

AERIAL APPLICATION ASSOCIATION OF AUSTRALIA LTD.

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AAAA Submission CASR Part 138 - NPRM 15190S

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Summary

AAAA believes that significant additional work is required by CASA before the Part 138 proposed regulations will be fit for purpose and will not significantly damage the industry.

AAAA believes there is clearly a need for an independent review of the proposed Part 138, with special focus on the application of the Forsyth Report recommendations regarding regulatory development and the DAS Directive 01/2015.

AAAA fully supports the need for a Part 138 and also strongly supports the need for Part 138 to work together with Part 137 to provide a clear pathway for aerial work operations. However, while the classification of operations approach in Part 138 is represented as a significant simplification, when the detailed definitions are considered, it is actually a more prescriptive approach than under current regulations.

While this is not an insurmountable issue and to some degree is inevitable in attempting to match operational rules to significantly different operations, the problem is largely compounded by the prescriptive rather than outcome-based approach in proposed regulations. This appears to be strongly indicative of CASA's 'old' approach to regulating industry and is now inappropriate.

There is a considerable 'missed opportunity' in the proposed draft in that it does not deliver a broad simplification of aerial work operations.

The proposed rules also suffer from a lack of detail regarding supporting administrative approaches, including the relationship between the classification of operations, the details of the Part 138 proposed certificate and accompanying operational specification, and the requirements for an operations manual.

AAAA is particularly concerned with the proposed consequential amendments to Part 137 which have not been consulted with AAAA, and the introduction of performance requirements for rotorcraft that are prescriptive, will have massive cost impacts for industry and do not appear to have been adequately considered in the regulatory development process.

With the proposed Part 138, CASA appears to be repeating many of the errors identified in the Forsyth Report.

Key Issues

Lack of application of DAS Directive 01/2015

AAAA is deeply concerned with the lack of application of DAS Directive 01/2015 - especially for rotary performance requirements.

The lack of a clearly articulated, written safety case, based on real accident and incident data as a starting point, is problematical for the general approach of Part 138 and especially the new proposal to include helicopter performance accountability and requirements.

AAAA is strongly of the view that the current Part 138 should be reviewed independently to ensure the application of DAS Directive 01/2015 to the rule set.

If such a review cannot identify clear safety cases or substantiate the cost of such a significant change such as the introduction of helicopter performance requirements, then those sections should be abolished.

What are we aiming for?

What is the objective of the new Part 138? Having been a part of the various CASA working groups involved in looking at aerial work issues for over a decade, AAAA is concerned that the proposed rule-set does not have a clear purpose or goal and mostly represents a repackaging of existing requirements and the addition of new ones.

While AAAA has a clear understanding of the broad purpose of Part 138 in terms of its need to capture a range of operations not captured elsewhere, AAAA is not convinced that the detail of Part 138 provides a simpler or generally better approach to the regulation of aerial work operations.

One of the key objectives of a new Part 138 must surely be to provide a classification framework that eliminates the current CASA practice of ‘splitting hairs’ over very similar types of operations - and thereby creating complexity and cost.

AAAA is aware of a range of current interpretations - many from field offices - where unnecessary complexity is being created for no safety purposes. For example, CASA is currently requiring or has required the following operational specifications / approvals despite the obvious similarity of operations:

- Aerial application vs agricultural operations
- Aerial application vs oilspill
- Aerial application vs mosquito spraying not over agricultural land
- Aerial application vs firebombing vs firefighting (Part 61)
- Survey - geosurvey vs animal survey vs powerline survey

The inherent nature of aerial work operations is that each operation is likely to be different in some ways, but substantially similar in key respects.

Unfortunately, the proposed approach seeks to provide a veneer of simplification to 3 categories, only to require an additional 22 sub-classifications in the detail of the regulation, compounded by a prescriptive regulatory approach.

A Missed Opportunity

Rather than attempting to pin-down every single different type of aerial work operation through an exhaustive listing, AAAA believes that CASA has missed a significant opportunity to simplify regulation by identifying the key systems required for safety (eg qualified personnel and risk management) and then providing guidance material such as through an Acceptable Means of Compliance - at least for the simpler types of operations.

Many earlier discussions of various CASA Part 138 and Part 133 working groups identified the possibility of true simplification of the regulation of many aerial work operations (such as simple sling loads and survey) by the reliance on the licencing and competency provisions of

Part 61 and the provision of an Acceptable Means of Compliance from CASA that would describe one way - but not the only way - that the operations could be conducted.

This approach was attractive to industry because it removed the need for each company to create their own approach to simple tasks, and thereby removed the need to include such simple operations in the Operations Manual and to have it approved by CASA at considerable cost and time delay.

Such a standardised and simplified approach had the potential to address a lot of the issues now incorporated into Part 138, but appears to have been unilaterally abandoned by CASA.

