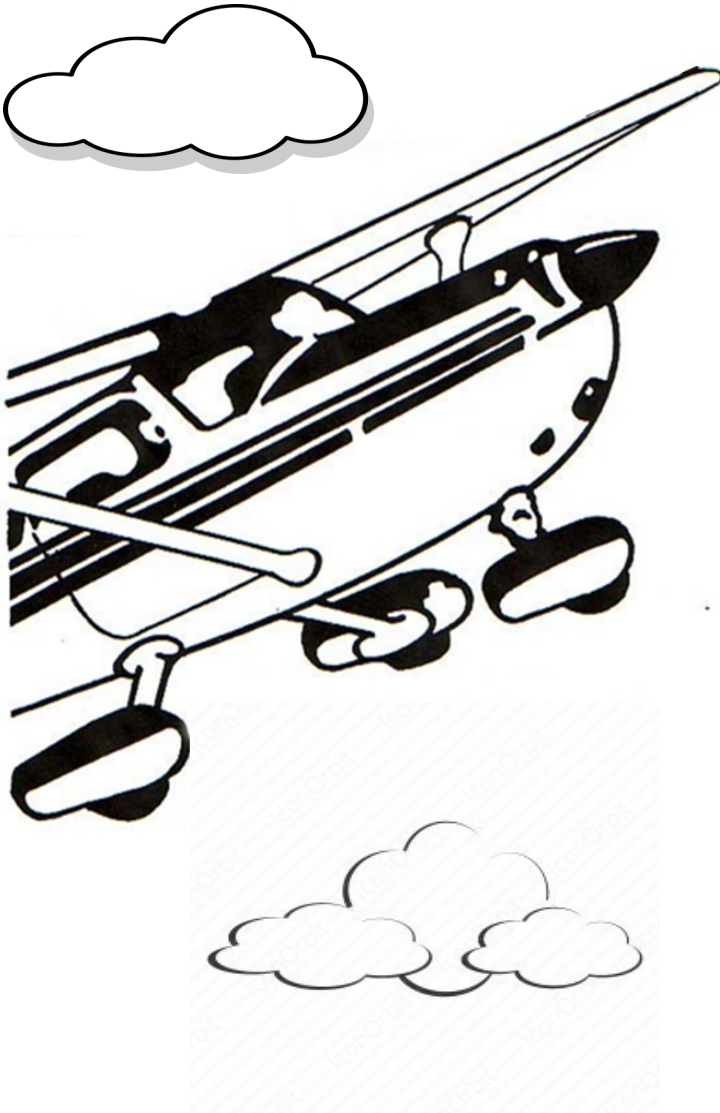


# Fly About

Northam Aero club (Inc.) Newsletter

Vol. 51 Issue No.5 MAY 2020



## In This Issue

- ◆ A Message from the President
- ◆ Club Captain's Report
- ◆ A lesson from the CFI
- ◆ Club Calendar
- ◆ Classifieds

# Presidents Message

Hi all again,

Things have been very quiet around the Club as you would expect with the virus. It is excellent to see Western Australia has had a very good run of days with no new outbreaks.

Matt Bignell has advised that we cannot open the bar until we undertake a hygiene course online and we will keep you updated on the re opening.

As you may have noticed Nomination Forms have been included in this month's edition for upcoming Committee positions. Peter Hill intends to hold the monthly flying competition again on 14<sup>th</sup> of June and we will be once again holding our Committee Meeting at 13:00 hours as per usual.

We are looking at renovations to the club rooms so will keep you updated on those changes.

Instructors Kevin and Murray are both open for any flying training so lets take to the air while we have perfect flying weather. Although having said that, they are forecasting strong winds and rain this Monday, 25<sup>th</sup> May. A much welcomed rain if it eventuates for the farmers.

Once again anyone who would like a fly-in just let me know by email or text.

Rod Garnaut from the RACWA has just text me to let me know they are holding a social fun fly-in on the 31<sup>st</sup> May 2020 at Murrayfield, weather permitting and I will do a ring around.

