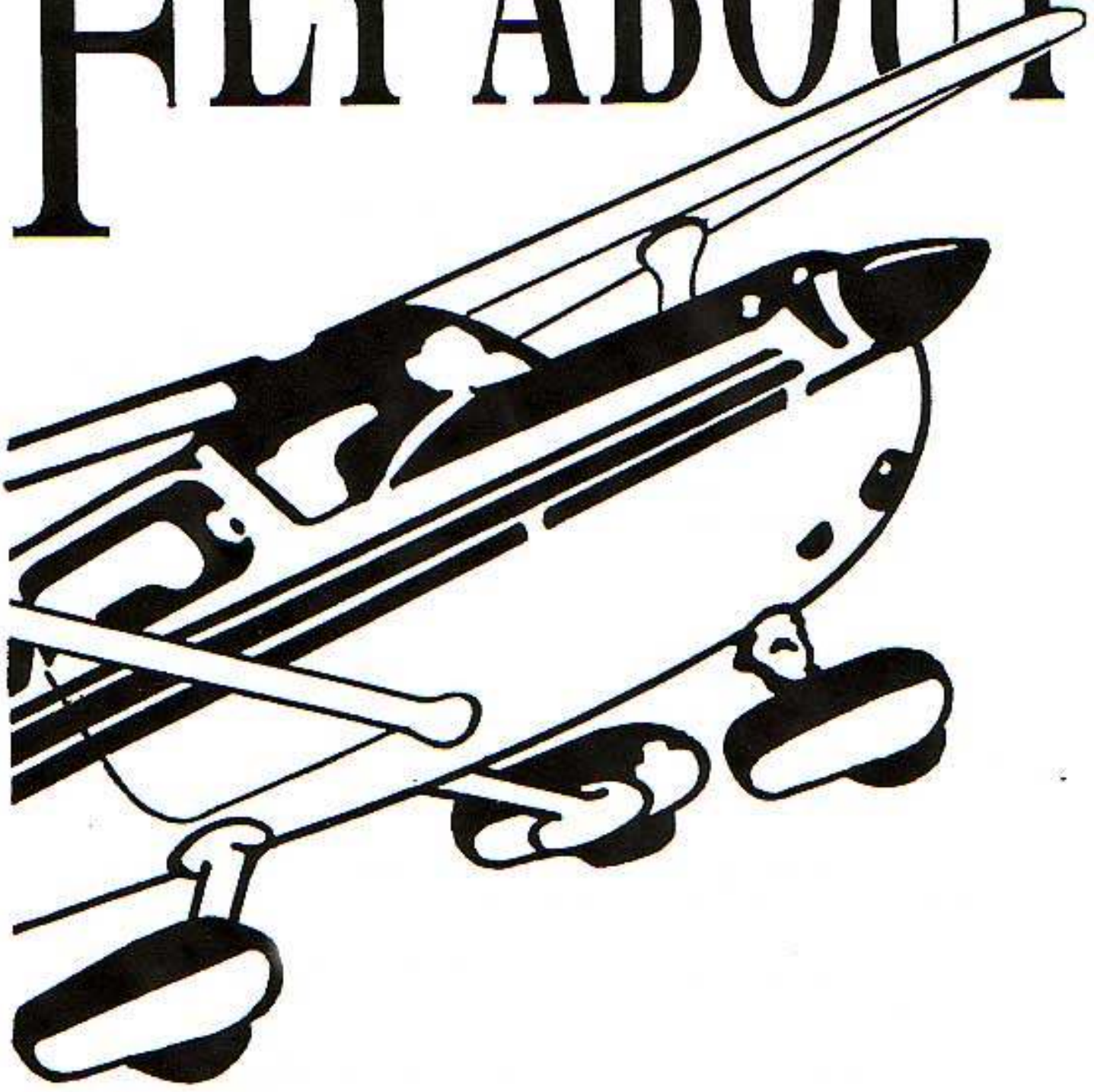
FLY ABOUT



OFFICIAL ORGAN OF THE NORTHAM AERO CLUB (INC)
POST OFFICE BOX 247 NORTHAM WA 6401

Print Post Approval No: 639955/00013

Volume 42 Issue No.04

May 2011

NORTHAM AERO CLUB

PO BOX 247 NORTHAM WA 6401

COMMITTEE CONTACTS

PRESIDENT	**Simon Cooper** simon.sj.cooper@centrelink.gov.au	0429 202 597
IPP	**Claude Meunier** claudemeunier@bigpond.com	08 9622 5574 0417 816 168
VICE PRESIDENT	**Errol Croft** dowref@bigpond.net.au	0428 880 149
SECRETARY	**Les Ballantyne** les@aquasport.com.au	08 9622 5303
TREASURER	**Ashley Smith**	9622-3673
CLUB CAPTAIN	**Errol Croft** dowref@bigpond.net.au	0428 880 149
COMMITTEE	**Steve Vette** svette@southernphone.com.au	0407 577 617
• AIRCRAFT BOOKINGS • AIRFIELD OFFICER • BAR MANAGER • HOUSE & GROUNDS	**Matt Bignell** big.matty@hotmail.com	0428 962 001 08 9622 3001
• AIRCRAFT • FLIGHT TRAINING • AIRSIDE & SAFETY	**Denis Beresford**	08 96225 222 0408 747 182
FLYING INSTRUCTORS	**Phil Butherway** **Kevin Lathbury**	0427 967 363 0434 000 217
SOCIAL	**Ryan Bristow-Stagg** bristow82@bigpond.com	0404 081 786
BALLOONING LIASON	**Ryan Bristow-Stagg** bristow82@bigpond.com	0404 081 786
FLY ABOUT EDITOR	**Debra Donovan** nac.editor@yahoo.com	0429 207 502
WEBSITE **E-MAIL** **CLUB ROOM**	www.northamaeroclub.com northamaeroclub@westnet.com.au	 08 9622 3248

Vice Presidents Report

Our monthly meeting brought up a few points of interest. Our Aero club has another new member. Welcome Noel Williams. We hope you will become a flying member with our club as we are planning a few fly-aways and we do need numbers for these flights.
Currently we have 5 or 6 students, but unfortunately Kevin Lathbury will be away from 24th May for 4 weeks.

The toilets have been playing up due to the leach drain system. Once upon-a-time the Aero club would have had to pay for their renewal but now we can hand the repairs over to the Shire.

Our next meeting is 13th June with the Annual Presentation Dinner coming up along with Committee nominations ready for the AGM.

Hope to see you around the club or in the air flying.

Cheers
Errol

Club Captains Report – May Comp

Our Comp held on 8th May was also a Mothers Day Event. Numbers were great with Mothers taking to the air. The comp consisted of the longest glide with the competitors climbing to 2000ft. They cut power and Dennis measured the distance gliding to 1000ft. All pilots headed in the same direction which was to Mt Bakewell.

