

Fly About

Northam Aero club (Inc.) Newsletter

Vol. 49 Issue No. 10 October 2018

A Message from the President

Hi all.

It is not long now until the 10th November being our 50 year, yes 50 year Anniversary Celebration. Spread the word to all our present and past Members. See the agenda in the following pages.

We will be having a Busy Bee on Saturday the 3rd November to clean up for the big day.

We will be cleaning out and setting up the original briefing hut as it was in the early days of Northam Aero Club.

After the Busy Bee we will have a briefing on the downloading of the weather and carrying out weather planning from our very experienced Instructor Murray Bow. This will be followed by bar then a movie night which will be a big day and all are welcome to participate.

The weather was not the best for flying last weekend and I am not sure if any one managed to fly to Serpentine Open Day.

It is amazing how word gets around. My cousin saw a post on her page where I was President of the Aero Club. My cousin had a very good friend that lived with them in Kalgoorlie and he was also a pilot. He was a member of the Mandurah Club but has since given up flying. He has very generously donated to our Aero Club Air Tourer Computer and also a set of concept headphones. How generous is that. I will get them engraved and present them to the Club. We are looking for another part time Instructor to meet our number of students which is fantastic. If you know of anyone that might fill our requirements please let me know.

Happy Take off and Landings.

Cheers,

Errol

In This Issue

- ◆ A Message from the President
- ◆ Vice President's & Airside Report
- ◆ Page 3 Plane
- ◆ Club Captain's Report
- ◆ Social Corner
- ◆ Close Calls
- ◆ Club Calendar
- ◆ Seen Around the Field
- ◆ Fun Page and Quiz
- ◆ Maintenance Corner
- ◆ Air Incident Sept 18
- ◆ Classifieds



Vice President's & Airside Report

Dear NAC Members

Well conditions are getting better for aviating and it is evident that there is a lot more activity around the aerodrome and the club.

Peter Scheer and I had a very productive meeting with the Shire in early October where a number of issues such as toilets, airfield maintenance and emergency services were discussed. We have a very good relationship with our Shire and they support the ongoing viability of the aerodrome. We need to be mindful that the Shire has only a limited budget for the aerodrome and note that everything is not going to come at once. As the Aerodrome Managers we have highlighted the most important issues and are working towards resolving these.

Our new iPad application is working well for aerodrome inspections and the Shire are very appreciative of the format and detail provided. Thanks to the club member who dropped the last remaining tree which was an ongoing hazard to aircraft, you know who you are and it's appreciated.

The Committee are all working hard towards improvements to the Club and the aerodrome, keep your eyes open things are happening slowly but surely.

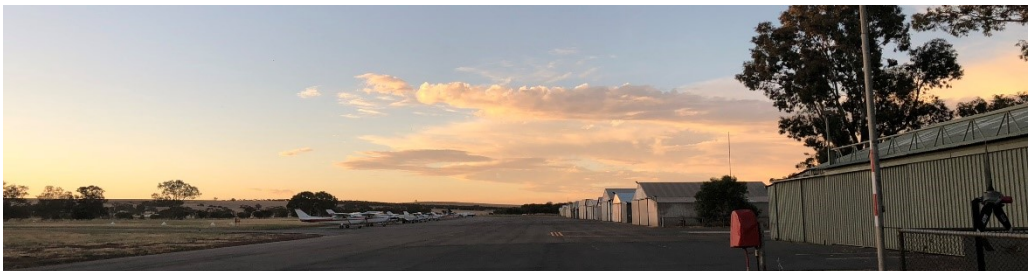
Maintenance Corner is back with our resident aircraft engineers and club members Ian and Trevor giving us some food for thought on all things maintenance related.

Hangar 39 (Price family hangar) was vandilised sometime between 1600 on the 6th October and 0900 on the 10th October, Club Members please vigilant with regard to aerodrome security. The Police and Shire have been notified. No vandalism or theft has been evident on the aerodrome for some time so it is very unfortunate that this has occurred.

The club has a full day planned for the 3rd of November with a busy bee commencing at 1230. Murray Bow will provide a presentation on the new Graphical Area Forecast (GAF) commencing at 1600, the bar opens at 1700 and we have a movie and hot dog night starting at 1900. Please come along and support the club for what should be a great day and night, see the flyer included in this issue of Fly About.

As always, don't hesitate to contact me if you would like to discuss any aerodrome or club matters.

Adam Price—NAC Vice-President



Page 3 Plane



OWNERS: Hans Wenziker

REGISTRATION: 24-5519

TYPE: Evezor Sportstar

YEAR OF MANUFACTURE: 2008

SEATS: 2

TOTAL TIME: 738 Hours

ENGINE TO RUN: 1200 Hours

PROP TO RUN: 900 Hours

CRUISE SPEED: 100 knots

STALL SPEED: 38 knots

CRUISE FUEL FLOW: 16 litres/hour

HANGARED: Hangar 10, Northam

AIRCRAFT NAME: "Jenny"



Club Captain's Report - September 2018

"Mokine Sortie"

Saturday 13th September

Team NAC Flying Comp for October was a Cross Country Mini Air Trial. As part of our Flying Comp TEAM NAC Pilots and Crew overflowed a Memorial Service being conducted by R.S.L Northam at a Dedicated Memorial site on Avro Anson Rd, Mokine, in tribute to four RAAF aircrew who lost their lives in the crash of Avro Anson W2262 Friday 9th October 1942 at 11.42 am. The local people, immediately after this tragedy and in the next few weeks erected this Memorial and had it officially dedicated by December 1942. R.S.L. Northam have expressed their appreciation to NAC Pilots for the added spectacle to this Memorial Service by their Flypast during the Comp. All pilots were provided with a full Comp Sheet and Map 30 days prior as usual, so we all had plenty of time to read, print off, understand and even FLY a practice run or two, as good a reason to go flying as any.

