

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INCORPORATED

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IMPORTANT INFORMATION - PLEASE DON'T IGNORE!

Big regulatory changes for recreational aviation are under way -What it means for you

Main Points -

- * We're changing from life under Exemptions to under CASR Part 103
- * A new 'ASRA Technical Procedures Manual' is downloadable from the ASRA website
- * ASRA has created a formal 'system of maintenance' adapted to operate under Part 103 while still keeping costs minimal
- * Our system preserves our existing processes, but does formalise Annual Inspections and better record-keeping

PART 1 - BACKGROUND

1. Recreational aviation started in Australia in the mid-1970s when enterprising individuals at a "grass-roots" level started making and quietly flying ultralights inspired by U.S. magazines such as 'Popular Mechanics', 'Popular Science', or 'Kitplanes.' Reluctantly, the then Department of Civil Aviation (DCA) quietly began issuing individual Exemptions to allow persistent pioneers such as Bob Higgins in Victoria to fly his Bensen B8M gyrocopter under very strict conditions. As interest skyrocketed, in 1977 the authorities published a gyroplane Exemption that would apply to anyone who succeeded in making a gyroplane, but the conditions were still very strict.

2. An **Exemption** is a kind or regulation that makes permissible activities that wouldn't otherwise be possible under traditional aviation legislation. Private flying in the 1960s and 1970s was done in traditional "light aircraft" such as Cessna 150s, 172s, Piper Cherokees, or even surplus Tiger Moths, flown by people who held DCA private pilot licences. Over time, the label "ultralight aircraft" came into use to distinguish aircraft operating under exemptions from traditional "light aircraft" which always carried Australian VH registration markings.



3. Regulators dislike exemptions because people flying under them are outliers very difficult to call to account if they do the wrong thing. The main features of the ultralight exemptions are that a conventional government-issued pilot licence is not required, and the aircraft are usually very weight-limited and can only be used for recreational purposes during daylight hours and almost always

outside controlled airspace.

4. Forty-seven years later - in 2024 - we are STILL operating under Exemptions!

5. For 2-seat and Compliant gyros see: 'Civil Aviation Order 95.12.1 (Exemptions from CAR and CASR — LSA Gyroplanes and ASRA-compliant Gyroplanes) Instrument 2021'. For single-seat gyros see: 'Civil Aviation Order 95.12 (Exemptions from CAR and CASR — Gyroplanes Not Exceeding 250 kg) Instrument 2021'. These are most easily viewable at the Australian Government 'Federal Register of Legislation' via a Google search.

6. Astonishingly, before 2019, CASA and its predecessors didn't have any regulations in place giving formal recognition to 'Sport Aviation Bodies' such as ASRA, or RAAus. The relationships the associations had with the Regulator were 95% based on **goodwill and a spirit of collaboration in the interests of aviation safety**.

PART 2 - THE 1st NEW REGULATION - CASR PART 149

7. Civil Aviation Safety Regulations 1998 Part 149 commenced in July 2019 as a mechanism for aviation organisations to acquire formal government recognition provided they were capable of meeting specified standards of organisation, management, administration and operations. By 2022 CASA was ready to start processing applications for Part 149 accreditation, and mandated that existing recreational and sport aviation bodies needed to apply no later than the end of 2023.

8. To meet the CASA Part 149 requirements, ASRA began writing several new manuals such as an 'Exposition', an Administration Manual, a Safety Management System, and a Technical Procedures Manual as well as re-writing the existing Operations and Disciplinary Procedures Manuals. The new manuals were essentially a codification of the processes ASRA is already using and which evolved over the past fifteen years. This 'codification' took about 18 months because draft manuals had to be submitted to CASA for critiquing, and for changes to be made for CASA-specified line-by-line insertions, amendments or deletions. By late November 2023 CASA was satisfied we'd met requirements.

9. ASRA was granted a Part 149 Approved Self-Administering Aviation Organisation Certificate on 2 December 2023, valid for 5 years.

10. The fact that ASRA is now a Part 149 ASAO won't disrupt the "business as usual" activities of members, although readers should note that under Part 149 CASA has a much easier ability to discipline or even prosecute members of ASAOs who deliberately do the wrong thing.

PART 3 - THE 2nd NEW REGULATION - CASR PART 103

11. CASR Part 103 commenced in March 2021 but it's not yet fully operative because a Part 103 'Manual of Standards' (MOS) of over 135 pages still hasn't been finalised, which explains why we are still operating under the Exemptions. A Manual of Standards (MOS) is a modern style of document which in one single reference draws together provisions that were previously spread separately between various Exemptions and other regulations.

CASA's description of the Part 103 MOS is that it:

(a) sets out what aircraft are "Part 103 aircraft" ¹, which are either fixed-wing three-axis or weight shift aircraft, powered parachutes, gyroplanes, gyro-gliders, powered parachutes, paragliders and powered paragliders, and powered sailplanes.

