

Australian

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Mooney

Pilots Association

NEWSLETTER



How strong is a Mooney?

THE PREZ SEZ

THE PREZ SEZ

Welcome to my February 2023 Presidents report.

Merry Christmas and Happy New Year to all. I hope you all had a wonderful break.

There hasn't been much happening around the traps lately. We are presently in the low flying time of the year in NSW as the weather is usually too hot for comfortable flying conditions. This part of Australia is finally drying out and the farmers have been able to get most of their crops harvested. Who knows whether we will remain in La Nina or if El Nino will come and get us again.

I had intentions of attending the Wings over Illawarra Airshow back in November but, on the day, there were 45 kt gusting winds forecast with thunderstorms, heavy rain and hail. I chickened out, only to find the day cleared up to a nice sunny day. Anyway, better to be safe than sorry unfortunately.

Our next available get together will be the Australian International Airshow in Avalon near Melbourne. 2-5 March 2023. AMPA will have a stand there for the 3 public days. Dale O'Meara and myself will put our aircraft on display, so if anyone is in the area and would like to catch up and hang out at our stand, please let me know as I have some free passes. This is a great opportunity to meet fellow Mooney pilots and talk flying.

CASA seem to be giving us their usual headaches with backlogs on everything, especially licence renewals and medical reforms. I was hopeful that Pip Spence might shake things up a bit, but it appears that she has fallen into the trap and is now being influenced by the bureaucrats, like they all seem to do. We can only keep our fingers crossed.

Don't forget to start thinking about our next flyaway to Longreach in central QLD. This will be our AMPA AGM. That will be on 16-20 March 2023. Howard has done an excellent job putting this one together with many exciting activities planned. Registrations are open now.

This will be quickly followed by our Pilots Safety Program in Bathurst on 14-17 April 2023. We almost had a full list last time, so hopefully this changed time

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might pick up some extra participants. These programs are very worthwhile.

The PSP has a ground component as well as a flying component. You can register for one or both. Also, by attending the PSP, you are eligible for a discount on your insurance, so it is a no brainer, in my mind. Andrew and John have been instrumental in pulling this together and are doing a great job.

As you know, Peter Rejto has sold his Mooney and is away at the moment. He has indicated that he will stand down as Secretary at our upcoming AGM. Please have a think about who might be a suitable replacement for this position. I would like to thank John M for standing in for Peter while he is away.

So that's about it for my report this time. Once again don't forget to register for the AGM in March. Get in early so you don't miss out.

Cheers

John Smith

AMPA Calendar

2023 Pilot Safety Program

We had to cancel the 2020 and 2021 PSPs due to COVID restrictions and 2022 because of the weather but, otherwise, the PSP has run every year since the first in 1996. We hope that it will now be possible to get back to our usual practice of running PSPs each year alternating between the East and the West Coast.

Let's hope that we can finally run it this year! It will be at **Bathurst, NSW from Saturday 15th April to Monday 17th April 2023** but we encourage you to arrive the day before on Friday 14th April.

Most of the people who signed up for the 2022 Program will be attending this year but we do have one or two flying places available so let us know now if you are interested. We don't encourage people to sign up just for the theory sessions as we believe that the real benefit comes from doing the flying. But, if you do want to do just the theory, then you are welcome as it is better than nothing!

If you want an application form or have any other queries then contact john@hillard.net.au or 0417 084400

We believe that the PSP is the best type specific training program in Australia. It involves a day and a half of theory sessions and two half-day sessions in your own aircraft with an experienced Mooney instructor. The instructors teach you to fly your Mooney the way the factory intended - "by the numbers". Mooney's test pilots worked hard to establish the right combinations of power settings to enable us to fly their airplanes safely, efficiently and well.

If you are new to Mooneys and are "making it up as you go along" then you'll find the method we teach will not only make the plane easier to fly but it also might just save your life one day. If you think that you have a better way of flying Mooneys than the test pilots, then you really do need to attend! Over the years, we have had many very experienced pilots demonstrate "their" method to our instructors and, almost without exception, they have admitted that the factory method is better once they have tried it.

The PSP instructors are highly qualified in Mooneys and other types and are mostly CFIs, ATOs and Grade 1 instructors.

2023 Annual Gathering of Mooneys

Longreach

March 16 – 20

Day 1 – Thursday 16th March

Longreach Motor Inn will transfer from Longreach Airport to accommodation

Dinner at Longreach Motor Inn, Harry's Restaurant

Day 2 – Friday 17th

Rosebank Station Tour and Morning Tea

Outback Aussie Tours Longreach Town Tour

Lunch and free time in town

Smithy's Sunset Cruise on the Thomson River

Transfer to The Branch Café

Following dinner walk back to your accommodation

Day 3 – Saturday 18th

Qantas Founders Museum Entry, Guided Airpark Tour, and Lunch

Australian Stockman's Hall of Fame Museum Entry

Camden Park Station Sunset Tour with Nibbles, Dinner and Drinks

Day 4 – Sunday 19th

AGM approx. 09:30 -12:00 at (TBC)

Lunch at the Wellshot Hotel.