Our visitors enjoyed the flying and also enjoyed the scrumptious morning tea provide by the Ladies in NAC Clubrooms-Thank You Shay, Kate, Annette!

First Place with a perfect score went to Ashley Smith .. well flown!

Equal Second - Ian Berry and Adam Price

Third Place - Peter Hill

Fourth Place- Trevor Sangston (who also helped design this Comp)

Fifth Place - Neil Whitmarsh

Judges were Jesse, Lachie and James.. thanks, much appreciated.

Six points are all that separated First place and Fifth, very close scoring. Our next Flying Comp is on Sunday 11th November 2018 9.00 am

"CROSS COUNTRY AIR TRIAL AND STRAIGHT IN APPROACH"



Mokine Memorial, Avro Anson Rd, Mokine



Padre David Dixon doing the address at Mokine while the NAC aircrew conduct flypast tribute



All pilots have full Comp Sheets with 30 days to go, we look forward to all TEAM NAC PILOTS joining us at Northam Airfield 9 am Sunday 11th November 2018.

Thank You, look after Yourself and see you Sunday 11th November!

Peter Hill
Club Captain
0450 415 947

Editor's Broadcast

Welcome to another edition of the Fly About! Seems like we just published the September Issue and here we are in October already—boy the year is just “flying by”!

We have had lots happening again this month with what looked like a great day at the Kulin Races, another fun club competition and of course the SABC Fly-in— even the dismal weather didn't stop the true aerosexuals from attending by car.

Don't forget to save the dates for the Weather Briefing and the movie night on the 3rd November—we hope to have this as a regular event at the club. Earlier that day, the club is having a busy bee beginning at 12.30 in preparation for the 50th Anniversary celebrations. If you could spare a couple of hours to help out it would be much appreciated!

Xmas isn't too far away and planning has begun for our Xmas club celebrations. Once again we will have our Xmas Lunch on the 9th December after the club comp. A flyer will be sent out to all members shortly and if last year's event is anything to go by we will be very well fed! Of course Santa will be flying in too :) As always, please feel free to contact me with any contributions to future issues, be they stories, tall tales, adventures, photographs, funnies, advertising (free for club members), or ideas! Remember the Fly About is only as good as the contributions we receive.

Submissions need to be sent by the first Monday after the monthly flying competition to:

northamaeroclubsocialdirector@gmail.com



I want to buy
An Airplane....



.....But my wife
Cess-nah!

LEARN TO FLY

Recreational Aviation
Capital of the West



Ph Errol 0428 880 149 or Dave 0416 242 846

www.northamaeroclub.com

Social Corner

Wongan Hills Tourism Group presents

13th ANNUAL REYNOLDSON RESERVE WILDFLOWER FESTIVAL

26-28 October 2018

"The Station", Wongan Hills

SUNDOWNER - MARKET STALLS - KIDS ACTIVITIES
FOOD STALLS - CAMP COOKING DEMONSTRATIONS
BIG BREAKFAST SAT & SUN MORNING
BUS TOURS TO REYNOLDSON RESERVE
WILDFLOWER DISPLAY - ART SOCIETY EXHIBITION
STARGAZING - MUSEUM OPEN

FRIDAY - 6.00-9.00PM
SUNDOWNER AT "THE STATION"

SATURDAY

MARKET STALLS KIDS ACTIVITIES FOOD STALLS VINTAGE CARS Plus much more.....	STARGAZING EVENING AT THE WONGAN HILLS AIRSTRIP
9.30AM - 2.30PM	7.30PM - 9.00PM

SUNDAY - 10.00AM
SENIORS MORNING TEA SING-A-LONG

Proudly Supported by:





For Further Information Contact:
Wongan Hills Visitor Centre
08 96711973
E: Wonganhillstourism@Westnet.com.au

Dave McFarlane
has kindly offered to transport anyone flying in the for this event if needed. He can be contacted on 0428 743 031 thanks Dave!

Upcoming Events:

- Monthly Club Comps 2nd Sunday of the Month
- 26th—28th October 13th Annual Reynoldson Reserve Wildflower Festival
- 3rd Nov—Weather briefing Movie & hotdog night Club Busy Bee
- 10th Nov - NAC 50th Anniversary and Book Launch
- 9th Dec - Aeroclub Xmas Party

Bar Roster

October 2018

27th October Peter Hill

November 2018

3rd November Adam Price

10th November Mick

17th November Matt

24th November Peter Sheer

December 2018

1st December Peter Hill

8th December Crofty

15th December Howie

22nd December Closed

29th December Closed

Bar Hours - Saturday 5pm - 7pm

If unable to do your rostered days, please make arrangements to swap with someone.

NORTHAM AERoclub

Presents

Aviation Weather Briefing and a Movie & Hot Dog Night

Saturday 3rd November

It was a time of heroes, daredevils living only to fly—
and Waldo, who lived only to outfly the rest.



