



Summary of Public Submissions Received on

NPRM 17-02 — Interim Small Issues 16/17 Rule Amendments

Prepared by Salote Raiwalui

Rules Drafter

6 September 2017

Table of Contents

General	1
Summary of Submissions	2
Detailed Breakdown of Submissions	3
Definitions of Major modification and Major Repair (Rule 1.1).....	3
Definition of CAA notice:.....	6
Part 21: Ensuring most relevant standards for aircraft design changes.....	7
The reportage of tonnage carried on cargo-only flights (Rule 12.151).....	10
Rule Part 61.....	13
Bi Annual Review of Airworthiness(Rule 91.615)	16
Hire or reward operations	18
Part 66 Issues.....	18
Requirements for leaving helicopter unattended (Rules 91.120 and 135.67)	18
Prohibition on manipulation of controls (rules 115.215, 115.613, 115.667 and 115.759).....	25
Landing Distance Assessment (Rules 121.221, 121.223, 125.233, 125.235, 135.233 and 135.235)	26
Emergency Electrical Supply Requirements for Single Engine Aircraft	28

General

Notice of Proposed Rule Making (NPRM) 17-02 was issued for public consultation on 20 February 2017, with a submission close-off date of 20 March 2017. The objectives of NPRM 17-02 were to:

- make minor amendments to various rules that are considered not significant enough in nature or impact to warrant their own rule proposal, and
- are more than editorial in nature, so would not qualify for an Omnibus rule change.

There were 11 distinct policy items as set out below:

- A Reviews of airworthiness for aircraft not used for hire or reward (rule 91.615)
- B Definitions of “Major modification” and “Major repair” (rule 1.1)
- C Ensuring most relevant standards for aircraft design changes (rules 21.83, 21.505)
- D Manipulation of controls (rules 115.215, 115.613, 115.667 and 115.759)
- E Maintenance on large balloons (rule 43.54)
- F Extended Diversion Time Operations (EDTO) requirements (Rule Part 121 Subpart N)
- G Landing distance assessment (rules 121.221, 121.223, 125.233, 125.235, 135.233 and 135.235)
- H Leaving helicopters unattended with rotors turning under power (rules 91.120 and 135.67)
- I Emergency electrical supply requirements for single engine aircraft (rule 125.361)
- J Requirements for training, operation and use of aircraft following a safety review of risk (Rule Part 61 Subpart I)
- K Reporting of tonnage carried on cargo-only flights (rule 12.151).

A copy of the NPRM was sent to:

- The Ministry of Transport
- The Aviation Community Advisory Group (ACAG)
- Internal CAA stakeholders
- External stakeholders who receive an alert from the CAA’s website.

The NPRM was notified in the Gazette on 20 February 2017, and also published on the CAA website on that same day and notified to the industry by automatic email alerts.

Policy items referred to in paragraphs B, C and H above have been withdrawn from the final rule making process. Policy item J (Requirements for training, operation and use of aircraft following a safety review of risk (Rule Part 61 Subpart I)) has been revised to limit the Director's powers to issue a notice in respect of Robinson helicopters only. It is envisaged that the original rule proposal for Part 61 will be re-submitted to the Minister to allow for safety training in respect of other aircraft, in the coming months. Policy item H (leaving helicopters unattended with the rotors turning under power) will also be re-submitted to the Minister in the coming months.

In this regard, this document is entitled the 'Interim Small Issues 16/17 Rule Amendments' in anticipation of the remaining policy items being finalised for rule making in the near future.

Summary of Submissions

A total of forty five submitters provided feedback on the draft rules. Several of the submitters provided feedback on more than one proposal, across various rule Parts. The majority of the feedback was provided in the NPRM submission form based on the following categories:

Acceptable without change:

There were seven submissions that accepted a proposal without change – namely in respect of airworthiness review being extended to two years for aircraft not operated for hire or reward, exclusion of large balloons from maintenance under a Part 145 organisation, change from 'cargo' to 'freight' for purposes of rule 12.151, SEIFR requirements under rule 125.361, and the use of CAA notices and performance-based options for landings distance assessments. There were four submissions that specifically noted 'no comments' for proposals regarding manipulation of flight controls, landing assessments for runways under Parts 121 and 135 and aircraft statistical data under Part 12.

Proposal is acceptable, but would be improved if the following changes were made:

There were six submissions made under this category. Four of the submissions were in respect of leaving a helicopter unattended with the rotors turning under power, one submission proposed the removal of helicopter sling loads from rule 12.151, and another suggested the removal of 'hire or reward' in rule 91.615(a).

Proposal is not acceptable, but would be acceptable if changes were made:

There were thirty two submissions received for various rule Parts under this category. Half of these submissions raised concerns regarding provisions on leaving a helicopter unattended with the rotors turning under power. The remaining submissions raised concerns regarding the proposed definitions for 'major' and 'minor' modification, 'CAA notice', extension of airworthiness review period to two years for aircraft not operated for hire or reward, and landing distance assessment for runways.

