



SUMMARY OF CONSULTATION



Part 43 - Maintenance of general aviation and aerial work aircraft



Date	December 2020
Project number	SS 05/01
File ref	D20/14674

Overview

In August 2018, CASA conducted an initial public consultation that sought the views of the aviation community on the current challenges associated with maintenance of aircraft involved in General Aviation (GA) and Aerial Work (AWK) and to identify opportunities to improve Australia's regulatory system. The feedback identified a preference for Australia to replace the *Civil Aviation Regulations 1988* (CAR) maintenance regulations for aircraft conducting private flights and aerial work with a set of rules based on the Federal Aviation Regulations (FARs) of the USA with minimal changes.

In December 2018, we published a policy proposal that aimed to adopt the FARs, CD 1812SS—Part 43 of the Civil Aviation Safety Regulations (CASR) - Maintenance of aircraft. Comments closed on 31 January 2019.

Throughout both consultations, the Aviation Safety Advisory Panel (ASAP) and its associated Part 43 Technical Working Group (TWG) were involved to oversee CASA's processes and industry engagement to ensure the policy remains appropriate for the sector.

In August 2019, the TWG achieved general consensus to support the policy and this was subsequently supported by the ASAP, with advice provided accordingly to the CASA Director of Aviation Safety.

This Summary of Consultation (SOC) provides a summary of the comments received and how we have addressed the comments.

Summary of respondents

The consultation received 205 online submissions via the CASA Consultation Hub with 126 respondents giving permission for CASA to publish their responses on the Consultation Hub (<https://consultation.casa.gov.au/regulatory-program/cd1812ss/>). The remaining 79 de-identified responses have been analysed and included in the aggregated data presented in this SOC.

Quantitative analysis

148 respondents indicated they either supported or opposed the proposed regulations. Of the respondents who indicated a preference, 99 (67%) supported the policy proposals:

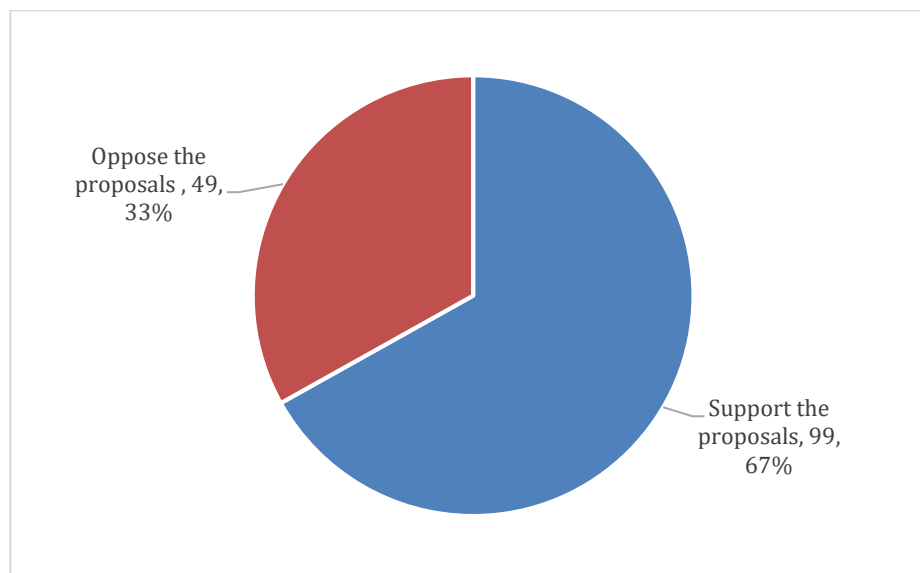


Figure 1: Preferences stated 148 responses

- Sixty-one (61) respondents expressed concerns with some aspects of the proposals and forty-six (46) respondents did not state a preference.
- Thirty-five (35) respondents expressed concern about the perceived compromising of safety due to the removal of the CAR 30 maintenance organisation structure and associated organisational CASA surveillance.
- Fifty-six (56) CAR 30 maintenance organisation approval holders provided responses:
 - Fifteen (15) expressed concern about the economic effects that the proposed rules may have on CAR 30 approval holders.
 - Twenty-seven (27) expressed overall satisfaction with the proposals.
 - Seven (7) respondents expressed concerns about a loss of insurance coverage if they were not able to continue operating under the umbrella of a CAR 30 approval.
- Eighty-four (84) licenced aircraft maintenance engineers (LAMEs) provided responses:
 - Fifty-two (52) expressed concerns with some aspects of the proposals.
 - Thirty-two (32) expressed satisfaction with the proposals.
 - Fifteen (15) were concerned about the loss of privileges for B2 LAMEs.
- Nine (9) respondents were concerned about some aspects of the proposed introduction of Inspection Authorisation (IA) with the two main areas of concern being:
 - the proposed requirement to pass an examination, and
 - the cost of obtaining or renewing an IA.
- Fifty-five (55) aircraft owner/operators responded.
 - Forty-eight (48) expressed satisfaction with the proposals.
 - Three (3) opposed the proposals.
 - Four (4) did not state a preference.

Summary of responses by policy topic

Policy Topic 1 - Responsibilities of the registered operator

This policy topic sets out the proposed responsibilities of the registered operator (RO) with regard to ensuring that the aircraft is not permitted to be flown unless it is in a condition for safe flight and has had all required inspections and repairs completed and properly certified. Figure 2 shows a breakdown of responses received:

- Eighty-four (84) respondents (50%) liked the proposal.
- Forty-two (42) respondents (25%) did not understand the proposal.
- Thirty-nine (39) respondents (23%) stated that CASA would need to provide comprehensive guidance material.
- Three (3) respondents (2%) did not state a preference.

