Valley Aero Club.

The weekend promises exciting wine tasting tours and a wonderful air show which gives a great mix of an entertaining weekend and friendship.

Friday 12th April

Fly into Australia's newest airport amongst the vineyards in the late afternoon Get picked up and taken to the township and stay at the Clare Valley Motel or Clare Valley Comfort Inn. Later a welcome dinner is planned.

Saturday 13th April

Wake up to a lazy morning before getting picked up for a vineyard and sight seeing tour and lunch at the local bakery Return to your accommodation where you can investigate the town of Clare and check out the restaurants for the night's dinner.

Sunday 14th April

After a light breakfast get picked up by the bus and travel through the vineyards to Roland Flat to attend the Barossa Air Show for the day. Later a bus will bring you back to your accommodation with a few stops at some interesting places for light refreshments. A Sunday night BBQ or dinner is planned with the Clare Valley Aero Club

Monday 15th April

Up early and grab a bite to eat and get picked up to be taken to the airfield to head home.

Costs

Bus to and from airfield \$10 per head,

Bus to Rowland Flat & return, \$30 per head for a bus of 20 people and increases with less.

Motels

a. Clare Valley \$85 per head

b. Comfort Inn \$130 per twin room

Note: Comfort Inn is in town & Clare Valley 2klm out of town. More info to follow.

Air show is \$50 per person

Websites

www.clarevalleyaerodrome.com.au

www.barossaairshow.com.au

To help with planning the weekend can members please email or fax to David Ind as follows:

Signman@skylinensw.com.au

Fax: 02 9580 8775

Phone: 0417 88 70 10

End Date of expressions of interest: 1st March 2013

Note: No Fuel Available at Clare Valley aerodrome so we need to plan



**Hi All Australian Piper Society Members,
Last chance to register for a great weekend away
with fellow members and their families in the beautiful
Clare Valley Sth Australia**

**The APS have not flown into this area of OZ as a
Group for quite some time and with the added
attraction of an Air Show we can promise you a
Special weekend.**

**Clare Valley Vineyards Tour
&
Barossa Air Show
April 12th 13th 14th 2013**



New Member Profile - Leigh Barling

As a boy I was attracted to aircraft, and used to build and fly wire controlled aircraft (30' wire going round and round in circles). I later advanced to radio control and spent a great many hours building a spitfire from drawings. Not having any aerodynamic training I managed to completely destroy it 10 second into its maiden flight.

Reaching 18 years of age, changes like driver's license, cars, night outs, girls etc meant that aircraft and aviation became distant memories. After getting married and raising three children the occasional family outing to air shows continued to keep the suppressed dreams alive.

For father's day 2004, my wife and children gave me a gift certificate for a Helicopter Trainee Instructional Flight. On the 28th Apr 2005 I finally booked my flight with "The Helicopter Group" at Moorabbin airport for a 30min flight in a Hughes 300.

I had never been in a helicopter before (or light plane for that matter), and the flight had an immediate and profound effect, in that reaching the ground I knew where I needed to be. A change of career was required (some people call it a mid life crisis). I sought out every flying school at Moorabbin and returned home the same afternoon with a pile of material and brochures.

I soon found my budget would not extend to helicopters, so fixed wing would have to do.

Only 20hrs for GFPT - should be able to knock that over in a couple of weeks, PPL in 3mths, CPL in 6mths and a new career in 12 months. Ok time to get started.

I began flight training with Cameron Myer at Civil Aviation in HEZ & RYI, and quickly found out that aviation training didn't work quite the way I expected, what with instructor availability, suitable weather, aircraft availability, weather, budgets etc - things were not going to plan. I finally completed my GFPT in Dec 2006, just as Civil closed its doors, and then moved to Lilydale to complete my PPL which I did in Nov 2007.

I continued flight training completing a Constant speed retract endorsement and NVFR rating, but finally coming to realize that the career change was a pipe dream, that at my age it just wasn't ever going to happen. I decided rather than continue to plough money into CPL, CIR and IR training I could put that towards acquiring an aircraft and just go flying whenever the need arose.