I managed to trim for 65kts and came in first covering the greatest distance. Ian was second with young Ray third. Well done guys and thanks yet again to Denis Beresford for the comp, Les for the barbie and Mrs Bristow-Stagg senior for the best egg muffins I have tasted.

The next comp is 12th June, so let's see you down at the Aero Club, if not to fly then for the barbie.

Cheers,
Errol

Mothers Day Competition-Thanks to all who turned out !

The Ice Machine in your Aircraft.

For many years, as winter approaches, I used to pull out this article, cross a few “tees”, dot a few “i”s and send it to the Editor. As our Department in their infinite wisdom published an article on carburettor icing (with a beaut chart) in the well known “Prang Digest”, I thought of getting it out of the archives once again and revamping it to the taste of the day. Here it is:

Winter flying can be great fun but there is a danger around the corner, it is carburettor icing. Indeed there is a very efficient ice making machine in our aircraft. It is the carburettor.

What is the role of the carburettor? Its role is to vaporise liquid fuel (Avgas) into a gas and to mix it with air in the proper ratio so it can burn in the cylinders and produce power. That is the ‘mixture’.

.

Vaporising a liquid into a gas creates ‘cold’…I can see from here the purists (ex PMG engineers…) saying ‘one does not create ‘cold’ but one removes ‘heat’….OK. So heat is removed from the fuel and from the carburettor around it. The classic water bag works on this principle. Water oozing through the fabric of the bag is evaporated, cooling the bag and its content.

There is another source of ‘cold’; it is due to the partial ‘vacuum’ created in the induction stroke by the pistons moving away from the cylinder head and drawing the mixture into the cylinders. More ‘vacuum’ is created at idle power settings when the carburettor butterfly is partly closed. We all know that compression creates heat and in reverse, depression creates ‘cold’ or removes heat. That is the principle of ‘compressor air conditioning units’ and fridges. Therefore at very low power settings with the engine idling (like on down wind or on descent) more heat is removed from the carburettor and its surroundings and greater are the chances of icing.