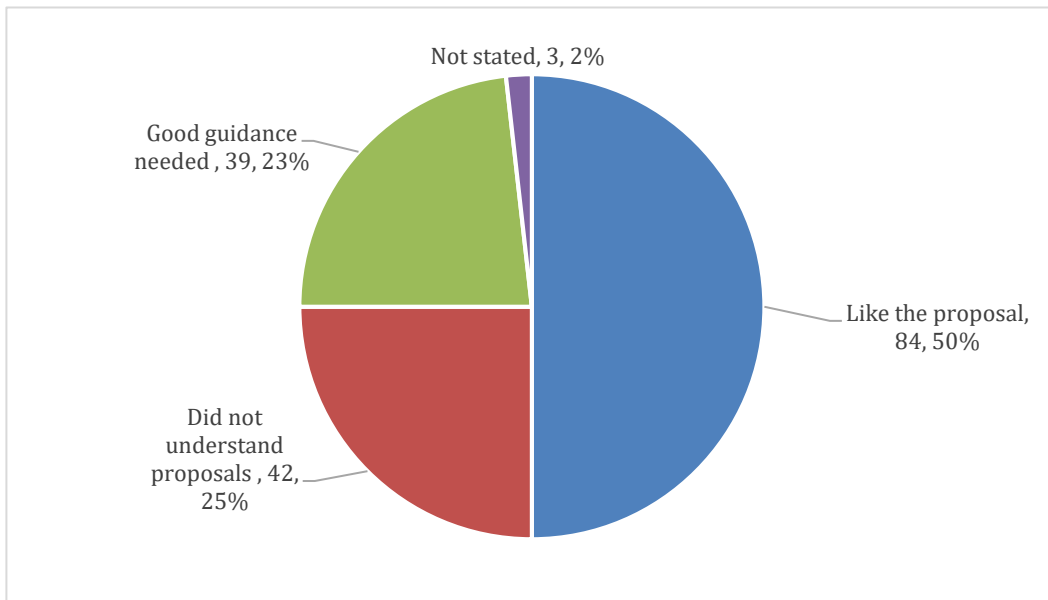


Figure 2: General

Repairs, modifications, maintenance records and operation after maintenance

This proposed policy topic sets out the proposed obligations on an RO to ensure that all repairs are carried out in accordance with appropriate instructions, that a system of maintenance records is kept up to date for an aircraft and that an aircraft is not permitted to carry persons other than flight crew unless a maintenance check flight has been carried out after maintenance that may have affected the flight characteristics of the aircraft. Figure 3 shows a breakdown of responses received:

- Seventy (70) respondents (51%) like the proposals.
- Thirty-three (33) respondents (24%) did not understand the proposals.
- Twenty-two (22) respondents (16%) stated that CASA would need to provide comprehensive guidance material.
- Nine (9) respondents (7%) stated objections based on assumptions not based in fact.

- Three (3) respondents (2%) objected to the proposals but did not provide any detail of their concerns.

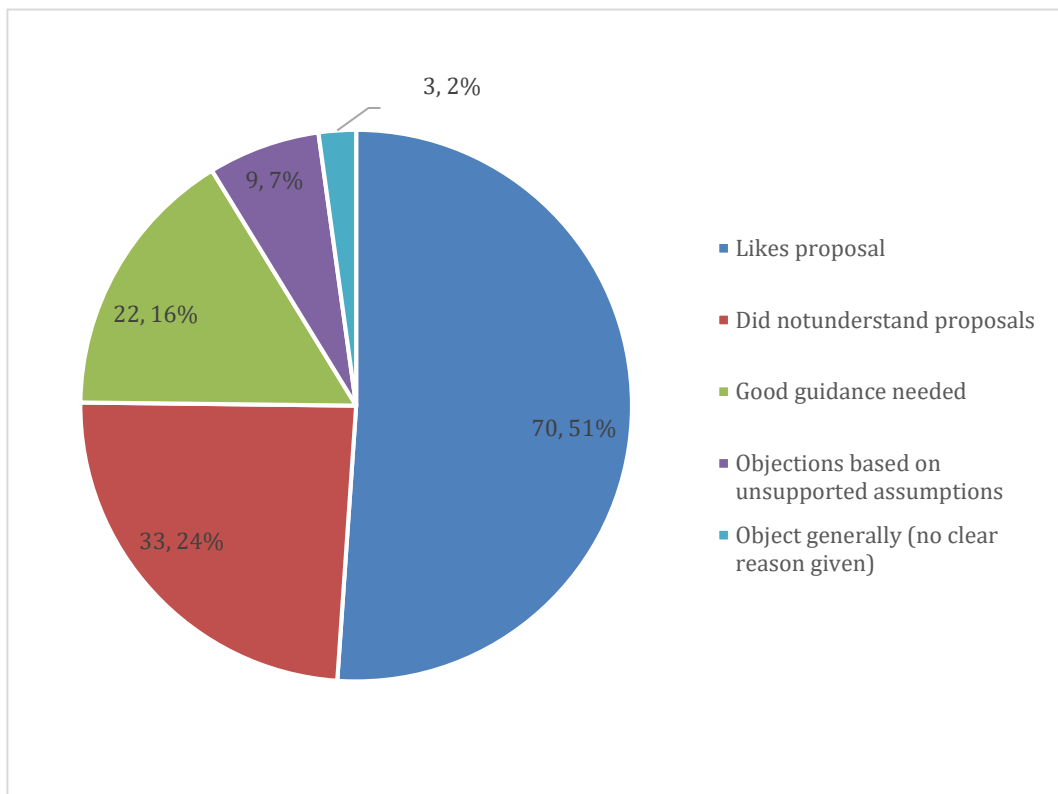


Figure 3: Repairs, modifications, maintenance records and operation after maintenance

Policy Topic 2 - Responsibilities of a maintainer

This proposed policy topic sets out the proposed responsibilities applying to a person carrying out maintenance on an aircraft or aeronautical product under Part 43. Figure 4 shows a breakdown of responses received:

- Sixty-eight (68) respondents (45%) liked the proposals.
- Thirty-eight (38) respondents (25%) did not understand the proposals.
- Three (3) respondents (2%) did not state a preference.
- Seventeen (17) respondents (11%) stated concerns about the expanded avionics privileges that will be granted to B1 LAMEs.
- Seven (7) respondents (5%) disagreed with the proposed removal of type rating requirements in Part 43.
- Seven (7) respondents (5%) stated concerns about the perceived loss of CASA safety oversight.
- Seven (7) respondents (5%) stated a preference for CASA to retain the Federal Aviation Administration (FAA) Form 337.
- Three (3) respondents (2%) stated concerns about availability and cost of liability insurance for independent LAMEs.
- One (1) respondent (1%) asked an out-of-scope question about Part 66 licencing.