¹ namely aircraft that are usually NOT on the main national VH register. However, by agreement made in 1953, gliders are included in the VH register in their own sub-category 'G', but most in Australia only display 3 letters, although those used in international competition also display the prefix VH-G.

- (b) provides administrative mechanisms for:
 - (i) the registration (termed "**Listing**" to avoid confusion with VH registration) with an ASAO of Part 103 aircraft;
 - (ii) the setting of **airworthiness** standards by an ASAO for Part 103 aircraft (to which general aviation type certificates and certificates of airworthiness don't apply) and the processes for acceptance of an aircraft against those standards by the ASAO,
 - (ii) identification markings for Part 103 aircraft
- (c) defines what constitutes a Part 103 activity;
- (d) requires a person to hold an authorisation to undertake a Part 103 activity (usually an ASAO-issued 'pilot certificate');
- (e) prescribes certain flight rules for Part 103 aircraft that are additional or different to Part 91 general aviation flight rules (these will be carried over from the current Exemptions);
- (f) provides for the instruments, equipment and systems to be fitted to Part 103 aircraft; and
- (g) governs the towing of Part 103 aircraft by other aircraft.

12. ASRA has no problem with the 'General conditions', 'Flight conditions', and 'Flight heights and separation limitations' simply being carried over from the Exemptions and inserted into the yet-to-be-published final Part 103 Manual of Standards (MOS).

13. However, the ultralight Exemptions have never previously dealt with airworthiness and only indirectly mentioned acceptance. ASRA and the other associations have protested to CASA about the heavy-handed way that CASA seemed to be approaching ultralight airworthiness, inspection, and maintenance under the proposed Part 103 technical provisions.

ASRA doesn't certify airworthiness

14. It is well known within the recreational aviation community - as well as within CASA - that ASRA **refuses** to "certify" airworthiness because we are an association of volunteers and although we are regarded as light gyroplane "subject matter experts" in Australia and internationally, ASRA considers it would be absurd for any association to present itself to the outside world as any sort of airworthiness certification entity, in the way the US Federal Aviation Administration is when they - for instance - "certify" airliners.

15. Put another way, within its ranks ASRA has a wide variety of people who have formidable amounts of experience in civil and military aviation, some LAMEs, and even aeronautical engineers, so we are actually not lacking in technical expertise. But, because every member is an unpaid volunteer, ASRA refuses to call upon the aviation professionals who are members to expose themselves to legal risk arising from their voluntary membership.

ASRA instead concentrates on compliance with Construction Standards

16. Most readers will be aware that the ASRA stance is that we only ensure compliance with **construction standards**, and once compliance with construction standards is demonstrated, ASRA will not stand in the way of a builder / owner who wants to fly their gyroplane at their own risk, provided the person is a financial ASRA member and holds a current pilot certificate. We are pleased to confirm that CASA now formally regards our ASRA Gyroplane Construction Standards to be equivalent to the UK BCAR-T Light Gyroplane Standards.

17. ASRA calls this method "the achieving airworthiness indirectly", because while it maximizes the likelihood that a gyro will be safe to fly, it neatly minimizes any likelihood of ASRA or any individual member being sued for wrongful death or injuries claims from gyro "airworthiness" controversies.

PART 4 - ASRA'S ROLE IN CASA'S PART 103 'TECHNICAL WORKING GROUP' (TWG)

18. ASRA's point of contact with CASA is the Sport & Recreation Aviation Branch, their main office being in Brisbane. Because ASRA's current Executive have long continuity in their respective positions, a really positive working rapport has evolved between ASRA and CASA with people usually on a first-name basis. ASRA's Executive believes that our current relationship with CASA S&RA Branch is outstanding. Importantly, almost everyone in the S&RA Branch were recruited from within the recreational aviation sector and have highly relevant aviation experience.

19. When it comes to Regulatory Reform, however, these tasks and functions are primarily undertaken by other branches within CASA, including their legal branch, as well as with outside entities such as the Office of Parliamentary Counsel in Canberra. This means that, with one or two exceptions, there's generally not much rapport with, or accessibility to, these "back room" personnel.

20. In late 2020 CASA announced the creation of a **'Part 103 Technical Working Group' (TWG)** comprised of representatives from current sport aviation bodies, as well as CASA staff from within the regulatory reform area and from the S&RA branch. The ASRA Technical Manager became a member of that group which, during COVID, convened monthly for lengthy video conferences.

21. Very quickly it became apparent that the "back room" regulatory reform people didn't know much about recreational aviation but had strong views on what they were wanting to achieve. This was not good. A constant theme guiding their involvement was an apparent belief that because the Exemptions were on the way out, sport and recreational aviation needed to step up to better align with general aviation.