After a few years of searching, I finally purchased a Piper Turbo Arrow III, registration N9292C from the USA. I had seen the aircraft for sale 12mths earlier and doing some research found it had not sold (mainly due to the GFC), so I engaged Sharman Enterprises to handle the negotiations, purchase and shipping. The aircraft had some deferred maintenance issues but ticked all the right boxes in terms of price, mission requirements and importing to Australia. The sale was completed in April 2011 and within a month was on its way to Australia. The container was unloaded in July 2011 and as it was last to go into the container with 2 other aircraft, it was last to be re assembled.

The assembly is a systematic process. A section is checked, assembled and tested and if a part requires replacement it is ordered which can then take several weeks before that part arrives and then that area of work can be completed and the next stage commenced and so on and so on. Unfortunately apart from the list of known issues, there were quite a few other items required attention causing further delays and cost blowouts.

Finally VH-YTA was completed and rolled out of the hanger on 24th July 2012





CASA now has a YouTube channel. Presently there are 23 videos loaded on the channel and more are coming. Over time CASA's full library of safety videos will be available on the channel – which is called CASA Briefing. This means everyone can now quickly and easily access a wealth of safety information presented in an engaging and informative manner. You can see and hear experts talking about subjects ranging from situational awareness to aerodrome safety. There are also videos on daily aircraft inspections, passenger briefings, prop swinging, operations at non-towered aerodromes, bowser refuelling and understanding weather. The frightening '178 seconds' video on the dangers of flying into instrument meteorological conditions when operating to visual flights rules is a must view for all visual flight rules pilots. As CASA's multi-media team complete more videos they will be posted to the YouTube channel. The YouTube channel complements CASA's Twitter account, @CASABriefing. Make sure you visit both Twitter and YouTube regularly to find the latest on aviation safety in Australia. And please feel free to send us feedback or questions anytime via Twitter or the feedback form attached to this newsletter.

Go to CASA's YouTube channel

<<http://casa.grapevine.com.au/lists/lt.php?id=Y0UBDAQNBwQGUR9VBgMDTAoCCAg%3D>>

****Move to mandate control cable terminal inspections****

CASA is moving to mandate inspections of stainless steel control cable terminals that are 15 years or older. This follows continued reports from aircraft operators of control cable terminal fitting failures. The failures are occurring in terminals manufactured from SAE-AISI 303 Se stainless steel. They are failing due to stress corrosion cracking. CASA is proposing to amend Civil Aviation Order 100.5 to mandate a recurring inspection of the applicable control cable terminals once they reach 15 years time in service. In June 2012 CASA issued an airworthiness bulletin urging aircraft operators and maintainers to consider replacing all control cables with stainless steel terminal fittings before they reached 15 years time in service.

“Reports of flight control cable terminal fitting separation failures continue to be received in Australia, New Zealand and the United States,” the airworthiness bulletin says. “Failure of a flight control cable terminal can result in loss of control. Terminal fitting separation...is due to chloride stress-corrosion cracking, a form of intergranular cracking which does not provide clear visual clues to the full extent of the internal structural damage and can originate from within the terminal. This means that even very small corrosion pits, cracks or rust deposits on the surface of the terminal fitting may be indications that the terminal could be very close to failure.”

Read the stainless steel terminal airworthiness bulletin

<<http://casa.grapevine.com.au/lists/lt.php?id=Y0UBDAQNBwQGUh9VBgMDTAoCCAg%3D>>

****Learn more about electronic flight bags now****

There's a new and easy way to learn more about the use of electronic flight bags. CASA has created an online resource devoted to the topic, covering everything from a basic explanation of electronic flight bags to the legislation and guidance material. The Civil Aviation Orders were amended in November 2012 to set out the requirements for the use of electronic flight bags in commercial operations. In addition, a Civil Aviation Advisory Publication has been issued providing guidance to both commercial operators and private pilots about the use of electronic flight bags. The new web resource looks at topics including what people need to know, what an electronic flight bag does, the effect of the regulations, what organisations and individuals need to do and key benefits. There are also six frequently asked questions and answers. These cover the minimum and maximum size for devices, whether approvals are needed from CASA, software validation, the requirement for back-up documentation and whether OzRunways is approved. OzRunways is not authorised under the Civil Aviation Regulations, although this may change in the future. Private pilots can use OzRunways for situational awareness in flight, but not as a primary means of navigation. Private pilots can use tablet devices as a primary means of in-flight documentation, as long as the documentation is from an authorised source - such as Airservices, Jepperson or Lido.