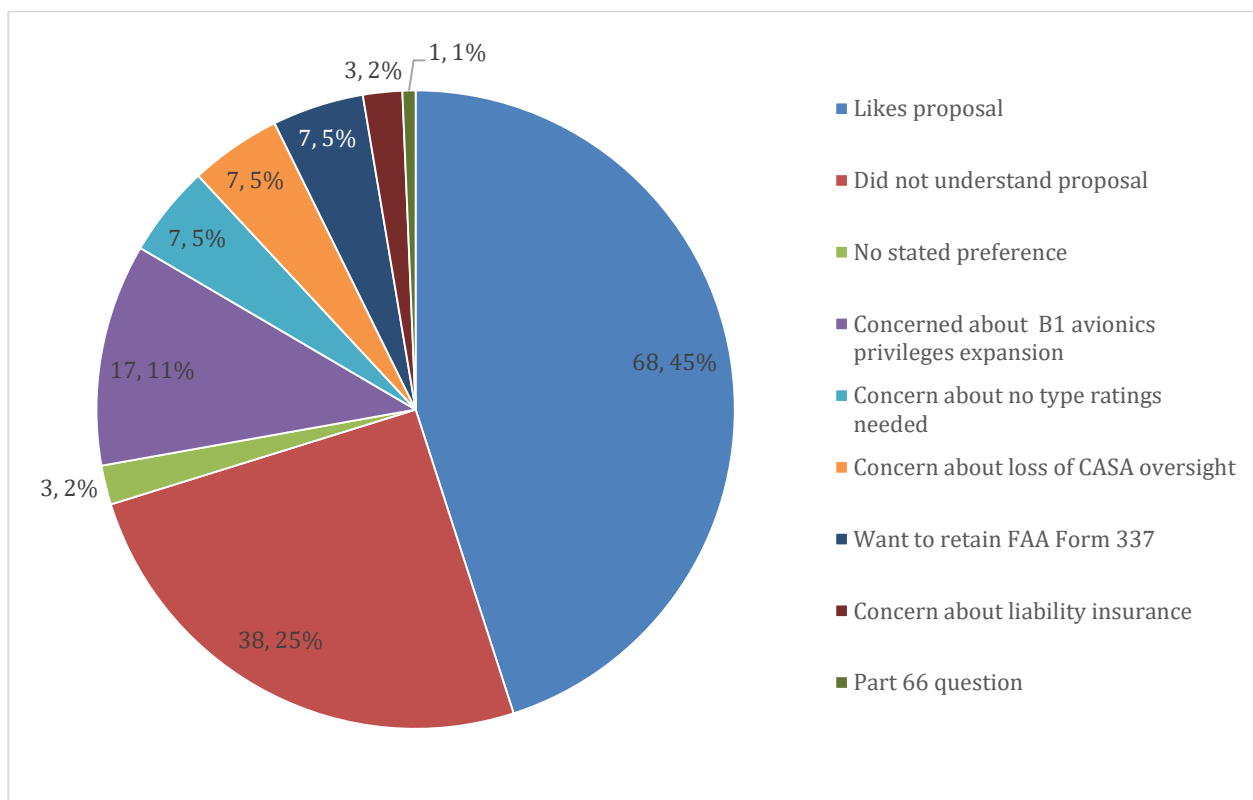


Figure 4: Responsibilities of maintainer

Policy Topic 3 - Maintenance performance rules

This policy topic sets out the maintenance performance rules that would apply under proposed Part 43. It specifies maintenance standards that would apply, use of appropriate maintenance accomplishments instructions and the limitations applying to individuals and organisations engaged in carrying out maintenance. Figure 5 shows a breakdown of responses received:

- Fifty-six (56) respondents (39%) like the proposal.
- Nineteen (19) respondents (13%) did not understand proposals relating to welding and non-destructive inspections.
- Fifteen (15) respondents stated that CASA would need to provide comprehensive guidance material.
- Fifteen (15) respondents (11%) stated objections based on assumptions not supported by fact.
- Twelve (12) respondents (8%) stated concerns about LAMEs carrying out piston engine overhauls.
- Nine (9) respondents (6%) did not understand the proposed maintenance record requirements.
- Eight (8) respondents (6%) did not understand the LAME competency and licence scope expansion requirements.
- Two (2) respondents (1%) did not state a preference.
- Five (5) respondents (4%) stated concerns about maintenance of aeronautical products.

- One (1) respondent (1%) stated concerns about the commercial effects on approved maintenance organisations.