For example, sling load, many survey operations, and a number of task specialist operations could be simplified by CASA placing a greater reliance on the qualifications it has issued to the crew (eg ratings and endorsements) and by publishing supporting AMCs that could easily be referenced in operations manuals.

In particular, AAAA is concerned at the loss of the intent of earlier discussions to make aerial work operations regulation simpler and more cost-effective.

Prescription versus Outcome Based Regulations

A comparison between the current Part 137 drafting style and that of the proposed Part 138 regulations makes it clear that CASA is not seeking to apply the less prescriptive style of regulations identified in the Forsyth Report and accepted by the Government as policy.

Part 138 seeks to impose a range of very prescriptive requirements onto operations. Again, this sits at odds with the Forsyth recommended approach to three tiers of regulation and an outcome based approach to rule-making.

A fundamental challenge for CASA remains and has been highlighted by the published work of the CASA Board and the DAS - CASA needs to stop being the 'big R' regulator and start working with industry towards simpler, more cost-effective regulations firmly based on real safety management.

At its simplest, this means CASA should reconsider regulations that seek to regulate activities that are already covered by other CASA regulations - including licencing and competency provisions - many of which are aerial work activities.

In detail, it means that the current Part 138 proposed regulations are too prescriptive and should be redrafted to be more outcome focussed.

Given the various Ministerial, Board and DAS statements regarding a new approach to regulatory development, Part 138 is clearly a part worthy of review in the light of those intentions.

Classifying Operations

While the decision to move all aerial application to Part 137 for both fixed wing and rotary is sensible, the ongoing potential for confusion regarding determinations of classification of

operations under Part 138 - especially by CASA field staff or the CASA Permissions Centre - has not been resolved satisfactorily.

It appears the sub categories in the Part 138 definitions are even more prescriptive than those under CAR 206, and may even create competing claims between Part 137 and Part 138 (see Table 1 below and Alternative Pathways section below).

Table for CAR 206 / Part 138 categories / Part 138 definitions sub-categories

CAR 206 Aerial work	Part 138 Categories	Part 138 Sub categories
Aerial survey Aerial spotting Agricultural operations Aerial photography Advertising Balloon flying training Ambulance functions Carriage for the purposes of trade of certain goods any other purpose that is substantially similar to any of those specified in subparagraphs (i) to (vii) (inclusive);	External load operation	Winch and rappel
		Sling
		Towing
		Powerline Stringing
		Powerline maintenance using an external platform
	Dispensing operation	Fire retardants (including water)
		Incendiary devices
		Food relief
		Fodder relief
		Lifesaving equipment
	Task specialist operation	Oil or chemical dispersants
		Stock mustering
		Animal culling
		Frost protection
		Search and rescue
		Surveying
		Photography
		Spotting
		Surveillance
		Marine pilot transfer
Emergency services	Transporting emergency services personnel	
	Transporting restricted persons	
		Any of the above for an emergency agency - but cannot find reference to establish this in the draft regs

One of the key problems the new regulatory system was meant to address was the difficulty of classifying operations based on risk management and in a cost-appropriate manner.

In the case of some previous CASA decisions, for example, this has led to ludicrous outcomes such as the need to recertify aircraft for oilspill operations because - in some CASA

officers' opinions - the type certificate statement including emergency services was not sufficient to align with CAR 206.

The cost to industry because of an 'interpretation' was significant - tens of thousands of dollars for each aircraft - for no safety outcome. The same aircraft with the same equipment and the same pilots operating under the same operations manuals were still doing the same work.

The only thing that changed was industry was poorer and the type certificate was slightly more prescriptive.

This is a salutary lesson regarding the caution that should be exercised when creating a range of very specific classifications and sub-classifications without a clear emphasis on the viability of the clauses referring to 'or other operations of a substantially similar nature' - that is also in CAR 206 but frequently ignored by CASA officers in making interpretations.

If the primary goal was to simplify and modernise the classification structure created by CAR 206 (and the contingent requirement for an AOC), then Part 138 appears to have largely failed.

Instead, AAAA is concerned Part 138 appears to replicate much of the arbitrary hair-splitting industry has experienced under CAR 206.

It is clear to AAAA that despite a grouping into 3 broad categories under Part 138 - this simply obscures the real classification of operations which can be found in the definitions of Part 138, which explains that each of these broad headings are informed by a further listing reminiscent of CAR 206.

In preparing this submission, it became clear that this more detailed structure is in many ways essential to describe the permissions to be given to operators because of the very interventionist and prescriptive culture of current CASA regulatory development. This is especially the case when combined with the likely need for a certificate to list the operations the company is approved to conduct.

Therefore, this calls into question the usefulness of the overarching grouping of operations into three categories. Clearly, there needs to be a listing somewhere of what a company can do, and if the broad 3 categories have to be further sub-divided - as they are in the definitions - then what purpose do they serve?