22. Even more irritating was that the Part 103 reform people didn't always seem to know what their Part 149 people were doing and vice versa, whereas the associations necessarily had to always consider how to adapt to operate under both Part 149 and Part 103. Another source of frustration was low numbers of people within CASA regulatory reform areas with relevant aviation experience, displaced by non-flying career public servants.

23. All these factors - ASRA contends - negatively influenced the way the CASA "back room" people had gone about drafting a Part 103 Manual of Standards (MOS). In March 2021 CASA issued members of the TWG a 139-page 'Exposure Draft' of a proposed Part 103 'Manual of Standards' (MOS). It contained flight rules and procedures - as anticipated - but a number of chapters were devoted to certification, inspection and maintenance.

The Associations protest and push back

24. Straight away, ASRA and RAAus were alarmed with the inspection and maintenance provisions of the draft MOS. It seemed almost as though the maintenance provisions had been drafted by people unaware that several associations already had highly comprehensive and effective systems of maintenance in place.

25. Worse still, the draft MOS either used, or referred to, regulations applicable to general aviation, being processes usually involving expensive 3rd party maintainers such as LAMEs. It was as though the drafters had absolutely no idea of the "grass roots" history of recreational aviation and that a major priority is to always minimise costs. Some TWG association representatives called these oppressive provisions, *"... the nasties*."

26. ASRA and RAAus regarded the Part 103 draft MOS inspection and maintenance '*nasties*' as

superfluous, patronising, and insulting, and if brought into effect would be expensive and oppressive to comply with. The associations also argued that the 2021 draft Part 103 MOS was also overly complex, difficult to understand and often ambiguous. Further, given that currently there is a LAME unavailability crisis within general aviation (where the average LAME is in their 50's approaching retirement), it seemed idiotic to attempt impose scarce LAME processes on recreational aviation.

27. Over the next 14 months consensus between some associations and CASA was not reached concerning the Part 103 MOS, so the Part 103 MOS is delayed and remains so at time of writing.

PART 5 - ASRA DECIDED TO SIDESTEP SOME PART 103 MAINTENANCE PROVISIONS

28. ASRA and RAAus would not, and will not, budge with our respective stances of, "*If it ain't broke, don't fix it.*"

29. Fortunately, the way the CASA Part 149 people had drafted Part 149 resulted in the associations being able to create their own systems of maintenance, provided their schemes had CASA approval. ASRA and RAAus came to the view that **IF** our respective systems of maintenance were approved, then the more oppressive maintenance provisions of Part 103 wouldn't touch us.

30. Therefore, from early 2022, the Technical Manager set out to compile the new ASRA Technical Procedures Manual (TPM) with Part 103 in mind, with special emphasis on sidestepping the "Part 103 nasties."

31. The main purpose of our TPM was to codify our existing technical processes and to <u>only</u> put new things in that CASA absolutely insisted on.

CASA now insists that inspections and maintenance be better documented.

32. Readers should note the CASA has also been unmoving about what they regard as several sacrosanct aviation processes that sport and recreational aviation must better adhere to, such as:

- (a) maintenance releases, to be henceforth called "Release to Service";
- (b) signed-off daily inspections; and
- (c) signed-off Annual Inspections.

33. The new TPM system of maintenance avoids compulsory LAME involvement, but ASRA did agree to include a 'Release to Service' document (the old 'Maintenance Release') as well as signed-off Daily Inspections and Annual Inspections (done by owners or approved pilots).

Under our system of maintenance LAMEs are not required (unless an owner wants LAME involvement)

34. ASRA's TPM system of maintenance enshrines our current principle of owner inspection, owner maintenance, owner modification and owner repair. No LAME involvement (unless an owner voluntarily wants to use the services of a LAME).

35. Our current system of TA inspections also continues unchanged.

36. Because a large proportion or our membership live in remote or Outback regions ASRA strongly encourages members to form networks with other members to jointly collaborate with inspections and maintenance. While an owner is 100% responsible for the inspection and maintenance of their machine, ASRA doesn't expect that they'll operate in isolation. For instance, where Rotax engines are concerned, it's currently commonplace for ASRA members to use well-known Rotax approved technicians, although if an individual owner possesses the knowledge, skills

and diagnostic equipment to self-service, then they are entitled to do so. Where Subaru engines are concerned, ASRA members should rely on skilled and relevantly experienced automotive technicians, unless the owner himself possesses the knowledge, skills and diagnostic equipment to self-service. Notice that there's no insistence on LAME involvement, unless the owner voluntarily wants to use a LAME.