ROBERT REDFORD

IN A GEORGE ROY HILL FILM

The Great
WALDO PEPPER

Co-STARRING **BO SVENSON**

SUSAN SARANDON and MARGOT KIDDER • SCREENPLAY BY WILLIAM GOLDMAN

STORY BY GEORGE ROY HILL • ORIGINAL MUSIC BY HENRY MANCINI

PRODUCED AND DIRECTED BY GEORGE ROY HILL • A UNIVERSAL PICTURE • TECHNICOLOR® • TODD-AO 35

TM & © 1976 BY UNIVERSAL CITY STUDIOS, INC. ALL RIGHTS RESERVED.

Admission - \$3.00 donation to the club

Murray Bow will provide a weather briefing on the new GAF at 4.00pm

Bar opens at 5.00pm

Movie starts at 7.00pm

All Club members and friends welcome



All past and present NAC members are cordially invited to the

50th Year Anniversary Luncheon and Book Launch

To be held at the Northam Aero Club

Withers Street, Northam

10th November 2018

10 am—Meet & Greet

12 pm—Lunch

3pm—book release

4pm—midnight—bar open

RSVP—Karin Price

Northam Aero Club Social Director

Email - northamaeroclubsocialdirector@gmail.com

Phone - 0428 611 797

Close Calls

Pre-flight Distraction—It's easy to get caught out!

Reprinted with courtesy of Flight Safety Australia Magazine

My aircraft is of the 'low and slow' variety, a tail wheeler with STOL performance. It's usually hangared at home base but on this occasion was tied down at a bush strip in a valley, with steep hills in close proximity to one side of the strip.

That morning I had untied and preflighted the aircraft as per my usual—a habitual routine—and had flown to collect a passenger at another local strip for a property inspection. On return I parked the aircraft in its previous spot and tied it down, fitting control locks in the process.

Late afternoon, I returned with another passenger for a local scenic flight of the district. She was quite excited at the prospect, having previously flown in a small aircraft, and very keen to see her valley from the air. As I untied the aircraft and removed the control lock from the centre stick, she was already settling into the right seat and adjusting the seatbelt, keeping up a steady stream of questions about the aircraft. I completed my passenger briefing, ran up the engine, taxied to the end of the gravel strip and lined up. There was a crosswind component of approximately five knots with slight gusts.

As usual the take-off roll was quite short and when climbing out I automatically applied aileron and rudder against the slight crosswind drift off the runway centre line. That's when I discovered that I still had gust locks securing the ailerons. First thought (of many in quick succession!) was to land on the remaining runway, but the drift negated this option.

Explaining to my passenger that we had a problem and would be landing again, I concentrated on investigating how controllable the aircraft was without ailerons, while maintaining approximately 200 ft above ground. Aggressive application of opposite rudder produced the desired adverse roll to keep the wings level, but significantly changed the desired flight path. Quick stabs of the rudder simultaneously with a short burst of power swung the nose without too much roll. Yes! With immense relief I knew I should have sufficient control to complete a circuit.

The close hills to starboard dictated a crosswind leg into the wind and a wide, circling turn put us on the downwind leg. Turning base took considerably more effort as a gap in the upwind hills allowed the gusts to affect roll more than previously. With the wind now behind us and carrying us more rapidly towards the hills, the sweeping turn onto final required constant rudder and throttle inputs to minimise the turn radius. Even so, the large turn radius took us past the final alignment and more correction was required to eventually line up the runway, allowing for the expected drift. I do recall thinking that my feet were as busy as a tap dancer.

Landing was anticlimactic and my passenger didn't seem to appreciate the gravity of the situation. After a short spell on the ground, we took off again for a delightful late afternoon flight over the mountains.

Having difficulty sleeping that night, I relived that circuit over and over and resolved to share what I had learnt that day.

The obvious contributing factor was allowing my passenger's enthusiasm to distract me while pre-flighting, to the extent that I missed two vital steps—removing the aileron locks from the wings, and checking controls for 'free and correct sense'. My own complacency was in my assumption that as I had flown the aircraft only a few hours before it was still good to go.

Helping me resolve the situation was my past experience in flying this aircraft, where crossed control approach slips are my usual crosswind landing technique and large rudder inputs come naturally.

I consider myself fortunate that my initial training and the majority of my flying is in tail wheel aircraft, where rudder use features prominently.

I have resolved in future to demand that passengers remain quietly some distance away from the aircraft until I invite them to come closer. I also have added tell-tale flags to the aileron locks to provide a visual reminder, particularly as I only use them infrequently when away from home base.



Seen Around the Field



Ian Berry won awards at the recent AirVenture Australia Aussie Fly in for the Australian Pilot who travelled the greatest distance and also the oldest pilot who has flown in—what an achievement!



Spring has Sprung.....



Some of the regulars at the club bar on a Saturday night



Another regular at the bar



Yellow fields of gold



Beautiful mornings on the field



Runway 14

A group of NAC Members took the flight over to the Kulin Bush Races on Saturday 6th October. Organised by Club Captain Peter Hill, we landed on the farm strip beside the beautiful lake side race track complex. Club Members Steve Bailey and partner Louise Harwood were actively involved in the action with Louise's two horses racing. Louise riding "Banksy" made the day for us. Fashion on the field kept everyone entertained. We had a great day flying to and from the races with good weather, we could make this an annual outing.

Barbara McFarlane - NAC Member





HAVE YOU
COMPLETED
THE MOST
IMPORTANT
PRE-FLIGHT
CHECK?

YOU

Don't ignore your mental health.
Start the conversation—it will be
the best decision you ever made.