This problem is compounded by the lack of material from CASA indicating what a Part 138 certificate may contain or the approval structure to be used.

There remains open a fundamental policy decision that the operation of Part 138 hangs on - is there to be a broadly or narrowly defined operational specification attached to a Part 138 certificate, or is the role of the Operations Manual to be critical in determining what operations can be undertaken (ie a form of reverse engineering of capability from the Ops Manual to the ops spec.).

This is a case where, with some notable exceptions - especially in the carriage of personnel relevant to the aerial work operations (eg firefighters - it is difficult to see much advantage

being created by the transition to a new rule set - perhaps other than to support the ongoing trajectory of a regulatory reform program that has broadly failed to deliver efficiencies and simplification.

Certificates, Approvals and Operations Specification

A key issue is how the fairly broad 3 or 4 categories (4 if 'emergency services' is counted) proposed in Part 138 will translate into what operators have to have in their ops manuals and what the 'certificate' operational specification will actually allow.

For example, an operator may only want an approval to do baiting – but will they be required to have a manual/procedures covering all 'dispensing' – eg oilspill / incendiary dropping etc?

Alternatively, will an operator only have 'baiting' on their certificate - in which case we are back to the current system...

It appears from discussions with the CASA Project Officer that CASA is still working on finalising these critical details that should have been resolved first.

It appears commonsense to AAAA - for a range of reasons - that there should be a clear listing of what a company is approved to do on the Part 138 certificate.

Similarly, there is a strong lesson from the mistakes of the implementation of the new maintenance licencing suite in not providing a very clear indication of what a company or an individual is approved by CASA to do.

It already appears that the draft regulations anticipate there must be some form of approval - See 138.045 (4) and (5) - in which case it appears that the general clustering of operations under the three primary groupings is essentially meaningless.

There is an industry need for clarity around permissions under Part 138 to ensure:

- The company has a clear understanding of what it is approved to do
- Company personnel have a clear understanding of company operations specifications
- Clients can be given a clear understanding of company held approvals
- CASA 138 certificate approval processes are clear to ensure correct permissions can be applied for and given easily
- CASA staff can easily access what a company is approved to do

It is unacceptable that company personnel, CASA staff or clients would have to go through the Operations Manual to determine what a company is approved to do.

Alternative Pathways

AAAA has always supported the development of an 'alternative pathway' for those operators performing aerial work that have not come to that point through the aerial application or 'agricultural' (CAR 206) pathways.

AAAA has previously made a full submission to CASA on DP1507OS and written to the DAS (29 July 2015) regarding the packaging of firefighting operations and is relying on

CASA to implement the new rule-set to recognise agreements reached and undertakings provided to industry at the relevant meetings on this issue.

AAAA strongly supports the use of Part 137 for firebombing activities - both fixed-wing and rotary - and the use of Part 138 for other firefighting operations.

AAAA notes, however, that additional work is still required to clarify exactly what firefighting operations need to be covered by Part 138 and how they will be classified. This is significant in that some firefighting activities could be classified under existing categories including survey.

While it appears that the proposed structure permits various operations under Part 137 or 138 - depending on which is the more relevant rule-set - it will be critical for CASA to ensure it does not create confusion for CASA staff or operators.

It will also be critical with any replacement for CAR206 that CASA does not increase the potential for CASA field staff to interpret what head of power should be used for which operation.

For this reason, CASA should develop - in cooperation with industry peak bodies - a range of education and interpretation materials based on real life examples that clarify what operational approvals and which Parts are relevant to which operations and the pathways different operators may come from. The education material must be made available to industry well before the regulation commences.

Interaction Between Part 138 and 137

There is still considerable work required to clarify the interaction between Part 137 and 138 as noted in the section above.

In particular, AAAA is concerned with the potential confusion around the following issues and seeks additional clarification from CASA:

- Part 137 should include both rotary belly tank approval and sling permissions when used on Part 137 operations including both agricultural applications and firebombing.
- Part 137 should include oilspill operations

Interaction of Part 138 and Part 61

AAAA notes and strongly supports CASA's undertaking as a consequence of discussions regarding DP1507OS to rename 'firefighting' to 'firebombing' in Parts 61, 137 and Part 138.

Over time, this will require a revisiting of the underpinning competencies of the aerial application rating and the aerial 'firefighting/bombing' endorsement to ensure they reflect the new name. In particular, there will need to be a review of the recognition of prior learning accepted for the issue of these qualifications, depending on the pathway and experience of the candidate pilot.

Consequential amendments to Part 137 not consulted

In the same way that Part 61 made a range of significant amendments to Part 137 without consultation with AAAA - resulting in significant 'unintended consequences' now requiring exemptions - it appears that Part 138 takes the same approach.