Ilfracombe Town Tour & The Machinery Mile

Dinner at the local's favourite pub "The Birdcage Hotel"

Day 5 – Monday 20th

Longreach Motor Inn will transfer from accommodation to Longreach Airport

Gold Coast Air Show

Pacific Airshow Gold Coast will be a three-day weekend event (**August 18 – 20**) featuring heart-pumping aerobatic demonstrations by the world's finest aviators, VIP meet and greet events, social parties, and so much more. Featuring the best civilian performers and military aviators from around the globe, Pacific

Airshow Gold Coast is set to be the largest air show event to ever take place in Australia.

It has been suggested that AMPA members attend as a group and reserve a block of accommodation for the weekend. If you are interested in joining the group, please contact Howard Hobbs (hh643@bigpond.net.au) for more information.

IFR Refresher

Several years ago, we ran an on-line IFR refresher course that was very well attended and very highly regarded by our members. We are hoping to run the event again later this year. It will be an on-line event focussing on the changes in the new Part 91 as well as other important operational matters.

How strong is a Mooney?



This M20J crashed into high-voltage power lines near Washington DC. The pilot and passenger survived with hypothermia and orthopaedic and trauma-related injuries.

The aircraft crashed in misty and wet conditions in Montgomery Village, Maryland and became caught up in live power lines about 30 metres from the ground.

From The Mooney Flyer

The Mooney Flyer is a monthly on-line newsletter published by Phil Corman. It always contains a range of useful and interesting articles and can be accessed free of charge at <http://themooneyflyer.com/>. The contents of recent issues are listed below and AMPA members are encouraged to read them.

November

- Bruce Jaeger, Wright Brothers Master Pilot Recipient
- Airplane on ground (AOG)
- Quiz
- 78878's final flight
- Filing IFR to an airport that does not have an instrument approach
- Careful not to snicker
- keep these things in your Mooney
- My Dad's Aunt Olive
- What is a BatteryMinder?

December

- Magneto & prop checks
- It takes all three
- Flying to Mexico
- ASTM International ... A Trip Report
- "It certainly didn't help"
- ArtCraft paint review
- ADS-B receivers can protect against GPS outages, spoofing and jamming

January

- The impossible turn
- The virtues & vices of technology

- And now the rest of the story
- Low altitude alert
- The wind giveth and the wind taketh away
- Mooney cockpit resource management
- Amazing Caribbean flying adventure

February

- Engine failure on takeoff – a critical gap in training and testing
- A summary of 10 Mooney accidents that were reported in the 1st quarter of 2021
- Losing concentration & focus
- Where are you Goldilocks, Part 1
- We can cancel flight following if it helps
- Thou shalt not perform a runway incursion
- AD 2023-02-04

In every issue

- The Top Gun;
- Have you heard?
- Product review
- Upcoming Mooney events

AMPA Disc Savers

Mind the gap

John Hillard needs your help

Often the only feedback that you get from your LAME regarding the condition of consumables is "looks alright" or "needs replacement". This is particularly the case for the shock discs in our main gear where the limit for the gap between the retaining collar and plate is defined in the maintenance manual as 0.6 inch (section 32-81-00). To be fair, I've never had much better information from car maintainers unless I specifically asked for it.

During my last annual, I asked the LAME to show me how the disc gap is measured and to tell me what it was. It is (as usual with Mooney) not straightforward as the only way that you can see the gap is with a mirror and it was estimated at 3/8". These numbers (converted to mm) are actual measure 3/8" = 9.5 mm vs limit 0.6" = 15.2 mm. That measurement is consistent with my main gear discs (installed Dec 2017) being about "half life".

The next time that your aircraft is near a LAME, could I ask you to find out what the measurement is on your

airplanes as well as what model you have and when the main gear discs were last replaced. Ideally, the measurement is taken with full fuel and no people in the plane. The gap that you measure on the nose gear should be zero as, otherwise, the maintenance manual says that those nose discs should be replaced.

I'd like to assemble enough data points to be able to plot the disc gap over time for both short/medium and long bodied Mooneys. I suspect that we'll find that the deterioration of the discs is linear and that it should be possible to estimate (with some accuracy) the likely date when you'll need to replace them.