These two actions (evaporation and partial vacuum) could drop the temperature in an average carburettor by about 15°C. So, if the outside temperature is at or below 15°C, the temperature within the carburettor could be zero or below zero. Meaning icing conditions.

For ice to form we need water in the air. There is ALWAYS some water in the air in the form of invisible water vapour. There is more water on some wet, moist, foggy days than in the middle of the summer but there is always some water.

What happens when ice is formed in the throat of the carburettor? Ice would coat the sides of the venturi and the butterfly, literally 'choking' the engine. The engine will run rough due to an improper mixture, loose power and ultimately, if no action is taken, will stop.
What to do it that happens? To alleviate this 'cooling', aircraft engines are fitted with a device to warm the air before it reaches the carburettor. It is called 'carburettor heat'. Air is no longer drawn directly from the atmosphere but through a muff wrapped around the exhaust pipe. By moving a vane, this warm air is fed to the carburettor, thus preventing icing. So, if any signs of icing are recognised (rough running, loss of power), the cure is to apply carburettor heat immediately. Heat should be applied in FULL and left on FULL. Partial heat would melt some of the ice to be reformed further down the track. Unless one's engine is fitted with a carburettor temperature gauge, heat should always be applied on FULL and left on FULL. Partial heat may in some cases be worst than no heat at all.
As the ice melts, the engine may first run rougher as it is ingesting ice and water, but then the revs should increase and the engine run smoothly again.

Is it dangerous to leave the carburettor on full heat at all time? No, it is not, the engine will only think it is in the Kimberley on a hot summer day…And that is much better than the chances of icing

But that is the cure. Prevention is always better than cure. Why wait to have a carburettor full of ice and an engine ready to quit to do something, which may come too late?
Prevention is to apply full carburettor heat before ice has a chance to form in the carburettor.

Imagine the scenario: a wet and cold winter morning with a wet runway, low clouds, fog in the valley, dew on the ground. A perfect day for carburettor icing…
You have decided you "must" fly. You can feel the humidity in the air. No need for any instruments for that. As you run the engine (idle) there is a good chance of getting icing on the ground.

Your instructor probably told you that the air through the heating muff around the exhaust is not filtered; therefore you must not use the carburettor heat on the ground for fear of ingesting abrasive dust in the engine. Well, he is right, but today with the ground still wet of last night rain and with this morning dew, there is no chance of ingesting any dust. So, carburettor FULL ON. Ground run. Check if the carburettor heat works: Carburettor heat on: decreased revs Carburettor heat off: increased revs... It is working! Ready for takeoff. We need full power. We know that with carburettor heat, the engine does not produces full power (warm air is thinner), so, carburettor heat off for the take off. Also there are less chances of icing with the butterfly fully open. Top of climb and power reduced to cruise setting: carburettor heat ON. It should stay on now until the aircraft is back on short final at our destination. There, just in case we need full power for a go-around, it should be briefly turn off.

We all have been taught in our early days of training to turn the carburettor heat on the downwind leg: (butterfly closed, engine idling) and to turn it off on short final for a possible go-around. That is in the mind of all pilots and most of us still do it religiously even on a hot day. But unfortunately some of us simply forget that carburettor heat is also to be use in cruise, not just on the downwind leg and on descent.

Simple: in any doubt apply FULL heat and leave it ON.

The Department in their infinite wisdom did publish a chart showing the risks of icing given temperature and degree of humidity. Great. It should be consulted prior to departure if one has the parameters to enter in the graph (dew point and ambient temperature). If not, just go back to basics: full heat ON and leave it ON.

In their article in the “Prank Digest”, the authors say the cooling in the carburettor could reach 35°C. I think that may be too much, but as we all know, the Department in never wrong, so that must be right! And also it is always better to err on the safe side...

Cheers, Happy winter flying, straight please, no ice, shaken, not stirred.

Courtesy of Claude Meunier

NAC Annual Awards Night, Saturday July 16th

Bar open at 7 p.m. for pre-dinner drinks. Dinner starts at 7:30-three courses.