Northam Aero Club

BUSY BEE

Saturday 3rd November

12.30 pm

In preparation for the club's 50th Anniversary

"Speed is life. Altitude is life insurance."

—anonymous combat pilot



October 2018



Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	2	3	4	5	6 Bar Roster Ashley Smith Kulin Fly-in	7
8	9	10	11	12	13 Bar Roster – Errol Croft Club Comp. NAC Committee Meeting	14 SABC Annual Fly-in
15	16	17	18	19	20 Bar Roster – Howie	21
22	23	24	25	26 Reynoldson Reserve Wildflower Festival	27 Bar Roster – Peter Hill Reynoldson Reserve Wildflower	28 Reynoldson Reserve Wildflower Festival
29	30	31	<i>The desire to fly is an idea handed down to us by our ancestors who looked enviously on the birds soaring freely through space, on the infinite highway of the air</i> <i>Wilbur Wright</i>			

November 2018



Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
			1	2	3 Weather briefing & Movie Night Busy Bee Bar—Adam Price	4
5	6	7	8	9	10 NAC Anniversary Lunch & Book Launch Bar—Mick	11 Club Competition NAC Committee Meeting
12	13	14	15	16	17 Bar—Matt	18
18	20	21	22	23	24 Bar—Peter S	25
26	27	28	29	30		

Air Incident September '18

I departed Northam recently with a student in our trusty PGL. Our first waypoint was Dowerin, which as our club president can assure you is northeast of Northam. We were climbing to 3500 and another aircraft broadcast on CTAF saying he was north of Northam, inbound at 5700 on descent. We advised him that we were outbound at 3500.

When we switched one of our radios to Melbourne Centre we heard the controller trying to contact "aircraft north of Northam". Thinking he may have meant us, I gave him our callsign, position and intentions. We squawked ident at his request, which confirmed to him that we were the aircraft he was trying to contact, and he advised us of conflicting traffic. I couldn't see anything, and was looking for the inbound aircraft to our left because he'd said he was inbound from the north. I asked him for his position, and when he realised neither of us had seen each other, he made the sensible decision to level off at 4000, and advised us of that.

ML CEN then talked to us again, sounding worried because he apparently hadn't been able to talk to the inbound aircraft. Shortly after that, he said "Suggest you turn immediately Sir". I then saw the other aircraft, no more than half a mile to our right, at 4000 as he'd advised.

If I'm still learning after all my years of flying, I figure others might learn from little tales like this as well. My observations include:

- It would have been good if the other pilot had broadcast his position accurately. He was northeast, not north. In future, if in doubt, I'll ask for the pilot's last tracking point.
- I didn't hear any evidence that he was monitoring Centre as well as CTAF. He was a 206 so I'm sure he'd have two radios. If you've got them, use them.
- To his credit, when he understood the potential conflict he made the safe decision to level off.

The person who most on the ball was Melbourne Centre. It was his call to us that triggered me to talk to the inbound aircraft a second time, which in turn caused him to level off.

The main lesson was the reminder of the importance of the radio, and the use of it by all three of us. Although we can quite legally take off from Northam and fly around without a radio at all, who'd want to do that? It's an invaluable extra pair of eyes. It's harder than many people realise to spot aircraft more than a couple of miles away. "See and avoid" is nowhere near as good as "alerted see and avoid."

Incidentally, if we'd done as Centre advised and turned to avoid a conflict, we would have turned right, which would have been towards the traffic. When two aircraft are approaching head-on, the rules say to turn right. It's not because the pilot sits on the left – helicopter captains sit on the right. So why do the rules say right and not left?

Kevin Lathbury - NAC

Hot Starts

With the warm weather approaching I figured now would be a good time to have a look at the term “Hot Starts”. The following information is typical of a Continental fuel injection system as the Lycoming system is a very different story as many pilots would be aware of.

It used to be quite common and to most pilots, it was, or perhaps still is, synonymous with the gas turbine engine. In recent years, it has spilled over into some of the reciprocating power plants that power the general aviation fleet. However, the meaning is quite different when applied to modern reciprocating engines and implies difficulty in starting the power plant when it is hot or heat soaked from recent use. This condition is primarily associated with fuel injection engines and usually occurs only during hot summer weather.

So let's get acquainted with “hot starts” as applied to fuel injection engines.

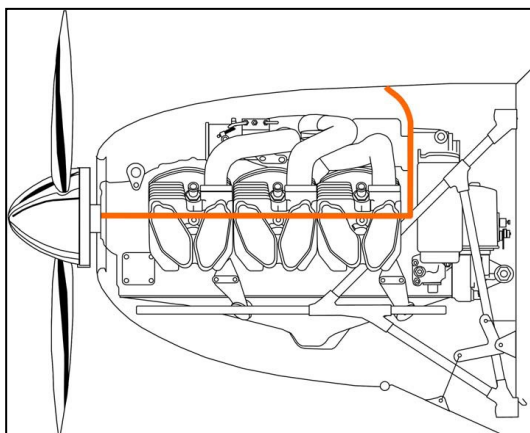


Figure 1. Typical example of a tightly cowled engine in a well-designed airframe

This temperature rise results from the fact that the air trapped inside the cowling is heated by residual engine heat. Notice how air entering the cowling opening in the front is forced around the cylinders by means of baffles and moves into the lower cowling where it passes overboard through the cowl flap openings. Cooling air also enters the accessory section via strategically located vents. This condition can occur in nearly all modern airplanes, twins and single engine alike, and especially so on those airplanes having no upper cowl openings. On a hot summer day it will take approximately two or three hours for this trapped heat to dissipate appreciably. And here's where “hot starts” get started.

