



The LAME shortage

The RAAA's report, 'The 'Aircraft maintenance engineer shortage – crisis and opportunities' has been getting a lot of coverage since its release in October, so you will probably have seen mention of it. A key issue for RAAA members, especially in rural and regional areas, the LAME shortage is critical. As member, Matthew Wheatley of Sigma Aerospace based in Tamworth, says, 'There is a shortage of licensed aircraft maintenance engineers (LAME) in Australian aviation, a shortage now at crisis point. If we do not address this immediately, the continuing airworthiness of the Australian aircraft fleet will be significantly compromised, and more aviation maintenance organisations will be forced to close their hangar doors, threatening the future viability of the Australian aviation industry and the critical transport infrastructure it provides.'

However, what makes this report different, because the LAME shortage is not news—it's something which has been raised for many years, in numerous reports—is the fact that that it offers federal and state decision makers some concrete, pragmatic and achievable ways to do something about it. And that's largely because the author of the report is Sheridan Austin, an AME of many years' standing, with 25 years of aviation experience, much of it in aviation engineering regulation, quality and safety standards, in rural and regional areas.

Sheridan began her engineering career with National Jet Systems in Darwin, where she was an AME and hands-on aircraft maintenance planner before moving into maintenance control.

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The LAME shortage

RAAA News looks at the new 'LAME shortages – crisis and opportunities' report the RAAA has produced.

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What's happening in the climate science world, and where the aviation industry stands.

MH370 update

RAAA News talks to Peter Foley, former head of the ATSB's MH370 search team.

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CJ Aerospace, GA spare parts specialists

From the chairman



Malcolm Sharp
RAAA Chairman
CEO, Sharp Airlines

In the last *RAAA News*, I talked about some of the ways we are working on behalf of members, so in this Spring edition I would like to give you an update.

The feature article this issue looks at the work we are doing to alleviate the critical shortage of LAMEs, particularly in rural and regional areas.

On the pilot front, as I discussed last issue, there have been a number of pilots at member organisations who have challenged the terms of their bonds.

We have been working with those members affected and negotiating with the Australia Federation of Air Pilots (AFAP) to come to an agreement on how 'actual costs' in the bonds should be ratified. The costs for the operator are broad, but we believe we are fairly close to getting an outcome. We hope to have a resolution to this matter late this year, or early in 2023.

If any operators have pilots who are contesting their bonds, please contact the Association, either Steve or myself— I believe we are close to settling this precedent.

In the Winter edition of *RAAA News*, I also talked about the work we were doing in conjunction with the Flight Safety Foundation and the resources industry to establish a new program for peer support in regional aviation.

We are still working with the Foundation to finalise the program, but with the upcoming board elections, the matter has been held over, as it is really a decision for the new board. I am a big supporter of this program; for regional aviation there is nothing like it available, and if I am re-elected, I would like to see seek board approval to support the CAPS program (contracted aviation peer support) in the New Year as an add-on at no cost to members. Essentially this would mean that the 2,000 or so employees in regional aviation would have access to wellbeing support in a scheme similar to the successful one operating in the Qantas network.

In the meantime, I hope to see you in Perth,

Stay safe, Mal

2022 Aviation events

RAAA Events

Annual General Meeting

Online event

17 November

Roadshows

23–24 November

Perth

www.raaa.com.au

2023 Aviation events

Avalon International Airshow and
Aerospace & Defence Exposition

28 February-5 March 2023

[Avalon Airshow](#)

From the CEO



Steve Campbell
RAAA CEO

We have a great line-up of speakers for the final roadshow for 2022 in Perth on 23–24 November. Following the well-received Cairns roadshow, we're geared up for Perth to focus on a range of local issues. Perth Airport will give an update on what's happening with some of their major projects, including their new runway, while a CASA aviation safety advisor will brief the audience on changes to the airspace in the Perth area, as well as integrating drones into the airspace.