Go to the electronic flight bag web resource

<<http://casa.grapevine.com.au/lists/lt.php?id=Y0UBDAQNBwQGV9VBgMDTAoCCAg%3D>>

****Pilots get the latest on non-precision approaches****

Pilots can now access updated advice on flying non-precision approaches and approaches with vertical guidance. CASA has published a revised Civil Aviation Advisory Publication on the operation of the approaches. The advisory provides a general explanation of performance-based navigation, which is a type of area navigation that is not based on a navigation aid such as a non-directional beacon or an instrument landing system. Instead it uses global navigation satellite systems and computerised on-board aircraft systems. The navigation performance of an aircraft determines which instrument procedures or airspace can be used. In the general information section the advisory also explains non-precision approaches, approaches with vertical guidance, vertical navigation, minimum descent altitudes and missed approach procedures. There are separate sections on straight-in approaches, circling approaches, distance measuring equipment and global navigation satellite system arrivals, the visual segment of approaches and helicopter procedures. Pilots are told it is not recommended that non-precision approaches be flown in a series of descending steps – sometimes known as 'dive and drive'. The advisory says: “Many controlled flight into terrain accidents have been attributed to the 'dive and drive' technique, due to human errors such as early descent before a step or failing to arrest descent. In addition, the aircraft's descent is more difficult to manage due to changes in airspeed, rate of descent and configuration.”

Read the non-precision approaches and approaches with vertical guidance advisory

<<http://casa.grapevine.com.au/lists/lt.php?id=Y0UBDAQNBwQGV9VBgMDTAoCCAg%3D>>

The Gripe Sheet !!!

After every flight, FEDEX pilots fill out a form, known as a 'gripe sheet' to tell mechanics about problems with the aircraft. The mechanics fix the problem, and then document their repairs on the form.

Here are some actual maintenance problems submitted by the pilots (marked with a 'P') and the solutions recorded (marked by an 'S') by maintenance engineers.....

P: Left inside main tyre almost needs replacement.

S: Auto-land not installed on this aircraft.

P: Something loose in cockpit.

S: Something tightened in cockpit.

P: Dead bugs on windshield.

S: Live bugs on back order.

P: Auto pilot in altitude-hold mode produces a 200 feet per minute descent.

S: Can't reproduce problem on the ground.

P: Evidence of leak on right main landing gear.

S: Evidence removed.

P: DME volume unbelievably loud.

S: DME volume set to more believable level.

P: Friction locks cause throttle levers to stick.

S: That's what friction locks are for.

P: IFF inoperative in OFF mode.

S: IFF always inoperative in OFF mode.

P: Suspect crack in windshield.

S: Suspect you're right.

P: Number 3 engine missing.

S: Engine found on right wing after brief search.

P: Aircraft handles funny.

S: Aircraft warned to straighten up, fly right and be serious.

P: Target radar hums.

S: Reprogrammed target radar with lyrics.

P: Mouse in cockpit.

S: Cat installed in cockpit.

P: Noise coming from under instrument panel. Sounds like a midget pounding on something with a hammer.

S: Took hammer away from midget.



Arnhem Land & Kimberley Safari

Just to let you all know that the final numbers for the Safari have been locked in.

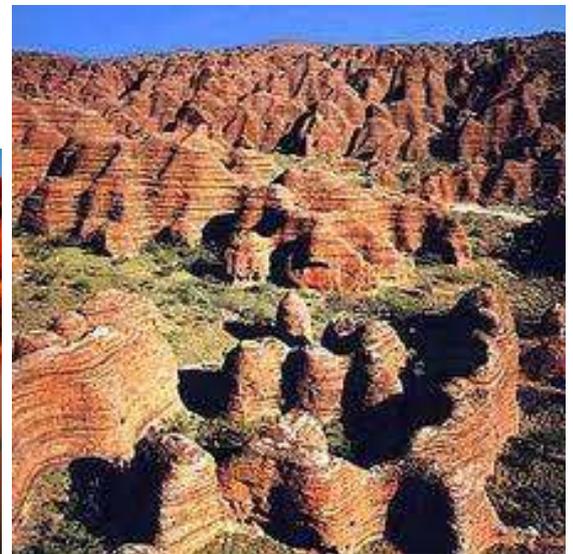
There are eight aircraft and 18 lucky people who will be flying their own Piper aircraft into the Kimberley region and beyond.