The engine in a modern airplane is closely cowled to reduce airframe drag and subsequently increase the overall efficiency. Consequently, there is very little space inside the cowling and it is void of any unnecessary openings. Figure 1 is typical of such an installation. Cooling of the engine depends on air being forced into the cowling by the propeller during operation and the “ram” effect during flight. Figure 2 illustrates airflow during in-flight conditions on a typical installation. Of course when the airplane is on the ground and the engine is at rest, no cooling is necessary. But! -things do get a bit warm inside the cowling immediately after shut-down.

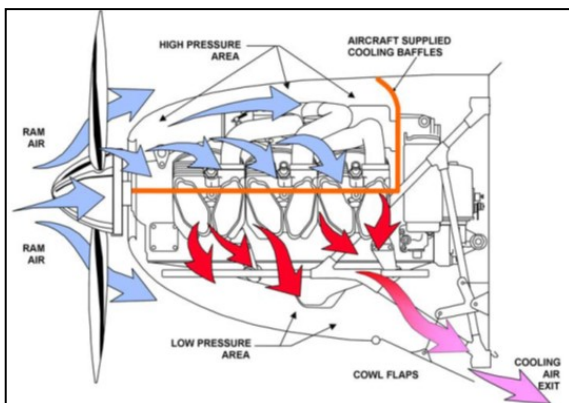


Figure 2. Desired Airflow Typical Naturally Aspirated Fuel System Schematic

What actually happens? Within ten to fifteen minutes after shutdown in hot weather, the heated air inside the cowl heats the fuel in all of the lines and fuel metering components located inside the cowl and forward of the firewall. Under these conditions the liquid fuel begins to expand and vaporize. If the fuel selector valve is left on (and normally it should be) the pressure from the expanding fuel begins pushing the liquid fuel remaining in the lines back to the fuel tank from which it came.

Figure 3 illustrates this condition. Very quickly most of the fuel in the lines and components inside the cowl will have turned into vapour. If the fuel selector valve was turned off after engine shutdown, the expanding vapours then force the liquid fuel and vapours through the fuel metering equipment and into the engine's induction manifold, eventually to escape into the atmosphere. Heated air rises to the top of the cowl. Notice the vapour bubble in the clear fuel line in the photo above.

All airplanes equipped with fuel injection have at least two fuel pumps, one engine-driven injector pump and one electric "auxiliary" or "boost" pump.

The injector pump can deliver fuel only when the engine is running or being cranked. The electric auxiliary fuel pump can be operated anytime, whether the engine is running or not. As its name implies, the auxiliary pump serves a variety of purposes, including the complete elimination of "hot start" situations.

On a fuel injection system the engine-driven pump provides several functions. In addition to supplying fuel under positive pressure to all other components in the system, the injector pump also automatically meters the correct amount of fuel into the cylinder combustion chamber under all given power settings.

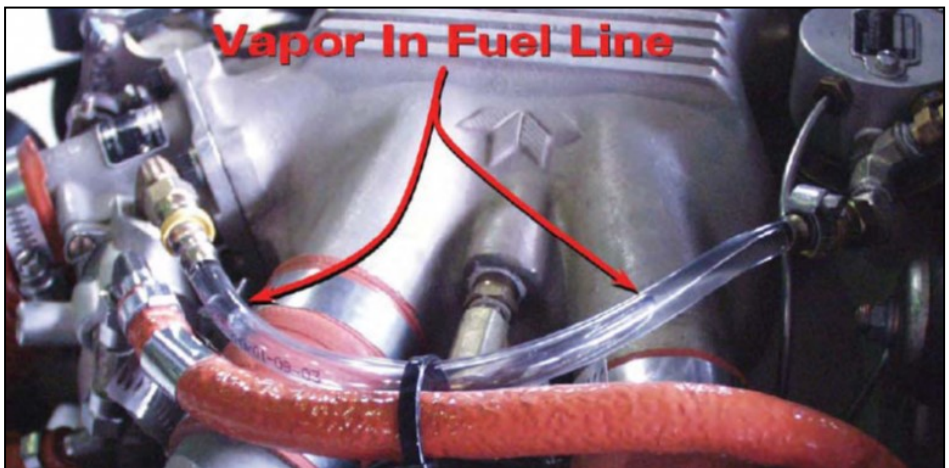
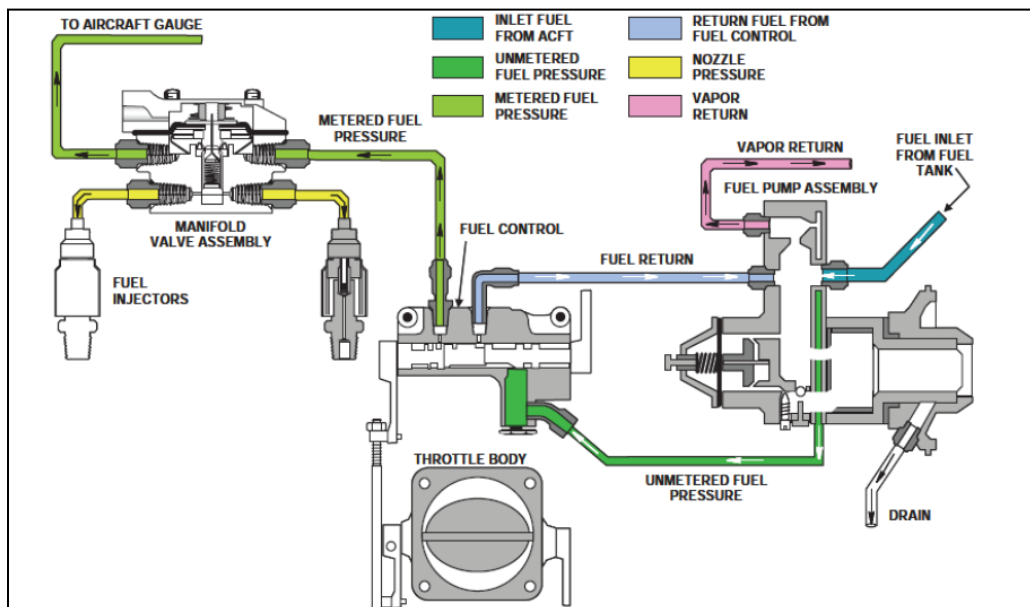