Peter Foley will give a presentation on the search for MH370. (See the article in this edition of *RAAA News*.) Peter was the program director of the operational search for MH370 and gave a very well-received presentation at the 2021 Dubbo roadshow. Having worked closely with Peter when I was in the Minister's office, and seeing his frustration with media conspiracy theories, it is refreshing to hear the facts, so I'm sure members will enjoy hearing from Peter.

I am pleased to report too that the WA Minister for



Photo | Perth Airport terminals. Image Perth Airport.

Transport, Planning and Ports, the Hon. Rita Saffioti, MLA, will be speaking at the roadshow, giving members the government's perspective on local transport issues, and providing an opportunity for members to give her their perspective.

The roadshow will be rounded off by presentations from Aerodrome Management Services (AMS) on security and lighting changes happening at rural aerodromes; one from CASA on Pilbara airspace changes; and we will finish day 2 with an update from Sheridan Austin about the LAME report (see feature article in this issue). I am very pleased with the report—our aim was to focus on a handful of key problems, and provide the government with solutions, and I am looking forward to meeting with CASA soon to discuss the report.

And to close: don't forget the AGM on 17 November. It will be an online meeting, with voting via Survey Monkey, so we are looking forward to welcoming as many members as possible. Hope to see you in person in Perth,

Steve



Photo | Hon. Rita Saffioti and the opening of the new Perth Airport line in Oct 2022. Image: www.6pr.com.au



LAME shortages report ... cont.

She was offered a job in engineering quality and safety, and realised she says, 'that I was very much wired for that'. She developed a niche understanding of the field and collaborated with companies on audits and their QMS and safety systems. Working with Aviair in Broome for four years as head of quality and safety consolidated this experience.

Her passion for aircraft engineering compliance and recognising that many aircraft maintenance organisations needed help to understand and comply with aviation regulations, led her to found Aviation QMS – Quality & Management Services in 2009 to support them. This became especially critical when in 2011, as she says, 'the world changed with the transition from the CARs (Civil Aviation Regulations) to the CASRs (Civil Aviation Safety Regulation), from CAR 30 to Part 145'.

Her unique understanding of some of the unintended consequences and anomalies which arose as part of the new Part 145 and LAME accreditation process have helped shape the



Photo | Sheridan Austin. Image supplied.

report, along with interviews with engineering organisations around Australia. The report proposes seven short- and long-term actions to deal with the crisis.

In summary, these are:

1. Recognition of international LAME licences
2. Education to support current and future LAMEs
3. Create a pathway for other experienced engineers
4. Remove challenges associated with Diploma in Aeroskills examinations
5. Permit issuing of an aircraft engineer licence with exclusions
6. Government incentives to employ aviation apprentices
7. Align theory training delivery nationally & create a National Aviation Academy.

[Read the full report on the RAAA's website.](#)

The report has been widely distributed. RAAA chief executive, Steve Campbell and Sheridan Austin have been promoting these issues with aviation media; the Federal Minister, the Hon. Catherine King; CASA; and training organisations. *Australian Aviation's* Adam Thorn interviewed Campbell and Austin in a podcast titled '[How to fix our engineering talent shortage](#)' on 20 October, which is well worth a listen.

Net zero by 2050

It's a much-quoted goal, but one that for aviation, Dr Emma Whittlesea says, will require a concerted and holistic approach to achieve.

Whittlesea is the acting executive director of Griffith University's Climate Ready Initiative and gave a presentation on the implications of net zero by 2050 at the RAAA Roadshow in Darwin in the middle of the year.



Photo | Ecopulse hybrid electric demonstrator. Image Airbus

'A 1.5-degree Celsius temperature rise above pre-industrial levels constitutes a "critical level" beyond which the impacts of climate change accelerate strongly'

she told the audience. Globally, 3-3.6 billion people, or about half the world's population, live in areas 'highly vulnerable' to climate change. Since 2019, Australia has experienced the impact of the climate crisis first-hand, with drought and severe fire storms decimating large areas of the nation, and more recently, in consecutive years, unprecedented heavy rainfall and severe flooding damaging cities, towns and farming communities down the east coast.