Cheers, Errol

## Bar Roster

### **Bar Hours - Closed until further notice**

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

# Club Captains Report



## NAC FLYING COMP WINNERS 2019/2020

|                                                                                                                                                                                                                 |                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>JULY 2019</b></p> <p>First Ian Berry</p> <p>Second Peter Hill</p> <p>Third Nick Kostov</p> <p>Equal Fourth Russell Steicke<br/>James Hill</p>                                                             | <p><b>AUGUST 2019</b></p> <p>First Peter Hill</p> <p>Second James Hill</p> <p>Third Ashley Smith</p> <p>Fourth Trevor Sangston</p> <p>Equal Fifth Ian Berry<br/>Nick Kostov</p> <p>Sixth Russell Steicke</p>                   |
| <p><b>SEPTEMBER 2019</b></p> <p>First Howie Pietersie</p> <p>Equal Second Ashley Smith<br/>Nick Kostov</p> <p>Third Peter Hill</p> <p>Fourth James Hill</p> <p>Fifth Ian Berry</p> <p>Sixth Russell Steicke</p> | <p><b>OCTOBER 2019</b></p> <p>First Adam Price</p> <p>Second Ashley Smith</p> <p>Equal Third James Hill<br/>Peter Hill</p> <p>Fourth Nick Kostov</p> <p>Eq.Fifth Howie Pietersie<br/>Neil Whitmarsh</p> <p>Sixth Ian Berry</p> |
| <p><b>NOVEMBER 2019</b></p> <p>First Adam Price</p> <p>Second Ashley Smith</p> <p>Equal Third Nick Olszewski<br/>Peter Hill</p> <p>Fourth Ian Berry</p> <p>Fifth James Hill</p>                                 | <p><b>DECEMBER 2019</b></p> <p>First Peter Hill</p> <p>Second Howie Pietersie</p> <p>Third Ashley Smith</p> <p>Fourth James Hill</p> <p>Fifth Dave McFarlane</p> <p>Sixth Ian Berry</p>                                        |

# Club Captains Report



## NAC FLYING COMP WINNERS 2019 / 2020

|                    |                                   |                     |                                             |
|--------------------|-----------------------------------|---------------------|---------------------------------------------|
| FEBRUARY 2020      |                                   | MARCH 2020          |                                             |
| First              | Peter Hill                        | Equal First         | Ashley Smith<br>Peter Hill<br>Phillip Smith |
| Second             | Ashley Smith                      | Second              | Trevor Sangston                             |
| Third              | Jesse Stewart                     | Third               | James Hill                                  |
| Fourth             | James Hill                        | Eq Fourth           | Nick Kostov<br>Howie Pietersie              |
| Equal Fifth        | Russell Steicke<br>Nick Olszewski |                     | Ian Berry                                   |
| Sixth              | Ian Berry                         |                     |                                             |
| APRIL 2020         |                                   | MAY 2020            |                                             |
| POSTPONED DUE CV19 |                                   | POSTPONED DUE CV 19 |                                             |

NEXT NAC FLYING COMP

JUNE 2020 Sunday 14th "CIRCUITS x 2"



# **ANNUAL GENERAL MEETING**

**Notice is hereby given to the Members**

**Annual General Meeting**

**NORTHAM AERO CLUB**

**Friday 24th July 2020**

**NAC Club Rooms**

**7.30pm**

## **AGENDA ITEMS**

- Election of Office Bearer**
- Notice of Motion**

(Please bring a small plate of food for fellowship at the conclusion of the meeting)

The names of the candidates proposed as Officers of the Club with the names of their proposers and seconders shall be in the hands of the Secretary 21 days before the date of the Annual Meeting (3rd July 2020). The names shall be posted in the Club for 14 days before the Annual General Meeting.