Figure 3. Heat Soaked Vapour in Clear Line



The typical naturally aspirated fuel system illustration above shows normal fuel flow when the engine is running. Note the return of excess fuel from the injector pump and metering unit. This excess fuel returns to the tank from which it came.

All engine-driven fuel pumps must have the capacity to provide more fuel than the engine can use, even at full throttle. Since the injector pump operates at higher pressures and delivery, it is provided with a return line system. The injector pump also supplies more fuel to the metering equipment than is needed. This excess fuel returns through the fuel pump and then to the aircraft fuel tank from which it came.

All injector pumps are fitted with a bypass valve which allows the auxiliary pump to bypass the vane portion of the pump and yet utilize the metering section of the injector pump when the injector pump is inoperative. During normal operation the injector pump draws fuel from the tanks, meters it to some degree, and then delivers this partially metered fuel, under pressure, to the metering unit or control.

The metering unit contains the fuel metering valve, which is mechanically linked to the air throttle. On some engines the metering unit also contains the mixture control, while other installations have the mixture control built into the injector pump. In either case, fuel passes through the mixture control valve prior to reaching the fuel control metering valve.

Whenever the pilot moves the throttle, the fuel metering control will move in direct or related proportion. The metering unit is also provided with a return line for returning excess fuel which isn't delivered to the cylinders for combustion. The return line from the metering control connects to the return line on the injector pump, and from here the return system goes back to the storage tanks or (in some installations) to a small hopper tank located somewhere along the main fuel line. This return system plays a very important role in preventing "hot start" difficulties.

The Auxiliary Pump

When you turn on the auxiliary pump, it draws fuel from the storage tank and delivers this fuel under pressure to the engine driven injector pump. If the engine is at rest, fuel from the auxiliary pump will pass through the injector pump bypass valve and into the metering section of the injector pump. The partially metered fuel leaves the injector pump and flows on to the metering control. If the mixture control is open, the fuel arriving from the injector pump will continue on to the distributor valve and nozzles. However, if the mixture control is placed in cut-off or full lean position, the fuel leaving the injector pump will arrive at the mixture control in the metering unit and then enter the return line system. Once in the return line system, the fuel returns to the tank from which it came.

Ready? Let's start a typical fuel-injected engine that's been shut down for approximately twenty minutes when the ambient temperature is 35C using normal procedures.

Procedures for a routine, warm engine start on this fuel injection engine would consist of:

1. Mixture control full rich,
2. Throttle..... “cracked” or slightly open,
3. Magneto switches..... on (if separate from starter switch).
4. Starter engage.

Usually a small amount of liquid fuel will remain in the injection lines leading to the nozzles. As the engine begins cranking, this retained fuel is injected into the intake valve ports and drawn into the cylinders. Upon ignition, the fuel ignites and the engine bursts into life; then, just as suddenly as it started, it dies. The obvious indication that a “hot start” situation exists. Since the fuel lines inside the cowling are full of vapour rather than liquid fuel, the engine driven pump will not pump or “remove” the vaporised fuel in sufficient quantity to support combustion. Therefore, the engine's refusal to continue running after the initial start-up is simply due to fuel starvation.

Such false starts will usually be followed by difficulty in re-starting. The unknowing pilot will continue cranking the engine while resorting to some favourite procedure, self-designed, to accommodate the situation. If this doesn't bring immediate results, more cranking and different procedures are tried. At last (usually) the engine starts - but only because the excessive cranking has pumped away the vapour, permitting liquid fuel to fill the lines and returning things to normal.

There has to be a better way - and here it is, in three easy steps:

1. Mixture control full lean or cut-off.
2. Throttle..... full open.
3. Electric auxiliary fuel pump on high.

Relax for approximately twenty seconds and while you are waiting, here is how the solution is working for you.

The electric fuel pump is taking liquid fuel from the tank selected and pumping it through the heat-soaked lines under the cowling. In its cut-off position, the mixture control prevents this fuel from reaching the cylinders. This is exactly what is needed at this moment: Now the fuel takes the alternate path and returns to the tank or header from which it came.

During this process, the continual flow of fuel will purge the lines forward of the firewall of all vapours. Also this continued flow will reduce the wall temperature of the lines through which it passes. After approximately twenty seconds the fuel lines will have cooled sufficiently to retain the fuel in a liquid state after the pump is turned off. After twenty seconds, turn off the electric pump and make a normal start as follows:

- 1. Mixture control full rich.
- 2. Throttle cracked or partially open.
- 3. Starter engage.