The critical decade for action is now—global emissions must be halved by 2030, and Australia must play its part. In 2019, for example, Whittlesea said, 'Australia had the highest per capita aviation emissions of all the G20 member nations (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the European Union).'

Net zero by 2050 ... cont.

What is net zero?

Net zero means striking a balance between what we emit and what we remove. Industry can still 'emit', but it must compensate for, or extract (sequester) the emissions it produces.

Achieving net zero is not simply a matter of reducing carbon (dioxide) emissions, but considering all emissions, because, Whittlesea said, 'non-carbon dioxide emissions such as contrails, nitrogen oxide, soot, water vapour and particles of black carbon, account for two-thirds of aviation's total climate impact'.

The approach must be holistic, looking at the entire aviation ecosystem, from overall aircraft design to propulsion methods/power trains, air traffic management and operational efficiencies: at the airport and during flight. 'The whole way of doing business must change,' she told the Darwin audience.

William Walsh, director general of the International Air Transport Association, reinforced this pressing need for cooperation and coordination, saying the required

'... industry transformation is a multi-stakeholder effort. Airlines are unable to change if engine producers continue to build the same carbon-fuel consuming planes. This problem requires the whole ecosystem to change.'



Photo | e-VTOL over Tokyo. Image Rolls Royce

Sustainable aviation fuels (SAF) have a part to play, and there is work underway to progress this in Australia through the SAF Alliance ANZ as has been outlined in presentations from RAAA supplier members at previous roadshows. SAF is not the only decarbonisation solution however, and we also need to support maturation of hybrid, electric and green hydrogen technology, Whittlesea said.

Learn more about SAF and emerging hybrid, electric and hydrogen aircraft technologies from Griffith University's 'Aviation Reimagined' webinar series below.

The challenges and opportunities Whittlesea raised in her presentation are covered in much greater detail in 'Aviation Reimagined'. For the past three years, Griffith University has held a webinar series entitled '[Aviation Reimagined](#)', bringing together experts in aviation, tourism, airports, sustainable aviation fuels, environmental and climate change science who share their insights about a transition to a low-carbon future for aviation.

In 2022, the series, which ran from 21 September to 27 October, featured 25 speakers addressing topics such as:

- Webinar 1 [Aviation net zero—policy leadership](#)
- Webinar 2 [Sustainable aviation fuels](#)
- Webinar 3 [Aircraft and airlines of tomorrow](#)
- Webinar 4 [Transforming our airports](#)
- Webinar 5 [Advanced air mobility](#)
- Webinar 6 [Changing times and future perspectives](#).

Watch the replays of these webinars through the links above—they provide a comprehensive background to steps the aviation industry is taking to transition to a low-carbon future.



Photo | Dr Emma Whittlesea.

MH370 update

Peter Foley will be giving an update to the Perth roadshow audience on the efforts to retrieve the missing B-777, Malaysian Airlines flight MH370. Foley, who was the Australian Transport Safety Bureau's (ATSB) program director of the operational search for MH370, first presented on the search for MH370 at the 2021 Dubbo roadshow. He says the Perth talk will be similar to that in Dubbo, although there have been some promising developments from the key company in the search, Ocean Infinity.



Photo | Peter Foley.

'I will take people through from the beginning,' Foley says, in an attempt to restore the balance. 'There was a huge amount of scuttlebutt and speculation at the time: the media reporting of MH370 was universally horrible.'

He points to the unhelpful armchair commentary from a number of self-appointed 'experts', which underplayed the contribution of thousands of people who did the initial and ongoing analysis, and the extremely hostile nature of the area where the search took place. 'I'm a mariner, not an aviation expert', Foley says. 'The Southern Ocean where the search took place is an extremely hostile environment. One of the Fugro ships involved in the search measured a 24-metre heave in the ocean. That's terrifying, and those seas last for weeks on end.'