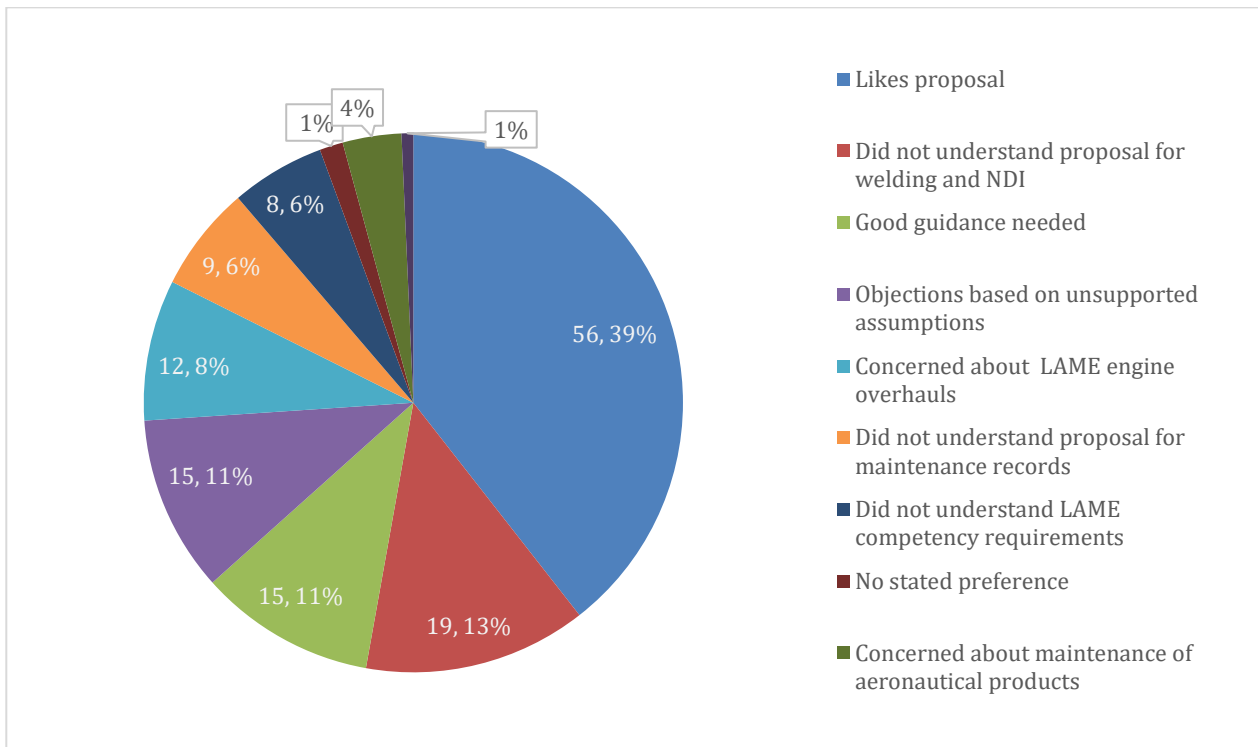


Figure 5: Maintenance performance rules

Policy Topic 4 - Who can perform or supervise maintenance and authorise a return to service

This policy topic prescribes who may perform maintenance, who may supervise and certify for maintenance and who may authorise an aircraft for return to service after maintenance. Figure 6 shows a breakdown of responses received:

- Fifty-four (54) respondents (37%) like the proposals.
- Forty (40) respondents (27%) did not understand the proposals.
- Ten (10) respondents (7%) did not state a preference.
- Fifteen (15) respondents (10%) stated that CASA would need to provide comprehensive guidance material.
- Eight (8) respondents (5%) stated concerns about loss of income stream for B2 LAMEs.
- Seven (7) respondents (5%), all CAR 30 holders, objected to the proposals without stating specifics.
- Four (4) respondents (3%) stated objections based on speculation about the effects of the proposals.
- Four (4) respondents (3%) commented on Part 66 questions (out of scope of this project).

- Two (2) respondents stated concerns about LAMEs performing piston engine overhauls.
- One (1) respondent (1%) stated concern about pilot maintenance provisions.
- One (1) respondent (1%), a large Part 147 organisation objected generally, without stating specifics.

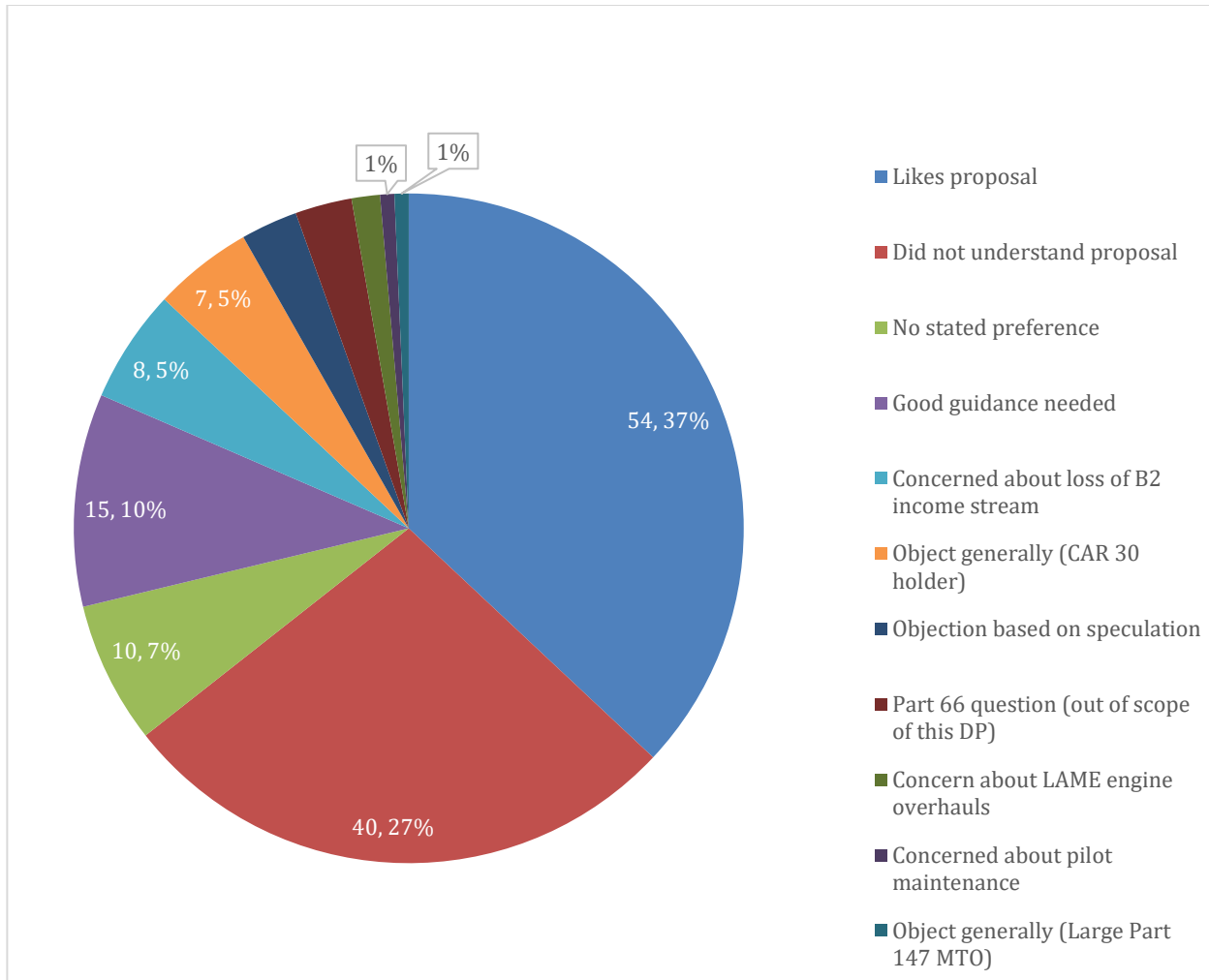


Figure 6: Who can perform or supervise maintenance and authorise return to service

Policy Topic 5 - Inspection authorisation

This policy topic sets out the privileges and limitations of a holder of an Inspection Authorisation (IA). It also sets out the criteria for initial issue and renewal of an IA. Figure 7 shows a breakdown of responses received:

- Forty-five (45) respondents (31%) asked questions about the scope of an Inspection Authorisation (IA).
- Forty-two (42) respondents (29%) like the proposal.
- Twenty (20) respondents (14%) did not understand the IA proposals generally.