## **Nomination Form**

Nomination is hereby made for the position of:

\*President \*Vice President \*Secretary \*Treasurer

\*3 x Committee Persons (2 year)

\*1 x Committee Person (1 year)

Nominee: \_\_\_\_\_

Signature: \_\_\_\_\_

Position: \_\_\_\_\_

Proposer: \_\_\_\_\_

Secunder: \_\_\_\_\_

**\*To be in the hands of the Secretary by Friday 3rd July 2020**

(PO Box 247 Northam WA 6401)

# Old-Fashioned Nav Theory—Kevin Lathbury

## Maps



Did your PPL theory include descriptions of different chart projections and their properties? The answer is probably either no, or yes but I've forgotten most of it! And since you've read this far in Flyabout, you can read another couple of pages if you're interested.

## Lines

Firstly, a bit about the important lines. A great circle is any circle you get if you cut the earth in half. The equator is a great circle, and any meridian of longitude is half of a great circle. The most useful thing about them is the shortest distance between two points is along a great circle. Radio waves travel that way, and long-distance flights go pretty close, flying a series of secants (go on, look it up!) to the great circle. Every turn on a great circle route is towards the equator. If you're using GPS or ground-based radio aids, you're flying great circle tracks.

A rhumb line is useful too, because it cuts all the meridians at the same angle, which means it's a constant track. That's easy for navigation, and it works fine for flying from Northam to Leeuwin Estate for lunch, but a rhumb line track from Johannesburg to Sydney is about 500 nm longer than the great circle route. All parallels of latitude cut the meridians at  $90^\circ$ , so they are rhumb lines.

The rhumb line between any two points is closer to the equator than the great circle track.

## Projections

The age-old problem of map-making will never change. You can't project a section of a sphere (the earth) onto a flat surface without some distortion. The cartographer's challenge is to make a map that minimises the distortions but is still useful for navigation. The basic idea is to project the earth's surface onto a 3-D shape that can be cut and flattened into a 2-D shape. Two such shapes are a cylinder and a cone.

# Old-Fashioned Nav Theory—Kevin Lathbury



## Mercator projections

The best-known cylindrical projection is the Mercator. This one's made by putting an imaginary light bulb inside the imaginary earth and projecting the earth's surface onto the cylinder, which you then cut and lay flat. See Figure 1. A Mercator projection has a line of tangency, meaning the line where the cone and cylinder touch. For the basic Mercator map of the world, like the one that was stuck on the wall of your Grade 4 classroom, the tangent line is the equator.

On a Mercator the parallels of latitude are parallel, which is accurate, but the meridians are also parallel and don't converge at the poles, which of course is not a correct representation of the earth's surface. That's why on a Mercator map of the world, Antarctica looks about eight times the size of Australia when it's actually about twice the size.

So the stated scale on a Mercator is accurate at the tangent line, but it's more distorted the further you get from that, which makes it a pretty useless map for showing large areas.

Because the meridians on a Mercator are parallel, a rhumb line track is a straight line, and a great circle track is concave to the equator.

The difference between a rhumb line and a great circle track is very clear over long distances. If you go to <http://gc.kls2.com/> and type in Joburg to Sydney (JNB-SYD) you'll see the route plotted on a Mercator projection, looking like a big loop that goes miles and miles south of both Sydney and Joburg. The way to see that it's the shortest route is to get a globe of the world, put a bit of string between the two cities and pull it tight. That's the great circle route.

So a Mercator is only useful for small areas. But there's no rule that says the tangent line has to be the equator. If you tilt the imaginary cylinder you can put the tangent line anywhere you want. The result is a transverse Mercator projection, such as a VTC or an AvPlan or OzRunways display. Since a VTC only covers a degree or two of latitude, the distortions are minimal. So when you draw a straight line on a VTC, you're drawing a rhumb line, and you can steer whatever heading you work out for that track. It's not a great circle, so it's not the shortest distance, but over a short distance the differences are small enough to not matter.