What an opportunity to take in the spectacular and ever changing wonders of both the north west corner across to Arnhem land and south into the sunsets of Broome.

Whether they are walking into the Bungle Bungles or flying over the coast at the furthest most North West point at Cape Leveque they will enjoy every moment and have plenty to chat about every evening amongst fellow Piper flyers.

We wish all that are going a safe and enjoyable flying safari. Take plenty of photos and watch this space in the newsletter for a tantalizing report.

Safari leader
David Ind
0417887010





“I survived a Piper Seneca in flight break-up”

I found your article on Seneca tail flutter quite Interesting and it brought back some sobering memories of December 27, 1976, as I am one of the pilots who luckily survived a Piper Seneca in flight break-up, I would just like to add some comments that may help aircraft owners realize the potentially serious problems with trim tab free play.

The flutter testing flights for N33589 was not taken as very dangerous because of our previous success with the Seneca. In fact, I had just completed a series of flutter flights on a Seneca II equipped with Robertson spoilers and tip tanks. The accelerometer traces were good, but the camera that recorded the speeds and altitude malfunctioned. The FAA wouldn't accept our data without speed verifications, and by the time the bad film was developed the aircraft was reconfigured for delivery. The owner was impatient and wanted his aircraft, The FAA allowed us to deliver this aircraft with some restrictions, and flutter testing was to be completed on N33589.

The intended test was to climb to 25,000 feet, camera and recorders on and to pulse each control at several predetermined speeds and at Vd (10 percent past red line). The first flights on December 24th were aborted because low temperature (-45 F) at 25,000 feet froze the elevator jack screw and only low-speed data could be collected. The heavy grease was removed from the jackscrew and a light silicone spray was used.

Flight tests on December 27 appeared to be going well. I climbed to 25,000 feet on an IFR clearance above a 4,000 to 6,000 foot broken cloud cover. The test equipment turned on and trim function was good. Intermediate speeds looked good and at Vd (250 IAS) at approximately 20,000 feet, I completed the following control pulses: aileron (spoiler equipped) left and right, rudder left and right, elevator down, and then I reached to start the up-elevator pulse. The aircraft was in trim and my left hand was holding the wheel lightly. The air was smooth and there had been no vibration.

It was like an explosion, the elevator failure resulted in an extremely violent nose down tumbling. Both wings tore off, once outboard of the engine nacelle and again at the fuselage. The fuselage was ruptured, part of the tail section and rear door were gone, the fiberglass nose section was gone and the windshields were blown out. Negative Gs had me pinned against the cabin ceiling and the violent shaking had torn off my helmet. I had to protect my head with my hands to keep from being knocked out; the survival instinct had taken over. I knew I had to get out of there to stay alive, but I couldn't move and couldn't do anything but try to protect myself against the beating I was taking, As abruptly as it started, the violence stopped. It was smooth and calm, with a sense of slow rolling or tumbling. The cold air was blowing through the hulk of the fuselage (-40F). Seat belt off and through the cabin door, I opened my chute immediately, which could have been fatal. As my chute opened, an engine with a section of wing came by from above. I can still clearly see that engine in my mind. The prop was feathered and the engine was running. The total sequence of failure and getting out only took seconds, but it felt like minutes.

I was awed by the destructive disintegration of that aircraft and my survival. I was now floating down at 20,000 ft or so. There were small light pieces of aluminum, insulation and fabric floating down all around me. In any direction I looked, it was like confetti.

This was December and I was over a cloud layer somewhere over the Cascade Mountains of Washington. I wasn't dressed for this situation and again my thoughts turned to survival. Luck was on my side that day. Wear some torn clothes, a parachute under your left arm, put up your thumb and you get a ride every time.

This was the first aircraft lost by Robertson in flutter testing. The FAA took a harder stand for more testing and complete evaluation by Robertson for flutter clearance. Prior to this loss, Robertson inspected and conformed only its modification and assumed that an airworthy aircraft would have all controls balanced and free play within limits. N33589 did not have the elevator tab free play measured before that test, but I firmly believe it was past its limits. On the walk-around inspection. I commented to the company inspector about the apparent amount of free play. We both agreed it was a common thing on Seneca's. Hindsight is 20/20, and I know where I should have stopped that flight test.