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- Eight (8) respondents (5%) stated that CASA would need to provide comprehensive guidance material.
- Eight (8) respondents (5%) stated objections based on unsupported assertions about the policy effects.
- Seven (7) respondents (5%) did not understand LAME privilege proposals.
- Six (6) respondents (4%) stated concerns about loss of CAR 30 provisions.
- Five (5) respondents (3%) commented on Part 66 matters (out of scope).
- Four (4) respondents (3%) stated concerns about loss of B2 LAME income stream.
- One (1) respondent (1%) stated concern that CASA was going to adopt the FAA Airframe and Powerplant (A&P) licence structure.

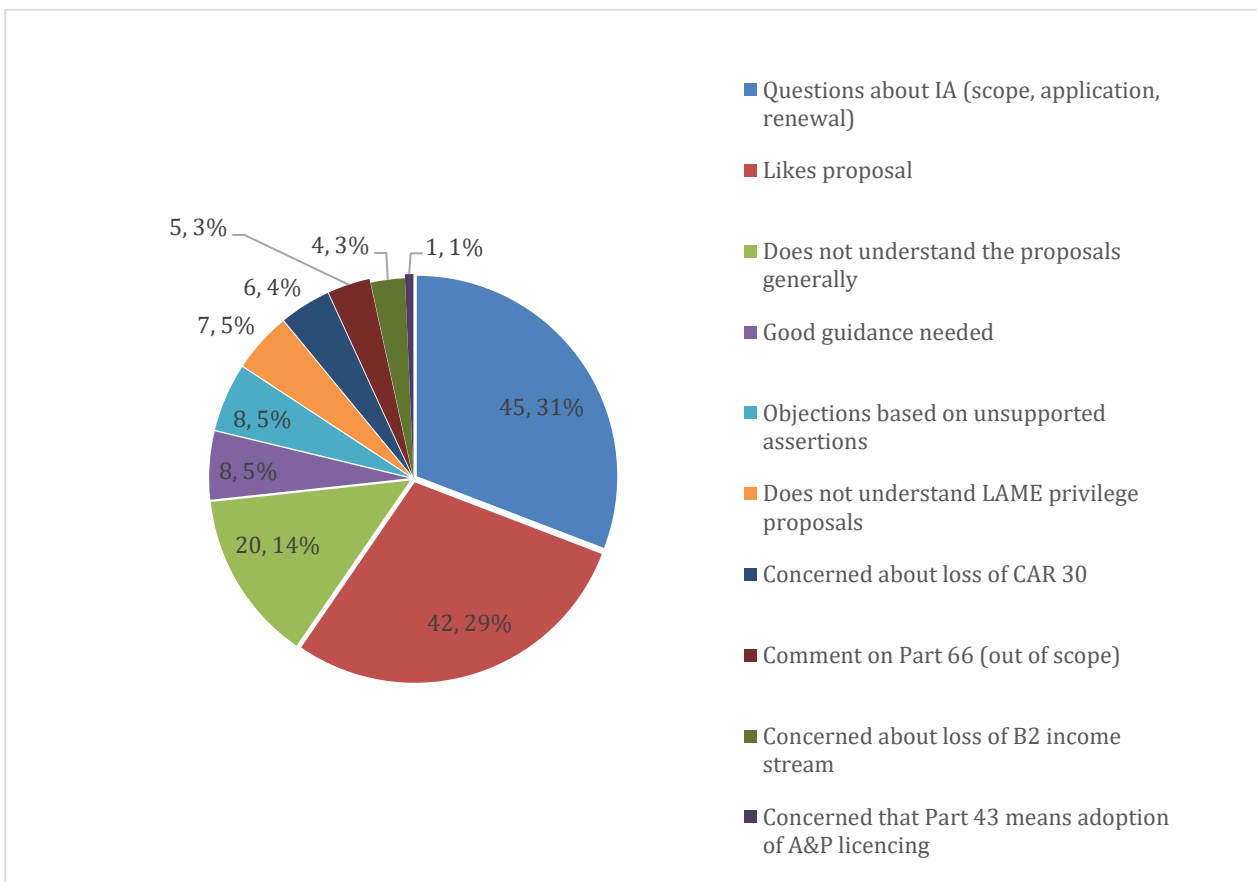


Figure 7: Inspection authorisation

Policy Topic 6 - Manual of standards - additional detail

This policy topic discusses additional matters that would be set out in a manual of standards for Part 43. Figure 8 shows a breakdown of responses received:

- Sixty-three (63) respondents (46%) like the proposals.
- Twenty-three (23) respondents (17%) did not state a preference.

- Twenty-six (26) respondents (19%) did not understand the underlying Federal Aviation Regulations (FAR) on which the Part 43 proposals are based.
- Fifteen (15) respondents (11%) stated that they needed more information.
- Ten (10) respondents (7%) offered comments that were out of scope or off-topic.