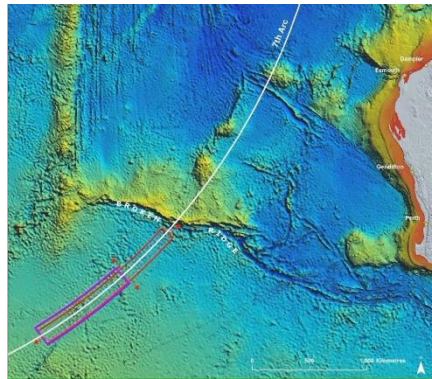


Photo | Search area for the MH370, showing the 7th arc.

There is only a short window from November–April when weather conditions are suitable for a deep-water search.

'It's also a high-risk environment, handling heavy items on deck in those sea conditions—the real heroes are the 200 people doing the search on water.' Adding to the complexity was the fact that all the search areas were at depths of over 3000 metres, and there was very little equipment around at the time suitable for operating at that depth. The only analogous deep-water search was following the crash of Air France flight 447, which while it was at similar depth (3900m),

only involved an area of 14,000 square kilometres compared to MH370's search area of 120,000 square kilometres. However, Foley says, although an extraordinarily large area has already been searched (bearing in mind that Tasmania has an area of 65,000 square kilometres), 'people don't accept that a 777 just goes missing. It won't go away until the aircraft is found.'

Ocean Infinity, the American marine robotics company involved in the original search, is currently in talks with the Malaysian Government to resume the search in 2023–2024. Ocean Infinity, which Foley describes as being at the 'cutting edge of marine operations', have invested in a number of new autonomous underwater vehicles (AUV) and robotic vessels, which can be used in a renewed search.

The original motivation for locating the B-777 is still there, Foley says, 'we just want to find their loved ones for the families', and importantly, to find out what happened in the interests of aviation safety.

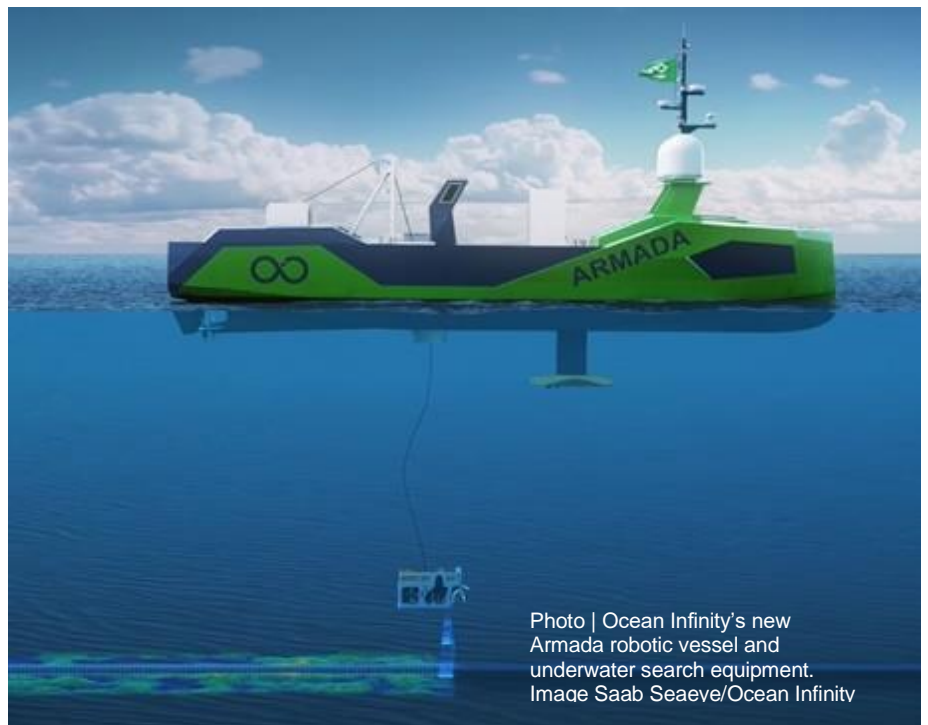


Photo | Ocean Infinity's new Armada robotic vessel and underwater search equipment. Image Saab Seaeye/Ocean Infinity