Some time later, Robertson elected to continue the certification of the tip tanks on the Seneca II. The FAA insisted that we place the trim tabs at the maximum limit. Robertson was not evaluating the tail, but was looking for differences in wing response with the tip tanks. Robertson lost the argument, and we instrumented the tail and went to maximum free play on the tab. But wait: when the inspector checked the original tab free play, he found it considerably past the limit and we had to build new bushings to tighten up the free play to the maximum allowed. The flight-testing was conducted as cautiously as possible with several flights of increasing speed and data reviewed between flights. I had declined to do this test flight and a consultant pilot was hired.

On one flight near Vd a problem was encountered that nearly caused the loss of this aircraft. The cabin door popped open at 225 KIAS, The pilot thought it was coming apart. The accelerometer couldn't be measured because it went off scale. The door problem couldn't be solved satisfactorily and the pilot insisted that the front door be taped shut with aluminum tape. (His only exit now would be through the rear cabin.) The test was successfully completed and proved the aircraft is flutter-free when within limits. The consulting pilot still believes the door problem could have caused the tail failure of N33589. It's interesting that Piper has redesigned the door latch on later models.

I do believe the Seneca is one of the best light twins on the market. Most pilots and maintenance facilities do not understand the consequence of improperly balanced controls and excessive tab free play. Robertson Corp. has corrected many of these problems during R/Stol modifications, and the owners are usually unhappy at the added cost. An airplane with controls out of limits cannot be returned to service and should be grounded until it's corrected.



Pilots and mechanics may think of flutter as a continuing vibration. Divergent flutter should be thought of as an explosion. If the conditions are correct, it's as dangerous as a lighted stick of dynamite.

My recommendation for the owner of any aircraft is to assure that your aircraft is maintained properly. All control surfaces can be checked on a simple preflight. Free play limits are design limits with no margin of safety if they are exceeded. Replace bushings or install high tolerance bolts to stay within these limits. An AD is not issued unless the airworthiness is in question and this means an unsafe condition exists. These unsafe conditions are discovered ordinarily by you, the pilot. Pay attention and know your aircraft.

Sherman E. Hall

(Former Robertson STOL Test Pilot & Chief Engineer)

Owner

Advanced Aero Safety, Inc.
Camano Island, Washington

Pilot Proficiency Program

Swan Hill Airport, Victoria

15-17 February, 2013



Member Report

John Martin has for quite a while encouraged me to attend an Australian Piper Society activity and after one or two false starts the PPP at Swan Hill was my initial contact with APS.

My registration fee of \$300 as a non member was quickly modified to a membership and member PPP price thanks to the salesmanship of Dave Laughton.

John and I left Moorabbin at around 11.00 am on Friday and we had a good flight up to Swan Hill with JFM getting a minor wash as we approached Swan Hill through light showers.

The afternoon forecast had some nasty bits about thunderstorms and the en route weather event delayed some attendees to an arrival later on Friday or early Saturday morning.

Our accommodation was at the Jacaranda Motel which was a basic but quite acceptable facility with the 'unique' feature of off premises management and the interesting function of punching a code (provided by the check in call operator) to collect your room key from the drop box safe below the motel phone.

John and I are good mates over a number of years but not quite up to sharing a bed so the initial room was not satisfactory and an alternate room configuration was obtained with the help of the off premises management who needed assurance we had not used the toilet in the room we were abandoning.

Transport officer Rae was a very busy lady delivering members to and from the airport and accommodation and we were soon gathering back at Swan Hill airport for pre dinner drinks and a BBQ prepared by members of Mid Murray Flying Club.

MMFC members proved to be very welcoming hosts and we were very well fed. Two large boxes of Swan Hill/Lake Boga nectarines and plums provided plenty of fruit for snacks during the weekend.

We all settled in for a good Friday night's sleep with the prospect of an al fresco breakfast as our facility did not provide a typical motel breakfast.

Rae and Melissa had purchased the ingredients for a group breakfast at the motel BBQ facility and together with Chef Dave turned out tasty egg, tomato bacon and toast which were washed down with orange juice.