The proposed amendments to Part 137 contained within the proposed draft Part 138 regulations have not been consulted with AAAA and the Association is now concerned at the potential for further 'unintended consequences' impacting on Part 137 operations.

For example, the proposed removal of the ability of a Part 137 operator to undertake an emergency response to a fire that is not under the control of an agency (see Part 137.175 (1)) could result in a significant loss of community protection.

AAAA members are sometimes called to 'private' fires - outside the control of State fire agencies - in places such as cotton module storage yards next to cotton gins. Clearly, State fire agencies would not assume control of such fires unless they escape the cotton module yard. Without the ability to respond quickly, millions of dollars of cotton could be lost as a direct result of CASA regulations.

This is an excellent example of a lack of CASA knowledge of real-world operations leading to a poor regulatory outcome for industry. Genuine consultation and teamwork appears to continue to be a problem for CASA regardless of the new philosophy of regulation statements and DAS Directive 01/2015.

AAAA has identified potential problems with the following proposed amendments to Part 137:

- 137.013 - new definition of 'aerial application material' - consider including a better list as per old 137 - but broader.
- 137.175 - AAAA has significant concerns regarding amendment to 137.175 and the loss of the ability to conduct fire operations outside the control of emergency services - for example fires in cotton storage areas adjacent to cotton gins at the request of the owner of the gin - or in any other circumstance that the emergency agency has not taken control of the fire - as per the current 137.175
- 137.186 - performance requirements - AAAA rejects this approach and believes the current approach is better focussed on risk management - replace with either nothing or a simpler rule as per current 137.180 and 137.185 - eg use of populous area concept / 200 feet at edge of aerodrome

Aircraft Performance Requirements

AAAA remains extremely concerned with the inclusion of helicopter performance requirements in Part 138.

This will undoubtedly have the effect of massively increasing costs for no identified safety gain.

In the case of helicopters, any requirement for twin engines as a consequence of consideration of the potential for engine failure only addresses one of a number of mechanical failure risk scenarios.

Many two-engine rotary aircraft still have one gearbox, tailrotor or drivetrain that could fail, but CASA seems to have placed a strong emphasis on engine failure alone and subsequent accountability without providing a clear safety case for doing so.

CASA should reconsider this approach in consultation with peak bodies and operators - especially those currently using single engine rotorcraft for aerial work operations that under Part 138 will require them to incur significant cost to upgrade to two engine rotorcraft or abandon an operation that they may have been conducting safely for many years.

In particular, CASA should initiate an independent review of this requirement that incorporates the direct application of DAS Directive 01/2015.

MOS - General

The MOS appears to be highly prescriptive and not at all outcome focussed - leading to the troubling conclusion that Part 138 will be far more complex than existing regulations.

It seems to AAAA that much of the material in the MOS is not, in fact, standards, but a further set of regulatory requirements that significantly increase the complexity of compliance.

AAAA believes an independent review of the Part should include the MOS and attempt to identify where content should be driven by a broader head of power that is outcome focussed and included in the regulations proper, or moved to guidance material to demonstrate one way of achieving compliance - but not the only way.

MOS - Risk Assessments - 140

While the MOS appears to be generally highly prescriptive for operators, it does not appear to be particularly prescriptive in terms of what type of risk assessment is required that will trigger either acceptance of compliance by CASA or any clear criteria as to what might constitute a risk assessment that is “appropriate for the nature, size and complexity of the operation”.

AAAA raises this issue because of CASA’s track record in field staff seeking to impose a different risk management strategy onto operators, without the same level of experience or knowledge of the operational risks as the operator.

While AAAA strongly supports the use of risk management in all aerial work operations, the lack of detail or guidance for CASA staff regarding the meaning of the term ‘appropriate’ must be addressed - either in the MOS (perhaps as a note) or through widely available additional material, including in the CASA Enforcement Manual.

MOS Part 19 - Dispensing

The MOS raised more questions regarding the potential confusion between Part 137 aerial application operations and Part 138 dispensing operations.

While AAAA understands the general limitations in place for the number of crew involved in Part 137 or Part 138 operations, CASA should give further consideration to ensuring that while there is appropriate rigour in determining which pathway is available to which operation.

For example, reference in 265.6 raises the dispensing of liquids, powders or fine grains. AAAA questions under what circumstances these type of products would not be more properly captured under Part 137.

MOS - Proficiency Check - 315

AAAA is concerned as to whether the type of operator proficiency check outlined here would meet the requirements of Part 61 operator proficiency checks.

The far more detailed requirements for operator proficiency checks under Part 137.240 are in stark contrast to the requirements in this part and AAAA believes there should be greater consistency between the two approaches - including simplifying the requirements in Part 137.240 to be as simple as the approach in the Part 138 MOS.

Further information

If you require any further information on the issues raised in this submission, please do not hesitate to contact AAAA on 02 62412100.

Yours sincerely



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