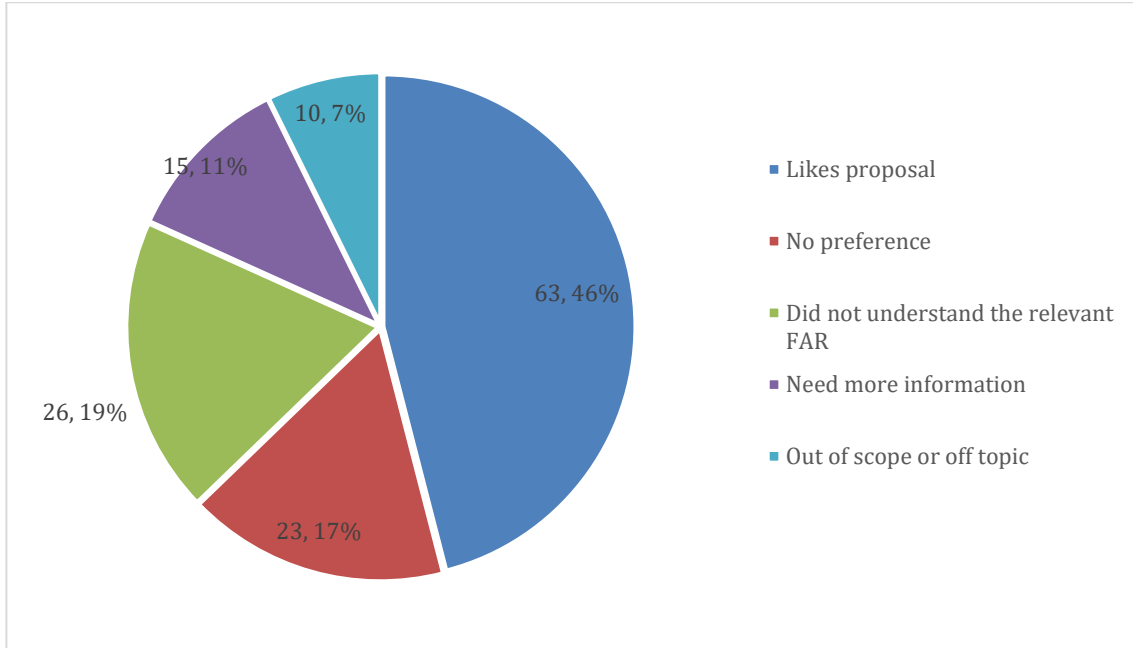


Figure 8: Manual of standards - additional detail

General comments

Do you have any additional comments about the proposed policy?

This question provided an opportunity for readers to offer comments on matters that may not have been specifically canvassed in the previous policy topics. Figure 9 shows a breakdown of responses received:

- Fifty-one (51) respondents (33%) generally like the proposals.
- Twenty (20) respondents (13%) generally objected to all of the proposals.
- Fourteen (14) respondents (9%) raised objections based on unsupported assumptions.
- Nine (9) respondents (6%) stated that CASA needs to provide comprehensive guidance material.
- Seven (7) respondents raised concerns about a perceived loss of CASA safety oversight of Part 43 maintenance.
- Seven (7) respondents (5%) did not understand certification rules.
- Seven (7) respondents (5%) stated that CASA should use a different regulatory model (out of scope).
- Seven (7) respondents (5%) asked questions about Part 66 (out of scope).

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- Six (6) respondents (4%) stated concerns about commercial impact on CAR 30 organisations.
- Six (6) respondents (4%) did not understand proposed LAME licence privileges.
- Six (6) respondents (4%) raised concerns about charter operations (out of scope).
- Five (5) respondents (3%) stated concerns about effect on B2 LAME privileges.
- Five (5) respondents (3%) asked questions about the IA.
- One (1) respondent (1%) stated concerns about the effects of the proposals on component-only CAR 30 organisations.
- One (1) respondent (1%) asked about how generic Airworthiness Directives would be affected in Part 43.
- One (1) respondent (1%) asked a question about how AMOs would interact with Part 43.