No priming will be necessary because a small amount of fuel will make its way past the closed mixture control and into the nozzles during the purging operations. If this “three step” purging operation is conducted exactly as outlined, the engine will respond to a normal warm start procedure every time, and with no difficulty. The process will be different for Continental engines equipped with a mixture control on the fuel pump. This type of fuel injection system is employed on the 240 and 360 series engines and the IO-550-G, N, P & R engine models. With this type of system you will need to run the boost pump for 20 seconds and then open the mixture control until a metered fuel flow indication is present on the instrument gauge.

Just remember:

- 1. The mixture control must be full lean - to prevent flooding and to force the circulating fuel to flow back through the return system.
- 2. The throttle must be full open - because some single engine fuel injected aircraft incorporate switches in their throttle linkage to prevent the auxiliary pump from operating in the high position when the throttle is retarded.
- 3. The auxiliary pump must operate in the high position for approximately twenty seconds - to provide sufficient time to adequately cool the fuel lines and components inside the cowling. The electric pump is operating and you can begin to see the results. The supply line from the electric pump to the injector pump is almost free of vapours. Notice the vapours being returned through the return line system and that fuel is passing the mixture control to the nozzles.

Three to Remember

Finally, let's summarize the three important facts that you should remember about “hot start” difficulties:

- 1. The cause of this possible difficulty is simply heat soaking of the fuel lines inside the engine cowling or nacelle after engine shutdown in hot weather.
- 2. The actual condition is temporary fuel starvation due to vaporization of fuel in the lines inside the engine cowling.
- 3. The solution for preventing the difficulty is the auxiliary fuel pump which simply purges the vapours and hot fuel from the lines prior to starting. It's just that simple.

So hopefully this may help next time you are struggling to get started on a hot summer day.

Information for this article was sourced from “Continental Tips on Engine Care” and of course always consult your Pilot Operating Handbook for information relevant to your particular aircraft.

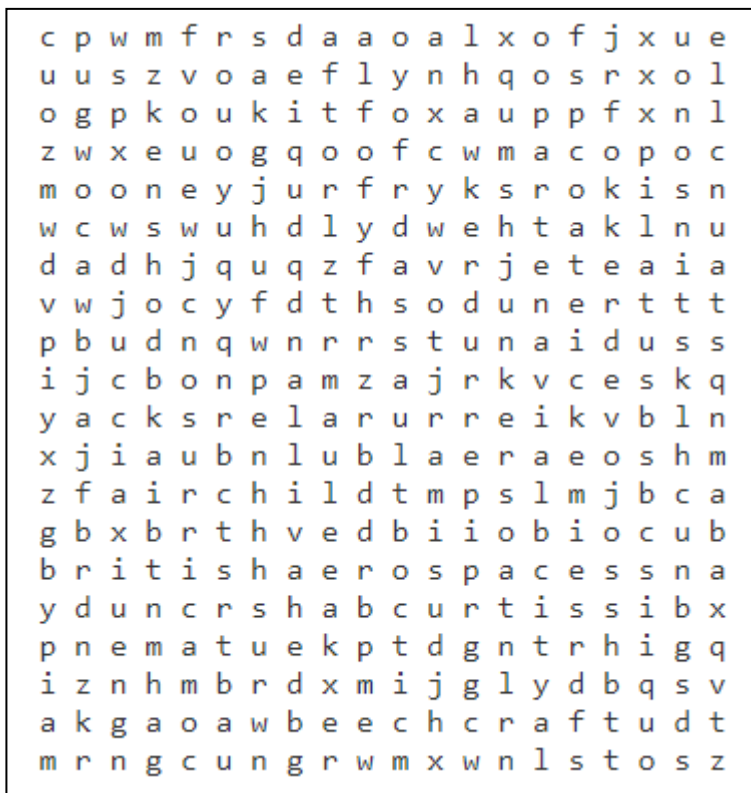
We will endeavour to have an article each month and as before if you have any ideas for articles please send us an email to, staff@northamairservices.com.au and as always,

Happy flying.

Trevor Sangston

Just for fun.....

Aircraft Manufacturers



Airbus	Dassault	Hawker	Pilatus
Beechcraft	DeHavilland	Jabiru	Piper
Bearhawk	Dornier	Junkers	Lockheed
Boeing	Douglas	Kitfox	Saab
Bombardier	Embraer	Lockheed	Sikorsky
British Aerospace	Eastman	Maule	Stearman
Cessna	Fairchild	McDonnellDouglas	Stinson
Cirrus	Fokker	Mooney	Tupolev
Comac	Grumman	Noorduyn	Waco
Curtiss	Gulfstream	Partenavia	Zenith

Test Your Aircraft Recognition

For the chance to win a \$10 Aeroclub bar voucher name the aircraft and the manufacturer below.

The winner will be the first and closest to the mark. Email your responses to Northamaeroclubsocialdirector@gmail.com



WINNER!!!!

Congratulations Kevin Lathbury - in record time naming all three aircraft and manufacturers from September's competition correctly. There is a \$10 voucher waiting for you at the club bar.

Answers :

- ◆ *Gloster Javelin F(AW) Mk8*
- ◆ *Hawker Hunter F.Mk.6*
- ◆ *English Electric Lightning Supersonic Jetfighter*

Classifieds

For Sale



TECNAM P2008 LSA. 2011, 430hrs TT.
VH reg, Aerial work & Private Category.
Bolly prop, electric AH/DG, aux alternator,
GMA 240 Coms, 30 Nav/Com with CDI.
Garmin 495 GPS, Garmin GTX327 Txp/
Mode C. 118Ltrs fuel, 115kts Tas, 20ltr/hr.
LAME maintained, one owner, exc cond,
always hangered inland WA.
Fresh 100 Hourly.