Rae ferried all participants to the airport by 8.30 am and we were soon down to the Saturday business with our lead instructor, Tony Smith. The Saturday program passed quickly with an informative presentation from Tony supported by clear audio visual material and a good quality bound reference manual.

I found the queries raised by attendees and the explanations by Tony very helpful in refreshing my knowledge of systems, procedures and general safe conduct of flights. Tony was very busy before and after the formal presentation taking attendees on individual flights with emphasis on slow flying in the precautionary search mode.

Saturday evening was spent at the Federal Hotel just over the Murray River and a pleasant evening was had with our happy group which included Mike Reynolds and his wife from Mid Murray Flying Club. Our Designated Driver Rae ferried us all back to our accommodation after a very busy day.

Sunday saw Tony Smith up early completing more flights as the remainder of the group enjoyed a repeat of the Saturday al fresco breakfast which was very pleasant in the balmy morning calm.

Our Sunday morning program centred around a presentation by Darren Heiberg on the AvPlan Electronic Flight Bag used on the Apple iPhone and iPad. Darren is a 10% owner of Avsoft which developed AvPlan and is an IFR pilot, former air traffic controller and IT airline senior executive, as well as a proud Piper owner. Along with his fellow 90% owner Bevan Anderson there is substantial experience in all facets of aviation which shows out in the product.

Members of Mid Murray Flying Club joined us for the AvPlan presentation which appeared to be well received and generated considerable interest.

Formalities concluded around 11.00 am allowing adequate time for the return journeys to ports in Victoria, New South Wales, ACT and Queensland.

My impression of the weekend was one of good fellowship always found when fliers meet with the added benefit of sharpening our skills to maintain safe flight. APS is very lucky to have the services of Tony Smith. There were 15 attendees and I counted 8 aircraft on the flight line.

Swan Hill was a great venue and the support from the members of Mid Murray Flying Club was first class.

We all owe a big vote of thanks to Dave and Rae who appeared to be constantly on the run making sure the program moved along.

Terry Boocock





Subject: FW: A Special B-17 & Her Crew In 1943

A mid-air collision on February 1, 1943, between a B-17 and a German fighter over the Tunis dock area, became the subject of one of the most famous photographs of World War II. An enemy fighter attacking a 97th Bomb Group formation went out of control, probably with a wounded pilot then continued its crashing descent into the rear of the fuselage of a Fortress named All American, piloted by Lt. Kendrick R. Bragg, of the 414th Bomb Squadron. When it struck, the fighter broke apart, but left some pieces in the B-17. The left horizontal stabilizer of the Fortress and left elevator were completely torn away. The two right engines were out and one on the left had a serious oil pump leak. The



vertical fin and the rudder had been damaged, the fuselage had been cut almost completely through connected only at two small parts of the frame and the radios, electrical and oxygen systems were damaged. There was also a hole in the top that was over 16 feet long and 4 feet wide at its widest and the split in the fuselage went all the way to the top gunners turret.

Although the tail actually bounced and swayed in the wind and twisted when the plane turned and all the control cables were severed, except

one single elevator cable still worked, and the aircraft still flew - miraculously! The tail gunner was trapped because there was no floor connecting the tail to the rest of the plane. The waist and tail gunners used parts of the German fighter and their own parachute harnesses in an attempt to keep the tail from ripping off and the two sides of the fuselage from splitting apart.

While the crew was trying to keep the bomber from coming apart, the pilot continued on his bomb run and released his bombs over the target. When the bomb bay doors were opened, the wind turbulence was so great that it blew one of the waist gunners into the broken tail section. It took several minutes and four crew members to pass him ropes from parachutes and haul him back into the forward part of the plane. When they tried to do the same for the tail gunner, the tail began flapping so hard that it began to break off.

The weight of the gunner was adding some stability to the tail section, so he went back to his position. The turn back toward England had to be very slow to keep the tail from twisting off. They actually covered almost 70 miles to make the turn home.

The bomber was so badly damaged that it was losing altitude and speed and was soon alone in the sky. For a brief time, two more Me-109 German fighters attacked the All American. Despite the extensive damage, all of the machine gunners were able to respond to these attacks and soon drove off the fighters. The two waist gunners stood up with their heads sticking out through the hole in the top of the fuselage to aim and fire their machine guns. The tail gunner had to shoot in short bursts because the recoil was actually causing the plane to turn.