# Old-Fashioned Nav Theory—Kevin Lathbury

## Conic projections

A conic projection is made by projecting the earth onto a cone whose apex is at the pole. A basic conic projection has the cone touching the sphere on one parallel of latitude, which is called the standard parallel. The Lambert Conformal projection is accurate over a bigger area than a VTC because it uses two standard parallels, with the cone being inside the sphere in between the standard parallels. See Figure 2. The WAC and VNC are made from this projection. A Lambert chart will always have the details of the standard parallels. They're normally  $\frac{1}{6}$  of the way from the top and the bottom. For instance, on the Albany WAC they are  $32^\circ$  and  $34^\circ 40'$ .

“Conformal” means the angles are correctly represented. So unlike on a Mercator, on a Lambert Conformal chart the meridians converge to the nearer pole, which is what they do on the real earth. If you look at the Albany WAC and measure the distance between two meridians at the top of the chart, it's about 51 nm. At the bottom it's about 49 nm. And since the angle between a parallel and meridian is  $90^\circ$ , and since that's shown correctly on a conformal chart, the parallels have to curve towards the equator. If you put a ruler along a parallel on a WAC, you see that clearly.

On a Lambert Conformal a great circle track is straight, and a rhumb line (such as a parallel) curves towards the equator. So when you draw a track, you're drawing a great circle, and the track will be different at each end because the meridians are not parallel.

Thankfully, as mentioned above, over a short distance a great circle and a rhumb line track are so close together that the difference in angles and distance is negligible.

But even if you don't remember and can't really be bothered with conic projections and rhumb lines and great circles, at least make sure your maps are up to date!

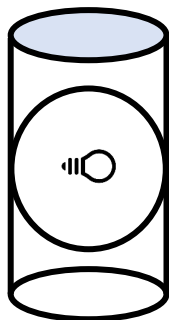


Figure 1

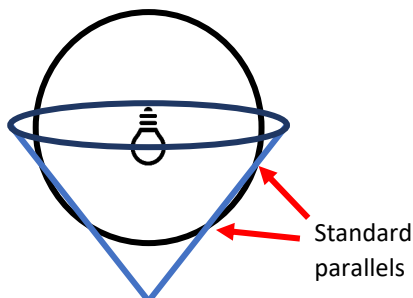


Figure 2

# FOR SALE

## WASP Aircraft and Hangar

Aircraft was first registered in 2009, built by Mark Thornton. Aircraft has a TTIS of 33 hours and is powered by a Rotax engine.

Hangar was also built by Mark and is at Beverley Airport. For more information please call: Maree Thornton on 0429 646 155



## Next Club Competition

NEXT NAC FLYING COMP is scheduled for Sunday 10th MAY 2020.

Due to the restrictions in place as a result of the Corona Virus Pandemic, please check with Club Captain Peter Hill to confirm.

Peter Hill, Club Captain NAC 0450415947 [prh@aurora.net.au](mailto:prh@aurora.net.au)



## How we're helping you – exemptions being put in place

The actions of various levels of government to stop the spread of COVID-19 are evolving rapidly and I am conscious that you will have many challenges in front of you as you adapt to this changing environment. In recognition of these difficulties, we are putting in place various general exemptions for a number of CASA authorisations or permissions, which are designed to proportionally manage safety risks while providing relief as follows:

- If you have an Air Operator's Certificate (AOC) or a Part 141/142 Certificate, it will be extended through an administrative process by six months. You do not need to do anything.
- If you are a pilot or an air traffic controller, you will be able to exercise the privileges of your licence for six months after the expiration of any medical certificate you hold. The conditions on your medical certificate will continue to apply. You do not need to do anything.
- If your current flight review or proficiency check expires after 1 March 2020, you will be able to continue to use all the privileges of your licence for a further three months from when it expires. You will need to apply to extend these arrangements beyond the 3 months.
- Operators will have relief from Part 61 proficiency checking and flight review as well as training and checking requirements up to 30 June 2020. Further relief options are being developed.