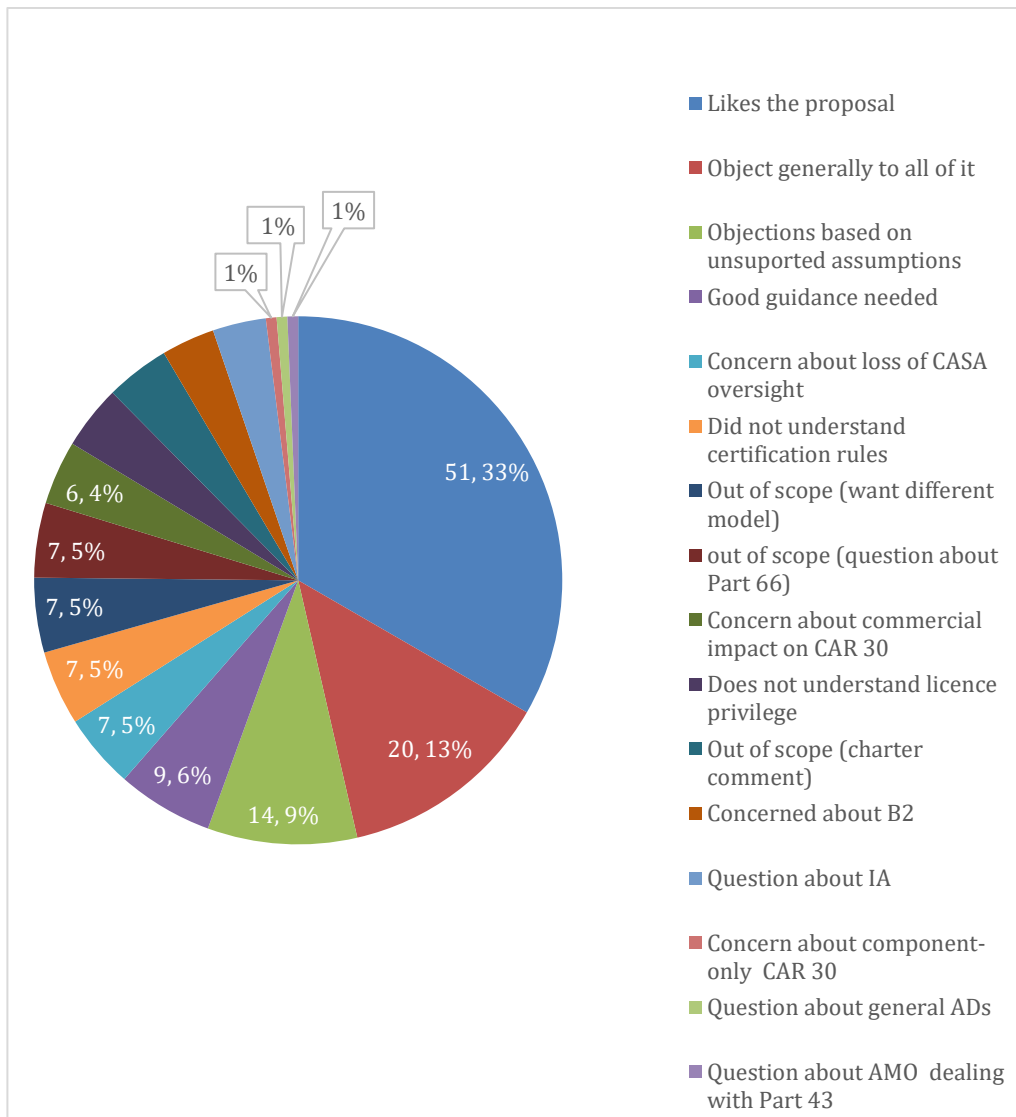


Figure 9: General comments

WHAT DOES THE DATA TELL US?

Of the respondents who indicated a preference, 67 per cent supported a FAR-based regulatory model, 24 per cent expressed concern with some parts of the proposals and 9 per cent expressed total opposition.

WHAT DID THE AIRCRAFT OWNERS AND OPERATORS SAY?

Of the 55 owners and operators who responded, 87 per cent expressed their support for the proposals, five per cent opposed the proposal and eight per cent did not express a preference.

WHAT DID THE CAR 30 HOLDERS SAY?

Of the 56 CAR 30 respondents, 48 per cent expressed their support for the proposals, 26 percent stated concerns about the economic impact on their business and 26 per cent did not state a preference.

Summary of concerns

Some respondents indicated concerns with some aspects of the proposals and others did not support the proposals in their entirety. Overall the feedback was varied. The following themes were identified.

Loss of business income

Some CAR 30 maintenance organisation approval holders stated concerns that the removal of CAR 30 approval requirements will lead to a loss of business by established maintenance organisations as a result of competition from low-budget start-ups.

CASA response

We acknowledge that the new regulations will reduce barriers to new businesses entering the general aviation and aerial work sectors. Overall, we consider this will provide an industry benefit by enabling more flexibility and more operators in a market which has been affected by a general diminution of suppliers of maintenance services, particularly in rural and remote areas of Australia.

Start-up maintainers will be required by regulations to have the required facilities, data, tooling and special and test equipment and licensed personnel for the maintenance services being offered. Established maintenance providers who meet the requirements for a CAR 30 approval and have an existing customer base, would hold the advantage over new businesses and will also have access to greater flexibility for their businesses. CASA will provide comprehensive information to assist current and new businesses adapt to the new requirements.

Based on a comparison of the regulatory requirements in CAR 30 and FAR 43, we consider the proposals will reduce the overall cost of regulation on the sector, although where these savings are realised, e.g. at the maintainer level or registered operator level, will be determined by natural market forces.

A detailed regulatory impact statement has been developed and will be published with the regulatory documentation.

Reduced safety

Some respondents were concerned that by removing CAR 30 maintenance organisation approvals, CASA will not have oversight of people undertaking maintenance, this will result in a reduction of safety standards.

CASA response

CASA believes that Part 43 will be beneficial for safety. Data from other countries that have regulations based on, or similar to, FAR Part 43 shows that equivalent or better safety outcomes are achievable. Part 43 will have clearer, simpler rules and safety standards based on the aircraft's certification basis. This will remove ambiguity and ensure that attention is focussed on key safety areas. The IA function will provide ongoing high safety assurance levels above a standard Part 66 licence at regular intervals and for major modifications. The IA function will also close a gap in the current continuing airworthiness framework by introducing formal competency

requirements on knowledge of aircraft certification basis and its relevance in continuing airworthiness.

CASA is aware that some of the Part 43 policies will necessitate changes to CASA's National Oversight Plan. CASA is proactively working to ensure that our oversight of Part 43 will be proportionate, effective and fair. CASA will take this opportunity to update the oversight approach, particularly for independent maintainers and small maintenance organisations working on small, simple aircraft, where an oversight approach based on organisational systems and procedures may not be the most effective.

Type rating requirements

Some respondents were concerned that by removing type rating requirements, CASA is permitting LAMEs to assess competency without any proper training and assessing qualifications.

CASA response

Part 43 is a competency-based system. The new task-based arrangements are an alternative way of demonstrating competency that:

- is proven to be safe and effective in other countries
- permits the use of local, qualified LAMEs to augment the privileges of other LAMEs
- is similar to how the industry currently uses supervision to establish practical competency for licences and certify maintenance
- is considered a proportionate, effective and appropriate approach for these sectors.

The new task-based arrangements are intended to supplement, not to replace, type ratings. The new task-based arrangements are limited to only the tasks that have been performed under appropriate supervision, so type ratings will continue to be the most effective way to gain full privileges on a type rated aircraft. The task-based arrangements are primarily intended to provide a practical means for LAMEs to augment their privileges with specific common tasks using the skills and knowledge of local, more qualified LAMEs, as opposed to the only option being to obtain full type ratings, which are often only available from overseas manufacturers at high costs for businesses.

Lack of insurance cover for independent LAMEs

Some respondents stated that all independent LAMEs will be required to carry insurance and that it will not be available, or the costs will be prohibitive.

CASA response

Insurance will not be a requirement under Part 43, it will remain a commercial decision for maintenance businesses, as it is now for CAR 30 maintenance organisations and independent LAMEs. Part 43 provides greater flexibility for LAMEs to certify maintenance using their licence, but approved maintenance organisations will also be able to continue to provide maintenance services under Part 43, so LAMEs may continue to work under a CASA maintenance organisation approval if that is their preference.

CASA understands there is some concern surrounding the use or lack of use of an organisational approval. A CASA organisational approval - such as CAR 30 - creates legal obligations on the basis the approval holder is an organisation of people undertaking an aviation activity. Other organisational approvals include an air operator certificate (AOC), a Part 142 flying training organisation and a Part 145 AMO. Most organisational approvals, including CAR 30, stipulate key positions and documented management systems. None of these are required under Part 43.