Allied P-51 fighters intercepted the All American as it crossed over the Channel and took one of the pictures shown. They also radioed to the base describing that the empennage was waving like a fish tail and that the plane would not make it and to send out boats to rescue the crew when they bailed out. The fighters stayed with the Fortress taking hand signals from Lt. Bragg and relaying them to the base. Lt. Bragg signalled that 5 parachutes and the spare had been "used" so five of the crew could not bail out. He made the decision that if they could not bail out safely, then he would stay with the plane and land it.

Two and a half hours after being hit, the aircraft made its final turn to line up with the runway while it was still over 40 miles away. It descended into an emergency landing and a normal roll-out on its landing gear. When the ambulance pulled alongside, it was waved off because not a single member of the crew had been injured. No one could believe that the aircraft could still fly in such a condition. The Fortress sat placidly until the crew all exited through the door in the fuselage and the tail gunner had climbed down a ladder, at which time the entire rear section of the aircraft collapsed onto the ground. The rugged old bird had done its job.





KEEPING PIPER MACHINERY OPERATING EFFICIENTLY

Understanding and taking proper care of Piper Aircraft equipment is an essential element for a company committed to safety and lean principles. For Piper's Machine and Facilities Maintenance group, those goals are achieved through a solution-oriented series of preventative maintenance (PM's) procedures.

In buildings 1 - 9, the group has created and load-leveled "PMs" for 80 pieces of critical-to-production and support equipment. Another 243 pieces of equipment have been identified and are being worked to include non-critical equipment.

Newer technologies such as thermo-imaging are being introduced into our PM plan to improve performance of equipment. The addition of equipment automation and autonomous maintenance has helped produce less breakdown of several critical processes.

The general health and performance of our equipment depends on its quality of maintenance. Our Maintenance team is dedicated to providing quality service tailored to meet the changing needs of all their customers.



Milling Machine PM



Equipment Automation/Autonomous Maintenance



Warehouse



Service Parts department

FACTORY OF THE FUTURE

Service Parts and Central Warehouse Project

It is rewarding to see and be part of a Piper team that is investing in the future success of the business. The Production Engineering team has spearheaded many projects in 2012 - delivering more advanced machinery, facility enhancements and process flow improvements. Every project the team completes takes the Company one step closer to being a world class aircraft manufacturer, putting Piper Aircraft in a better position to meet market demand and customer expectations.

In the fourth quarter of 2012, Service Parts, Production Control and the Production Engineering department worked together to achieve a significant milestone towards the Company's future state goals. The team refinished and relocated the Service

Parts department in order to expand the central warehouse. Our objective was to remove inventory from the factory floor and kit all production parts/assemblies. Proper kitting in conjunction with our upcoming Enterprise Resource Planning (ERP) system will give the organization better inventory control and product flow throughout the factory. Expanding the warehouse is an early milestone on a longer journey to our Company's future reorganization. We are pleased with the results of this accomplishment and even more excited about the process flow improvements projected for the coming years.

Wes Norris, director of Aftermarket states, "This move gave us the opportunity to relook at our processes and provide us a bright, clean, state-of-the-art work environment."



An Angel Flight, With A Twist

It started out as a pretty standard Angel Flight. Leave Toowoomba early one November afternoon for Archerfield to pick up our passengers, then off to Theodore and back to Toowoomba, a total distance of about 460 nm.

We'd been sitting around thinking about some yachting friends who were heading back from the cruising season up the Queensland coast, lamenting the fact we were not with them and musing on where they might be at that time. A quick SMS revealed they were going to be anchored for a few days inside the beautiful lagoon around Lady Musgrave Island off Gladstone, a truly lovely spot with fond memories from past visits.

And that was the spark for a slight diversion. Gladstone was not all that far away from Theodore and from there we could head out over the sea following a string of reefs to their anchorage, and so it was to be.

The two legs to Theodore were not that pleasant, the afternoon being pretty warm and, as it is at that time of year, pretty bumpy even at 10,000'. We got our passengers home (almost in one piece) then headed off in the turbulence to Gladstone for fuel. That done we set course for Heron Is. As soon as we cleared the coast the benefit of being over water was felt as the bumps all but disappeared and, sitting at 3,500' over a little scattered cloud, we really started to enjoy the flight.