In addition to the exemptions listed above, we'll be putting some general exemptions in place to cover dangerous goods, drug and alcohol management procedures and emergency procedures. Further measures for other sectors such as maintenance organisations and remotely piloted aircraft operations are currently being considered. Our decisions are designed to make it as easy as possible for you to continue current operational activities while ensuring aviation safety is maintained and operational risks are managed.

If you have specific questions, please email [regservices@casa.gov.au](mailto:regservices@casa.gov.au) (if you are enquiring on behalf of an organisation) or [applications@casa.gov.au](mailto:applications@casa.gov.au) (if you are enquiring on behalf of yourself).

Regards  
Shane Carmody  
Chief Executive Officer and Director of Aviation Safety



## Aerodrome sample manual and guide now available

We've just released our sample aerodrome manual which aligns with the new Part 139 ruleset that comes into effect on 13 August this year.

The sample manual and guide, which are now available on our website, will assist you to revamp your aerodrome manual or create a new one from scratch in order to ensure compliance with the new rules.

In addition to a Word version on [our website](#) you will be able to develop and manage your aerodrome manual in CASA's free online Manual Authoring and Assessment tool (MAAT). Visit the [MAAT website](#) to learn more about its features and [register](#) to start using MAAT.

To view the manual, head to the [aerodrome manual template page](#) of our website.

Did you miss some of our other Part 139 updates?

### Aerodromes given more time to transition

In an effort to ease the burden on industry during the COVID-19 pandemic, CASA will provide an additional three months for aerodromes to transition to some of the new Part 139 rules. [Find out more about the new transition dates.](#)

### First training package now available

The first of four training packages to help you to transition to the new rules is now available.

You can complete the training online through [AviationWorx](#) and don't forget, you can view the change summary anytime on our [reviewing the rules for aerodromes \(Part 139\) webpage](#).

To learn more about the training, [visit our website](#).

### Making it easier to take advantage of new rules

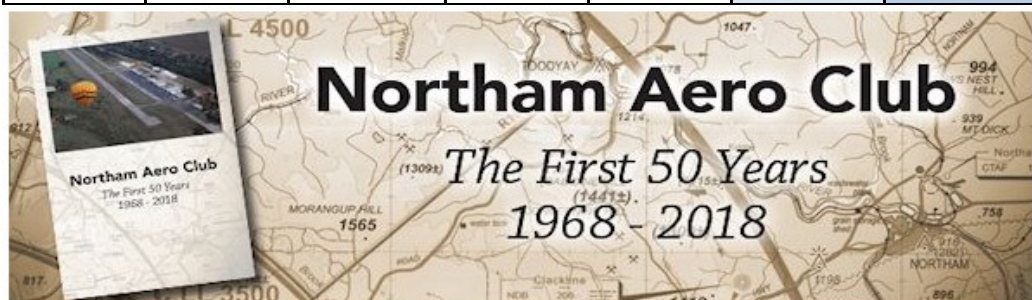
To make it easier for aerodrome operators to take advantage of the new rules, we are now giving you the option to apply some of the rules ahead of their originally scheduled commencement. Head to our website to [find out more about the two provisions](#).

# April/May 2020



**NORTHAM AERO CLUB**

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday    | Sunday |
|--------|---------|-----------|----------|--------|-------------|--------|
| 20     | 21      | 22        | 23       | 24     | 25          | 26     |
| 27     | 28      | 29        | 30       | 1      | 2           | 3      |
| 4      | 5       | 6         | 7        | 8      | 9<br>TRIVIA | 10     |
| 11     | 12      | 13        | 14       | 15     | 16          | 17     |
| 18     | 19      | 20        | 21       | 22     | 23          | 24     |
| 25     | 26      | 27        | 28       | 29     | 30          | 31     |



*\$25.00 available from Northam Aero Club*

## Wanted

### Aviation Memorabilia

- Books
- Artifacts
- Photographs
- Old Aircraft Parts
- Signs

## NAC Club Aircraft Bookings



Enquiries—Matt Bignell

0428 962 001

# Northam Aero Club Membership & Apparel Order Form

Name: \_\_\_\_\_

☐ Not Renewing

Address: \_\_\_\_\_

Phone: (Home) \_\_\_\_\_ (Mobile) \_\_\_\_\_ (email ) \_\_\_\_\_

Type of Membership: ☐ Adult (\$55)

☐ Junior (\$10)

Club Bank Details: BSB 036-107 A/c Number:69-2937

Apparel: ☐ Club Polo Shirt (\$35) – Size \_\_\_\_\_ Name on Shirt: \_\_\_\_\_

100% breathable polyester jersey knit, snag resistant. Knit collar with contrast tipping.