RSVP to (no phone in reservations please)

Email to northamaeroclub@westnet.com.au

By July 08

ANNUAL GENERAL MEETING

Notice is hereby given to the members that the

Annual General Meeting

of the

NORTHAM AERO CLUB

will be held on

Friday 29th July 2011

at the NAC Club Rooms

at **7.00pm**

AGENDA ITEMS

- **Election of Office Bearers**

[Please bring a small plate of food for fellowship at the conclusion of the meeting]

Nomination Form

Nomination is hereby made for the position of:
∗President ∗Vice President ∗Secretary ∗Treasurer
∗3 x Committee Persons (2 years)

Nominee: _____

Signature: _____

Position: _____

Proposer: _____

Seconder: _____

•**To be in the hands of the Hon. Secretary by** Friday 08/07/2011
[PO Box 247 Northam WA 6401]

Nomination Form

Nomination is hereby made for the position of:
∗President ∗Vice President ∗Secretary ∗Treasurer
∗3 x Committee Persons (2 years)

Nominee: _____

Signature: _____

Position: _____

Proposer: _____

Seconder: _____

•**To be in the hands of the Hon. Secretary by** Friday 08/07/2011
[PO Box 247 Northam WA 6401]

Errols Club Calendar 2011

	April	May	June	July
1		BAR-MATT		
2	BAR-ERROL			BAR-ASHLEY
3	BAR-ERROL			BAR-ASHLEY
4			BAR-LES	
5			BAR-LES	
6				
7				
8		BAR-ASHLEY		
9	BAR-RYAN	BAR-ASHLEY CLUB COMP 9AM		BAR-ERROL
10	BAR-RYAN NAC OPEN DAY	NAC.MEETING 7PM		BAR-ERROL CLUB COMP 9AM
11	NAC.MEETING 7PM		BAR-STEVE	NAC.MEETING 7PM
12			BAR-STEVE CLUB COMP 9AM	
13			NAC.MEETING 7PM	
14				
15		BAR-ERROL		
16	BAR-LES	BAR-ERROL		BAR-RYAN Presentation Dinner
17	BAR-LES			BAR-RYAN
18			BAR-ASHLEY	
19			BAR-ASHLEY	
20				
21				
22		BAR-RYAN		
23	BAR-STEVE	BAR-RYAN		BAR-LES
24	BAR-STEVE			BAR-LES
25			BAR-ERROL	
26			BAR-ERROL	
27				
28				
29		BAR-LES		AGM
30	BAR-MATT	BAR-LES		BAR-MATT
31				BAR-MATT

N.A.C.

Bar roster 2011

Opening Hours

Saturday 5pm - 7pm

Sunday 5pm - 7 pm

FEBRUARY		
5th-6th	-	Steve
12th-13th	-	Ashley
19th-20th	-	Crofty
26th-27th	-	Ryan

MARCH		
5th-6th	-	Les
12th-13th	-	Matt
19th-30th	-	Steve
26th-27th	-	Ashley

APRIL		
2nd - 3rd	-	Crofty
9th - 10th	-	Ryan
16th - 17th	-	Les
23rd - 24th	-	Steve
30th		Matt

MAY		
1st	-	Matt
7th-8th	-	Ashley
14th-15th	-	Crofty
21st-22nd	-	Ryan
28th-29th		Matt

JUNE		
4th - 5th	-	Les
11th - 12th	-	Steve
18th - 19th	-	Ashley
25th - 26th	-	Crofty

JULY		
2nd-3rd	-	Ashley
9th-10th	-	Crofty
16th-17th	-	Ryan
23rd-24th	-	Les
30th-31st		Matt

NEXT CLUB COMPETITION

12 th June at 9am

NEXT CLUB MEETING

13 th June at 7pm

BAR ROSTER

Opening hours
Saturday 5pm – 7pm
Sunday 5pm – 7pm

June		
4th-5th	-	Les
11th-12th	-	Steve
18th-19th	-	Ashley
25st-26nd	-	Crofty

Well! Sometimes one just has to do it!!!

Please make arrangements to swap with someone if you are not available on your rostered day(s)

FOR MORE INFORMATION
THE AERO CLUB CONTACTS ARE;

08 9622 3248
0429 202 597

PO BOX 247
NORTHAM WA 6401

OFFICIAL ORGAN OF THE NORTHAM AERO CLUB (Inc.)
PO Box 247 NORTHAM WESTERN AUSTRALIA 6401

SURFACE MAIL
POSTAGE PAID
AUSTRALIA

' FLYABOUT '

PRINT POST APPROVED PPN: 639955/00013