37. Where it comes to modification or repair, the TPM places 100% responsibility on the owner but strongly encourages owners to rely on appropriate 3rd parties, whether they are other experienced ASRA gyro owners, or TA's, or outside technicians. For instance, the TPM doesn't insist that steel or stainless steel welding be done by certified aircraft welders, but does require that any welding be done by an appropriately qualified and experienced technician to an artisan standard.

The ASRA TPM has been accepted and approved by CASA

38. The ASRA TPM formed part of the bundle of documentation submitted for ASRA's 2023 application for a Part 149 ASAO Certificate. As stated earlier, manuals such as the TPM were critiqued and edited by CASA on a line-by-line basis until they announced they found the document 'acceptable'. It is now classified as a "controlled document" and ASRA can't change it without CASA approval.

39. The ASRA TPM can be downloaded and viewed from the ASRA website:

Go to:	asra.org.au
Go to:	Member Zone page
Click on:	'ASRA documents'
Click on:	'link to ASRA documents'
Go to:	'ASRA Documents Part 149 (CASA Approved)'
Click on:	'ASRA Technical Procedures Manual'

The TPM will automatically download as a 16 Mb 158 page pdf file.

Better record-keeping and more comprehensive audits

40. Readers should note is that under Part 103, ASRA should anticipate that CASA oversight, scrutiny and auditing of our technical processes will increase. This means that ASRA must improve and professionalise its technical record-keeping, to ensure we'll survive future Part 103 audits.

41. The flow-on effect to ordinary members is that ASRA will expect gyro owners to diligently maintain gyroplane logbooks and to properly make legible and informative entries in those logbooks about scheduled and unscheduled maintenance, modification and repairs. Another new process is that major modifications, major repairs and rebuilds will need approval from the Technical Manager in advance.

42. It is also not out of the realms of possibility that ASRA may need to call upon members to email copies of their gyroplane logbooks or other documentation if CASA demands that information.

43. The main point here is that once we start operating under Part 103 <u>you must keep your</u> technical record-keeping in proper order and up to date.

PART 6 - TRANSITIONAL ARRANGEMENTS

44. As explained above, ASRA and the other Associations are still - as at April 2024 - operating under the Exemptions.

45. ASRA and RAAus have now both put in place CASA-approved 'systems of maintenance' adapted to what life under the CASR Part 103 MOS - when finally released - is anticipated to be.

46. The 2021 Part 103 draft MOS was a complex and difficult document to understand, packed with references to various other regulations. At time of writing, it is not known what the final form of the Part 103 MOS will be, and to what extent the CASA regulatory reform people have taken the associations protests into account.

ASRA has declared 2024 and 2025 as being transitional years

47. The ASRA position is that because the 2021 Part 103 MOS was a highly problematic document, and that the final version has not yet been settled, then regardless of what the final form of the Part 103 MOS inspection and maintenance provisions will take, ASRA will simply maintain a **"business as usual"** approach and gradually implement and refine our own TPM processes over the next 18 months to 2 years.

48. ASRA also expects that our reliance on the various Forms contained within the TPM will gradually give way to a more database-focused approach as our IT processes improve, or in other words the Forms will gradually be replaced by real-time database entries.

Annual Inspections (TPM page 47) and new ASRA red Forms F007 and F008 (TPM pages 111-115)

49. ASRA will over the next 18 months to 2 years be *gradually easing* into the TPM processes. For instance, the Gyroplane Annual Inspection certification and database entries set out at page 47 of the TPM will gradually come "on-line" later in 2024 in expectation of full operation commencing as from 1 January 2025.

50. Equally, the new red Form F007 (Release to Service) and new red Form 008 (ASRA Daily Inspection Certifications & Aircraft Time in Service) sheets detailed in TPM pages 111 - 115 will be gradually phased-in, for commencement also in 2025. Of course, this doesn't stop you from using these forms now if you find them suitable to your present needs.

The Operational Aspects of the Part 103 MOS

51. Readers should note carefully that ASRA's CASA-approved system of maintenance described in our TPM is very much our own individualized system covering acceptance, transfers, inspection, maintenance, modification and repair. However, the CASA airborne ultralight Flight conditions and limitations to be carried over from the Exemptions into the final version Part 103 MOS will be mandatory and fully operative from whatever future date CASA specifies as their commencement date. ASRA will notify all members of when that as-yet unknown CASR Part 103 MOS Operational flight conditions and limitations commencement date will be set.

Consultation and suggestions

52. ASRA welcomes any suggestions to further streamline our technical processes and they can be sent to technicalmanager@asra.org.au. The current Technical Manager (also known as Head of Airworthiness and Maintenance [HAM] under Part 149) is Mark Regan from Melbourne on 0411 423 428.

53. Mark will be at both Flyin' for Fun at Parkes and at the Bridger Family Farm at various times over 12 to 14 April 2024 and is very willing to explain and discuss all the information set out above.

Signed -	
The ASRA Bo	ard.

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