However, Part 43 still allows for organisational structures. Under Part 43 individuals or groups of individuals may choose to utilise an organisational structure, including maintaining a company as a separate legal entity (as indicated by 'Pty Ltd') registered with the Australian Securities and Investment Commission. Furthermore, a group of individuals may maintain a documented quality management system if they wish. None of this is necessary to satisfy Part 43.

This is one example of Part 43 being more flexible than the current CAR arrangements.

In response to the concerns about insurance costs, we have held discussions with several major insurance underwriters. Whilst insurance will remain a private commercial matter, indications are that the premium structures would remain largely unchanged. One underwriter indicated that the levels of coverage that are currently available for CAR 30 organisations will continue to be provided for independent LAMEs. Another underwriter indicated they already provide an insurance policy for independent LAMEs where the premium is based on their annual turnover, for example, a start-up LAME with a turnover of \$75,000 would pay approximately \$1,100 for the first year of coverage.

Loss of B2 privileges

Under the FAA system, an avionics technician provides support services to the airframe and powerplant (A&P) mechanic but does not have any legislated release to service privileges. Respondents stated concerns that in Australia, this arrangement would disadvantage LAMEs who have invested in their avionics qualifications based on the Part 66 licence structure.

CASA response

We have reviewed the avionics maintenance provisions and will ensure that a B2 LAME will retain maintenance certification privileges within the scope of their licence.

While some avionics privileges will be shared with a B1 LAME under Part 43, only a B2 LAME will be permitted to certify major repairs or modifications to avionics systems or components.

In addition, we have made provision for a B2 LAME to be issued with an IA which will allow a B2 IA to certify conformity of major avionics repairs and modifications – this will not be a shared privilege.

However, the IA qualification requirements for annual inspections and non-avionics major alterations will remain a B1 licence. Part 43 is a competency-based framework, and the annual inspection is a standards-based inspection that requires demonstrated competency in aircraft airframes and engines. The Part 43 annual inspection is fundamentally different from a final coordination certification under CAR, both legally and practically. The B2 syllabus does not adequately cover the range of knowledge that is required for a Part 43 IA to be responsible for an annual inspection.

Cost of obtaining/renewing an inspection authorisation

Respondents stated the cost of an IA is not justified because it only allows a LAME to continue doing what they are authorised to do under current legislation.

CASA response

The IA is one of the key safety assurance elements of Part 43. It is a fundamentally different function from the current functions of LAMEs and maintenance organisations under CAR so those differences must be addressed. The primary difference is that the IA function requires practical knowledge of aircraft certification basis, but certification basis is not covered by the Part 66 (or CAR 31) knowledge syllabus and is not a requirement of the current annual inspection under CAR. Similar to other countries' Part 43 based systems, an IA will need to successfully demonstrate competency in the IA function by way of an exam that specifically addresses the IA knowledge requirements.

Notwithstanding the functional differences, holding an IA will permit a LAME to provide the maintenance services that are currently only permitted under cover of a CAR 30 approval, e.g. major repairs, modifications and annual inspections. The cost of obtaining and renewing an IA will be considerably less than the cost of obtaining and maintaining a CAR 30 approval.

If an IA has been actively using their authorisation then renewal of the IA at two-yearly intervals would be a matter of showing that the applicant has performed the requisite number of IA functions during the preceding 12 months. Options available for IA holders who were not sufficiently active as an IA to qualify for renewal under the provisions of 65.93 will include attendance at a refresher course approved by CASA or by passing an examination. These options would incur only a nominal fee.

Requirement for an IA examination

Some respondents stated that the requirement to pass an examination every two years is an additional and unnecessary cost in time and money.

CASA response

Apart from the examination for initial issue of an IA, the holder is not under any obligation to undergo further examinations.

If an IA holder is unable to meet the specified required number of inspections to qualify for a renewal, the holder would have the option of demonstrating their ongoing competency by either attending a refresher course of eight hours duration or passing another examination.

Reduced safety standards

Respondents raised concerns that safety standards would be compromised if unqualified and untrained individuals were permitted to provide maintenance services.

CASA response

This is a misunderstanding of the proposal. Similar to current CAR permissions, Part 43 will provide a proportionate approach with increased flexibility for smaller, simpler recreational

aircraft compared to larger, more complex aircraft. In all cases maintenance certification privileges will remain associated with people specifically authorised under the regulations based on demonstrated competency.

The primary maintenance certification permission will remain a Part 66 licence. The increased flexibility for LAMEs to augment their privileges remains underpinned by the competencies they demonstrated to gain their licence.

In response to feedback received about large, complex aircraft, we have added a requirement that scheduled maintenance, major repairs and major modifications of transport category aircraft may only be carried out by approved maintenance organisations. This is effectively a continuation of current CAR requirements for maintenance of Class A aircraft with some added flexibility for unscheduled maintenance.

Charter aircraft inclusion

Several charter operators and maintenance organisations said that the scope of the project should include charter aircraft.

CASA response

The Part 43 project is intended to provide a proportionate safety regulatory regime for private and aerial work aircraft, which comprise a significant proportion of non-airline aircraft in Australia.

CASA is progressing a separate project developing new continuing airworthiness regulations for the current charter sector. Details of that project are available on the CASA [website](#).

Next Steps

We have prepared a policy decision summary (PDS) document which sets out the final detailed policy settings with the adjustments made as a result of the comments received during consultation. The PDS will be published to provide stakeholders an opportunity to view the final policy settings in plain English.

Based on the final policy settings, we will proceed with drafting the Part 43 legislation. We plan to publish a draft legislation package for public comment in June 2020, with the making of Part 43 proposed for December 2020.

In response to the feedback, we will develop a set of information sheets to clarify the issues highlighted as requiring further explanation. For the foreseeable future CASA Aviation Safety Advisors, along with CASA Standards Officers will continue to present and educate industry on the proposed policy during Engineering Safety Seminars around Australia. Locations and dates of the seminars are published on the CASA [website](#).