For those of us that are using the "disc savers" that Andrew Kotzur is selling, it will also be interesting to see whether we can detect any flattening of the decline curve in future years. Given that changing the full set of discs is now at least a \$5k job, I suspect the economics of using the disc savers will be pretty good.

Buy your own disc savers



\$480.00 including GST for a set of 3

These Disc Savers were developed by some Aussie Mooney aircraft owners wishing to extend the life of the rubber shock discs. They are being sold on behalf of Australian Mooney Pilots Association (AMPA).

Please note, the hydraulic jack is NOT included.

In case you are wondering whether the jacks are worthwhile, members who have recently purchased discs report that a full set now costs almost AU\$4,000, roughly four times the pre-covid cost.

To order, click [Mooney Shock Disc Savers](#) or contact <mailto:info@kotzur.com>.

Maintenance matters

A new AD for M20F and other early models

The FAA is adopting a new airworthiness directive (AD) for certain Mooney International Corporation Model M20C, M20D, M20E, M20F, and M20G airplanes. This AD was prompted by reports of the hybrid material elevator balance weight cracking. This AD requires inspecting to determine whether a certain elevator balance weight is installed. If installed, this AD requires inspecting each affected elevator balance weight for corrosion and cracking, and depending on the findings, either replacing each affected elevator balance weight with a non-hybrid (lead) elevator balance weight or repetitively inspecting each affected elevator balance weight. This AD also prohibits the installation of an affected elevator balance weight on any airplane. The FAA is issuing this AD to address the unsafe condition on these products.

The FAA has received reports of corrosion and cracks found on elevator balance weights on Mooney International Corporation Model M20F airplanes. The affected airplanes are equipped with smooth skin elevators, part number (P/N) 430000-503 and P/N 430000-504, with hybrid material elevator balance weight P/N 430018-1 installed. The hybrid elevator balance weight P/N 430018-1 is similar in size and shape (but not in weight) to the elevator balance weight P/N 430016-7. It is possible the hybrid elevator

balance weight P/N 430018-1 has also been installed on Model M20C, M20D, M20E, and M20G airplanes. The hybrid elevator balance weights were found to have developed galvanic corrosion and visible signs of cracking, which caused them to become severely displaced. This condition, if not addressed, could result in partial or total separation of the elevator balance weight during flight, which could lead to elevator flutter and consequent loss of control of the airplane. The FAA is issuing this AD to address the unsafe condition on these products

The FAA reviewed Mooney International Corporation Service Bulletin M20-345A, dated December 13, 2022. This service information specifies procedures for inspecting to determine whether a hybrid elevator balance weight P/N 430018-1 is installed, inspecting each hybrid elevator balance weight P/N 430018-01 for chipping or cracking, and depending on the inspection results, either repetitively inspecting each hybrid elevator balance weight or replacing with a non-hybrid (lead) elevator balance weight P/N 430016-7.

The image on the next page from the Mooney SB shows the two elevator types and the faulty balance weight.

The SB can be found [HERE](#) and the AD [HERE](#).

AD 2023-02-12 for Continental engines

The FAA is adopting a new airworthiness directive (AD) for certain Continental Aerospace Technologies, Inc. (Continental) GTSIO-520, IO-470, IO-520, IO-550, IOF-550, LIO-470, LIO-520, LTSIO-520, O-470, TSIO-470, TSIO-520, TSIO-550, TSIOF-550, and TSIOL-550 model reciprocating engines with a certain Superior Air Parts, Inc. (SAP) cylinder assembly or intake valve installed. The affected cylinder assemblies and intake valves are installed as a replacement part under parts manufacturer approval (PMA) on certain affected Continental engines. This AD was prompted by three intake valve failures on reciprocating engines that resulted in engine damage and emergency landing or aborted take-off. This AD requires replacement of the affected engine intake valve.

The FAA received reports of three intake valve failures on GTSIO-520, IO-550, and TSIO-520 model reciprocating engines. The intake valve failure on the GTSIO-520 engine resulted in no loss of engine power, while the IO-550 engine experienced engine damage and aborted take-off. The intake valve failure on the