Photo | Craig Jones and business development manager, Michael Dixon. Image supplied

New member profile

New RAAA member, CJ Aerospace, was founded by Craig Jones, who as both a licensed pilot and engineer, describes himself as a ‘flying spanner’. RAAA News talked to Jones about his aviation career, and the establishing of CJ Aerospace. His career has had its ‘ups and downs’—from gaining his PPL while an apprentice heavy vehicle mechanic with Mercedes Benz, to gaining his aerobatic and formation rating while working for a Bankstown-based company offering fighter jet warbird experiences. At 21, he became what was thought to be the world’s youngest jet warbird pilot, flying the MiG 15.

Thirteen years as an aircraft maintenance engineer followed, maintaining and flying skydiving aircraft, as well as writing maintenance manuals, and finally, in 2004-5, having sat all the basic exams and achieved his schedule of experience, he became a LAME.

At the time, the company he was working for was heavily involved

with Twin Otters. ‘The parts were very hard to get. So, in 2011, I started to source and sell parts. I was only selling about five types, stored on a shelf in my garage.’ The sales went well, so a year later, Jones put on a salesperson, but continued to work to offset the salesman’s wage. The company grew—in size, services and facilities. CJ Aerospace now employs 21 staff,

across two facilities: a large HQ and warehouse at Taren Point in southern Sydney, and a facility in Cairns. They also own three aircraft and an MRO, CJ Aero Engineering, located at Cairns International Airport.

‘I was lucky with timing’ Jones says, ‘but I am also incredibly lucky to have such highly experienced and knowledgeable staff, acquired over time as larger competitors closed.’ Without their expertise, and customer service approach, the business would not have seen the tremendous growth and industry credibility it has over the past seven years, he says.

CJ Aerospace has now transitioned from being a spare parts broker to a fully-fledged distributor for about 35 manufacturers, as well as offering more than 600 different types of rotatable aircraft parts for King Air, Cessna Caravans and Twin Otters. The first three distributorships were the hardest to get, due to gaining the trust of the manufacturers. However, through becoming a member of the Aircraft Distributors and Manufacturers Association, networking and business exposure has become easier, paving the way for CJ Aerospace’s continued growth.



Photo | Craig Jones piloting the YAK 52. Image supplied.

Welcome to new members

We are happy to welcome the following companies and individuals as members of the RAAA and look forward to a long and productive association.

Ordinary members



CJ Aerospace

Craig Jones, CEO

CJ Aerospace are Australia's largest GA spare part experts, providing high-quality spare parts at the best prices.

(See the article in this edition {Spring 2022} of RAAA News)



Photo | The CJ Aerospace team. Image supplied

www.cjaerospace.com.au/



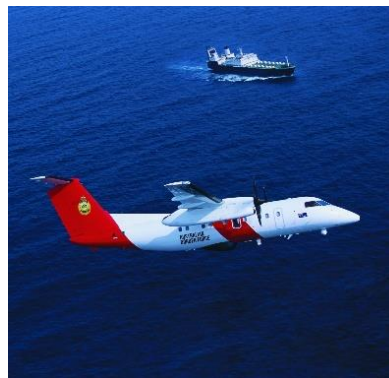
Cobham Special Mission

James Woodham, CEO

Cobham Special Mission conducts aerial border surveillance and search-and-rescue operations spanning the country's exclusive economic zone and SAR region.

Across Australia, they employ more than 300 people with headquarters in Adelaide, South Australia and operating bases in Queensland, Victoria, Western Australia, and the Northern Territory.

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www.cobhamspecialmission.com.au/



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