\$130,000 plus GST

0428935635



**Western
Airmotive
Pty Ltd**

30 Eagle Drive Jandakot
Western Australia 6164
Ph: +61 8 9332 7655
E: airspares@westernair.com.au
www.pilotshopwa.com.au

FOR ALL OF YOUR FABRIC COVERING NEEDS

**POLY
FIBER**
Aircraft Coatings

Randolph
Aircraft Products

CECONITE

Aircraft Spruce
SINCE 1965
& Specialty Co.
Dealer

**"For all your aircraft parts
and pilots' supplies"**



For Rent Hangar Space

Suitable for 2 aircraft

Jabiru Size - \$150 per month

C182 size - \$250 per month

Prices negotiable

Contact David Kerr

E : davedragon68@gmail.com

Wanted Aviation Memorabilia

- Books
- Artefacts
- Photographs
- Old Aircraft Parts
- Signs

If it's old and historic—I'm interested

Adam Price—0428 611 797

NAC Club Aircraft Bookings



Enquiries—Matt Bignell

0428 962 001

Aircraft for Sale

Mooney 20E

CSU Retractable Undercarriage

Engine

126 hours since new

Lycoming IO-360-A1A 200 HP

25 Nov 2024

Propeller

126 hours since new

Hartzell HC-C2YK-1BF

27 Nov 2018

Other

Airframe total hours - 5187.2



\$45,000

plus 200 hours of wet hire

For more information please contact

Milton Brooks

M : 0414 763 347

E : milt_brooks@hotmail.com

Aircraft for Sale

Piper Cherokee PA28-180

VH-RXA

- 100 hours on rebuilt engine
- New windows
- Corrosion proofing
- New Alternator
- Lots more!

\$35,000

For more information please contact MJ

M : 0408 439 160



Northam Aero Club Merchandise

Club Polo Shirts with name and club logo—\$35.00

Postage available—\$10.00 per order

Club Caps with logo—\$20.00 available at the bar

Stubbie Holders—\$7.00 available at the bar

Postage available—\$8.00



The Story of Curvy Kate

is a fascinating story of one man's lifelong dream to build a head-turning replica SS Jaguar from the ground up.

Howard Pietersie takes us through a mechanical odyssey, replete with setbacks, successes and innovative solutions that make 'Curvy Kate' a remarkable story of endurance, elation and love.

However, the romantic notion of building a truly elegant piece of 20th century motoring royalty is not for the faint-hearted, though any unsuspecting soul determined to do so would do well to read this book.

The Story of Curvy Kate is Pietersie's inspirational and sometimes hilarious journey into the secret life of an enthusiastic amateur determined to realise a dream.



The Story of Curvy Kate

available online

www.replicajaguarbook.com

Paperback—\$29.95

Hardback—\$39.95

ASIC Cards

As you know, ASIC's now need to be collected in person. This has meant a trip to Perth to have a face to face pick up. I am now an agent for CASA so if you nominate Northam as your pick up point, your ASIC will be sent to me for you to collect in Northam.

Enquiries—Denis Beresford

0408 747 182

"Happy Flying"

JJ's Signs

Fantastic handmade wooden spitfire signs



Only \$15

Jesse Price—0428 611 797

Junior Member

NAC Cessna 172—VH-PGL

Hire Fee Structure

Private Hire - \$210 per hour

Dual Training - \$300 per hour

TIF's - \$150 per 1/2 hour

Briefing - as required

Instructor (in owner's aircraft) - \$100 per hour

Pre-paid Discounted Block Rates Available

- 5 hours - less 5%
- 10 hours - less 10%
- 20 hours - less 15%

Student pilots may use the discounted block rate for aircraft hire only

Instructor fees remain as priced above

For all further enquiries please contact:

NAC Treasurer - nactreasurer@bigpond.com T: 0428 743 031

Matt Bignell - 0428 962 001





President

Errol Croft

E: dowref@bigpond.net.au

T: 0428 880 149

Vice President

Adam Price

E: adam@airsafetynav.com.au

T: 0429 041 974

Secretary

Peter Scheer

E: bushyps@gmail.com

T: 0408 802 955

Treasurer

Dave McFarlane

E: nactreasurer@bigpond.com

T: 0428 743 031

Club Captain

Peter Hill

E: prh@aurora.net.au

T: 0450 415 947

House & Grounds

Ashley Smith

E: ashleypsmith@westnet.com.au

T: 0429 083 152

Aircraft

Dave Beech

E: dbeech@iinet.net.au

T: 0416 242 846

Flight Training

Kevin Lathbury

E: Kevinlouise62@gmail.com

T: 0434 000 217

Flight Training

Murray Bow

E: bowie1@iinet.net.au

T: 0424 160 750

Fly About Editor & Social

Karin Price

E: Karin@airsafetynav.com.au

T: 0428 611 797

Facebook

Sally Wood

E: Swood77_nz@hotmail.com

T: 0439 941 201

THE NORTHAM AERO CLUB (Inc.)
PO Box 247 NORTHAM

WESTERN AUSTRALIA 6401

SURFACE MAIL
POSTAGE PAID
AUSTRALIA

TO:

"FLY ABOUT"
PRINT POST APPROVED PPN: 100018823