Grab a chart or log on to Google Earth and follow along as we head out over a string of reefs and islands, surrounded by that beautiful aqua blue tropical water all the brochures seem to present. What a sight. Out 46nm, over Masthead Is and Wistari Reef to our first turn at Heron Is, by this time having dropped back below 2,000' under the scattered cloud. On down past one reef after another, always being able to see well ahead with the reefs looking like a line of stepping stones, until Lady Musgrave Is drifts into view.

Sure enough there were about a dozen yachts sitting inside the lagoon in dead calm waters. It was just after 5pm which for yachties is time for 'Sundowners'. As you may have guessed this generally involves alcohol and fellowship and is a well established yachtie pastime. It's always easy to work out which is the day's host yacht. Just look for the one with a brace of dinghies dangling off the stern.

Having spotted the party boat we descended and circled once (ensuring we didn't scare the wildlife on the island), waggled the wings, took a photo or two (which were not too good), watched the mad waving of our sailing mates, then climbed a bit and headed south-east toward Lady Elliot Is and eventually on to Sandy Cape at the northern tip of Fraser Is, the world's largest sand island.

As the day drew to a gentle close we tracked 65 nm down the eastern side of Fraser at low level, watching the fisherman, campers and many 4WD's travelling along the beach. What a pleasure.

From Rainbow Beach we climbed back to 6,500' and headed back to Toowoomba, arriving in calm weather just a bit before the last rays of sun dipped behind the horizon. What a flight. Distance roughly 700nm. Time about 4.5 hours. Cost, priceless.

How lucky are we to be able to enjoy the wonders of Australia from above, wherever we happen to live.

Dave Laughton & Rae Percival
VH-SOG





Piper Goes To Avalon

The Australian Piper Society was well represented at the recent Avalon Air Show held in early March this year.

David Laughton & Rae had their Piper Matrix on display throughout the show along with Leigh Barling and his Piper Turbo Arrow

Jonathan Merridew spent the weekend with his Archer 3 on display supported by some instructors from the Lilydale Flying School.

The weather was kind after rain earlier in the week with many interested visitors through the tent over the four days.

Thank you to all the committee and members who gave up their time to help man the display.



The Hideout

A unique, luxury aviation retreat
Near Port Macquarie, NSW



An aviator's dream ...fly in, put your plane in the hangar and step into your private, self-contained accommodation

Enjoy some time on this 33 acre property near Wauchope and only 20 mins from the beautiful beaches and amenities of Port Macquarie on New South Wales Mid North Coast. Relax completely or take advantage of the many attractions close by.

The Hideout is a beautifully furnished contemporary cottage in a peaceful rural setting, yet close to facilities. There is a queen bed in one bedroom and a double and single bed in the second bedroom. A generously sized open plan sitting/ dining room and kitchen provide space to relax. A spacious bathroom, separate toilet and laundry complete the accommodation. The living area has a split system air conditioner. Entertain yourselves on the generous verandah and deck at the rear of the property overlooking expansive farmland or enjoying a beautiful sunset.

A vehicle can be made available if you require.

BOOKINGS: www.dexfieldpark.com

ENQUIRIES: Call Sue on 0410 541602

Property characteristics

- Newly completed, self-contained, 2 bedroomed cottage, sleeps 5
- Located 7 mins from Wauchope, NSW with a private 800m airstrip
- Hangarage available
- Fully equipped kitchen with dishwasher
- All linen provided
- Washing machine
- TV/DVD in living area, TV in each bedroom
- Wireless broadband internet
- Heated swimming pool, hot tub, snooker table
- Breakfast and dinner hampers available
- Minimum stay 2 nights
- Children and small dogs welcome

Calendar Of Events

APRIL 14TH 2013 – BAROSSA – CLARE VALLEY FLYING CLUB FLYIN

JULY 2013 – ARNHEM LAND & KIMBERLEY SAFARI

SEPTEMBER (MID) 2013 – PPP

OCTOBER MID 2013 – ANNUAL GENERAL MEETING – PORT MACQUARIE

PORT MACQUARIE FRIDAY 11TH – SUNDAY 13TH
OCTOBER 2013