TSIO-520 engine resulted in engine damage and an emergency landing. Subsequent metallurgical analysis revealed that the intake valve material on SAP part number (P/N) SA539988, with lot number 19077 O, was out of specification and did not meet the minimum requirement for elongation; a condition that may cause rupture of the valve stem surface and valve head surface. SAP shipped the affected intake valves installed in cylinder assemblies between January 20, 2022 and March 22, 2022. SAP also shipped individual affected intake valves between January 20, 2022 and May 18, 2022. The affected cylinder assemblies and intake valves may be installed on certain Continental GTSIO-520-C, -D, -E, -F, -H, -K, -L, -M, and -N; IO-470-A, -C, -D, -E, -F, -G, -H, -J, -K, -L, -LO, -M, -N, -P, -R, -S, -T, -U, -V, and -VO; IO-520-A, -B, -BA, -BB, -C, -CB, -D, -E, -F, -J, -K, -L, -M, -MB, -N, -NB, and -P; IO-550-A, -B, -C, -D, -E, -F, -G, -L, -N, -P, and -R; IOF-550-B, -C, -D, -E, -F, -L, -P, and -R; LIO-470-A; LIO-520-P; LTSIO-520-AE; O-470-A, -E, -G, -G-CI, -H, -J, -K, -K-CI, -L, -L-CI, -M, -M-CI, -N, -P, -R, -S, -T, and -U; TSIO-470-B, -C, and -D; TSIO-520-A, -AE, -AF, -B, -BB, -BE, -C, -CE, -D, -DB, -E, -EB, -G, -H, -J, -

JB, -K, -KB, -L, -LB, -M, -N, -NB, -P, -R, -T, -U, -UB, -VB, and -WB; TSIO-550-A, -B, -C, -E, -G, and -K; TSIOF-550-D, -J, and -K; and TSIOL-550-A, and -C model reciprocating engines. This condition, if not addressed, could result in failure of the engine, in-flight shutdown, and loss of the airplane.

AMPA does not know how many Superior engine components have made it into Australian Continentals but, if they can't be traced, then looks like engines will have to be pulled apart to find out.

You can find the AD [HERE](#).

THIS BULLETIN DOES NOT CHANGE AIRCRAFT TYPE DESIGN

Figure SBM20-345-1 - SMOOTH SKIN ELEVATOR AND BALANCE WEIGHT IDENTIFICATION

Figure SBM20-345-2 - ABNORMALITIES - SEVERE GALVANIC CORROSION AND CRACKING OF THE ORIGINAL 430018-1 BALANCE WEIGHT

MOONEY INTERNATIONAL CORPORATION 165 Al Mooney Road North, Kerrville, Texas 78028 tel: 830-896-6000 www.mooney.com
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New parts and equipment for sale

There's a new and extensive list of Mooney parts, avionics, electrical equipment and assorted other items on the web site. The list includes:

Magnaflite starter
~~Vacuum Pump~~ **SOLD**

KN64 DME
 Nav-Radio w/o GS
 Altitude Encoder
 GPS Annunciator
 KMA24 audio panel
 Annunciator
 Electric A/H
 Turn Co-ordinator
 KG258 A/H
 AA80-001 intercom
 Radio blower
 Light control box
 Strobe generator
 Strobe generators

Voltage Regulator
 Stall & Gear warning
~~ADS-B Transponder King KT-74~~ **SOLD**
 King KX-155 NAV COM
 King KG-107 Directional Gyro
 King KG258 Attitude Indicator
 Remote Annunciator Control Unit

Stainless steel wheel covers (set)
 Main wheel covers

~~Catalina 25 cu ft oxygen cylinder (in test) with 4 place regulator & masks~~ **SOLD**

For details, prices and who to contact, go to the CLASSIFIEDS page.

Mooney special tools

AMPA has purchased a number of Mooney specific tools that are available for loan to members. The tools that we have available include the aileron, elevator and rudder travel boards for all Mooney models, over-centre tools for the nose and main landing gear, and tools to replace the landing gear donuts.

The equipment is owned by AMPA but is stored by Smartair in Albury; Smartair also manage the loan of the tools to members.

The tools are available to AMPA members only. There is no charge for their use if returned in good order within the specified time but a late fee will be charged

for every day of late return; the maximum late fee will equal the replacement cost of the equipment. Members must agree not to make copies (or allow copies to be made), to pay freight both ways, in advance, and to ship the tools back to Smartair after a maximum of 5 working days from receipt.

The full terms and conditions of use are available on the web site.

To borrow any of the above equipment, contact Pieter Mol at Smartair in Albury by telephone (02 6021 2929) or email (pieter.mol@smartair.com.au).

The AMPA tools are:

P/N 030003-200	Aileron/flap travel board
P/N 030005-100	Rudder travel board
P/N 030004-100	Elevator travel board (M20C, D, E, F, G, J)
P/N 030004-503	Elevator travel board (M20K, L, M, R, S)
P/N 030012-100	MLG spring installation tool
P/N 030011-001	MLG shock disc tool
P/N 030038-501	MLG disc changer tool
P/N 030035-503	Rudder spring tool
P/N 030011-100	GSE MLG biscuit changer
P/N 030008-100	Nose gear over-centre tool