Mens sizes S M L XL 2XL 3XL or 5XL . (185 GSM standard 3 button)

Womens sizes 8 10 12 14 16 18 20 22 or 24 (Ladies 215 GSM with open V with 2 press studs)

☐ Club Cap (\$20) plus \$8 postage. (\* Caps are also available from the bar)

Total Enclosed \$ \_\_\_\_\_

If you would like to receive an Invoice please tick ☐

‘Fly About’ Magazine: Yes ☐ I would like to receive it by ☐ email (preferred) ☐ post

No ☐ I do not wish to receive it

Many thanks,

Northam Aero Club Committee

Northam Aero Club Cap \$20

Northam Aero Club Polo Shirt \$35 (Personalised)



# Classifieds

## 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



## LEARN TO FLY **Recreational Aviation** **Capital of the West**



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Pty Ltd**

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Western Australia 6164  
Ph: +61 8 9332 7655  
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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](http://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"***

## **Hangar for Sale**

15m x 15m located on a front row and

Corner of taxiway—Block No. 33.

Power and water on corner of block.

Note—the hangar only uses the front half of the block, therefore another hangar can be built on the back of the block.

**Please call—0438 101 334**

# NAC Cessna 172—VH-PGL

## Hire Fee Structure

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*Private Hire - \$220 per hour*

*Dual Training - \$330 per hour*

*TIF's - \$165 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](mailto:nactreasurer@bigpond.com) T: 0428 743 031

Matt Bignell - 0428 962 001





## President

Errol Croft

E: [dowref@bigpond.net.au](mailto:dowref@bigpond.net.au)

T: 0428 880 149

## Vice President

Les Ballantyne

E: [ballantyneles@yahoo.com.au](mailto:ballantyneles@yahoo.com.au)

T: 0419 983 176.

## Secretary

Lionel Moore

E: [rrocket181@hotmail.com](mailto:rrocket181@hotmail.com)

T: 0427 620 003

## Treasurer

Dave McFarlane

E: [nactreasurer@bigpond.com](mailto:nactreasurer@bigpond.com)

T: 0428 743 031

## Club Captain

Peter Hill

E: [prh@aurora.net.au](mailto:prh@aurora.net.au)

T: 0450 415 947

## House & Grounds

Ashley Smith

E: [ashleypsmith@westnet.com.au](mailto:ashleypsmith@westnet.com.au)

T: 0429 083 152

## Aircraft

Dave Beech

E: [dbeech@iinet.net.au](mailto:dbeech@iinet.net.au)

T: 0438 016 903

## Flight Training

Kevin Lathbury

E: [Kevinlouise62@gmail.com](mailto:Kevinlouise62@gmail.com)

T: 0434 000 217

## Flight Training

Murray Bow

E: [bowie1@iinet.net.au](mailto:bowie1@iinet.net.au)

T: 0424 160 750

## Aircraft Bookings

Matt Bignell

E: [big.matty@hotmail.com](mailto:big.matty@hotmail.com)

T: 0407 873 700

## Fly About Editor

Martin (MJ) Jacobson

E: [auswideaviation@bigpond.com](mailto:auswideaviation@bigpond.com)

T: 0408 439 160

## Membership Officer

Heather Deegan

E: [heatther1957@gmail.com](mailto:heatther1957@gmail.com)

T: 0248 738 808

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

**WESTERN AUSTRALIA 6401**

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