Proposal is not acceptable at all:

There were sixteen submissions received under this category. Six raised concerns regarding the proposed definitions for ‘major modification’ and ‘major repair’, changing the term from ‘cargo’ to ‘freight’, and ‘CAA notice’. Five raised concerns regarding provisions on leaving a helicopter unattended with the rotors turning under power. Three raised concerns regarding extending the annual review of airworthiness for aircraft not operated for hire or reward, from one year to two years. One submitter raised concerns regarding the additional reporting of tonnage carried on freight only flights under Part 12. One submitter thought that the proposed amendment regarding manipulation of flight controls was to ban the practice, rather than lift the current prohibition.

Detailed Breakdown of Submissions

Definitions of Major modification and Major Repair (Rule 1.1)

Submission:

“The crux of the proposed changes lies in the word “appreciable”. Any definition of the meaning of this word will be subjective and will lead to significant disagreement between affected parties.”

We do not agree with changing the definitions of Major repair and Major modification. This infers a lack of confidence of engineer and IA competence. There is no published evidence to support the need for these changes. We do not agree with the CAA being able to define “appreciably” within an AC. This should be defined in the rule.

Submission:

“We submit that the most effective way to modify this definition (Major Modification) would be to adopt the definition used by the FAA as it aligns more with the majority of aircraft and equipment that we have in our system and also with the majority of STCs that are used.”

Submission:

“Having a CAA advisory circular for Major modification and Major repairs is great but not acceptable as CAA staff change they change advisory circulars with little consultation and industry input.”

Submission:

“CAA’s intention to provide an interpretation in an AC of “appreciably” is of considerable significance and must be part of the rule.

The content of paragraph 3.2.2 relating to avionic modifications and repairs is also unacceptable as part of this amendment. The present rules regarding avionic requirements are very outdated, inconsistent and require considerable revision. .The cost of avionics

compliance for a VFR aircraft will involve considerable costs and therefore will require standard NPRM consultations.”

The submitter notes that the rule change does not address the larger issue of compatibility and consistency in the definition of major modification..

The first question is whether major design changes and major modifications will now become synonymous. If not rule 1.1. will need to include a definition of major design change and advisory material must clearly identify the differences between major modifications and design changes and who is responsible. If they do become synonymous, there are a number of implications...”

Submission:

“There is increasing resentment and anger from within industry at the level of paperwork needed for even a minor modification, when in the past a Licensed Engineer could look at the parameters and decide whether it would adversely affect flight or other characteristics of the aircraft...Nowadays it starts at around \$10000 to just have the paperwork done for something that was never a big problem. For Ag aircraft, such as Fixed Wing, or for Restricted Category, which are non-passenger, it is rather over the top to have to do a major mod with all the huge cost, when a suitably qualified licensed engineer could manufacture and install a simple mount to house the said unit. I have just been informed of a simple air connection mod to supply air to an underslung bucket costing \$40000....

The words “that might appreciably” are the way forward to have industry and the regulator come together to hammer out what is acceptable minor mods installed without the horrendous cost of.. paperwork. A simple 137 with the engineer’s drawings and installation procedures should suffice for most minor mods on Ag aircraft. For “major” mods, the submitter does not have any problem with but suggests that what is and isn’t ‘major’ should be defined better.”

Submission:

A submitter requested a clarification of the meaning “appreciably”, the absence of this currently makes any interpretation subjective and discretionary to the person making an adequate decision. This absence may impose a safety risk if the effect is undervalued or in other cases may imply undue burden (cost and resource) to the certification process. .The NPRM proposes a reference to an advisory circular. Perhaps a reference to FAA AC 21-101-1B ..is appropriate here?

The submitter further queried – The previous definition of major repair contained the wording “as a result of its embodiment” which is now crossed out but continues to require a sign off for conformity in Form 337 block 10. The proposed change to rule 21.505(a)(6) (i) and (ii) has the addition of ((D) “that the associated design change is fit for embodiment”. This suggests that the responsibility for the embodiment aspect of a modification is now intentionally shifted to the Part 146 compliance. Is this on purpose and if so, why?

Submission:

“The AEA supports the underlying tenets of the proposed change in the definitions of major repair and major modification. However the Association does not support the proposed definitions. The proposed definitions fail to achieve the intended purpose of international harmonization and will, as written, decrease safety in the New Zealand aviation industry. The internationally accepted norm for major design changes (modifications) is defined by the FAA in 14 Code of Federal Regulations 21.93(a) – A “minor change” is one that has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product. All other changes are “major changes” (except as provided in paragraph (b) of this section)”

The EASA guidance contained in AMC & GM for Part 21, Subpart D – Changes to type certificates may be the best international guidance available on major modifications.

It is important that a major change in type design is internationally consistent to the following 6 characteristics: [certificated] weight, [certificated] balance, structural strength, reliability, operational characteristics or other characteristics affecting the airworthiness of the product.

The CAA NZ proposal to specify the inclusion of “instrumentation, navigation systems, communication systems, electrical loads” is inconsistent with international norms and will cause significant confusion in international aviation trade, certification and commerce. And more importantly, is unnecessary. Installations of these products that result in an appreciable change in the type certificated product are already addressed within the 6 critical safety criteria. The globally accepted standards for defining major modification focus on technical (engineering) effects of change on the type certificated product which could lead to a catastrophic failure of the aircraft. The proposed inclusion of products is inconsistent with the engineering criteria of the regulation.

As equally important, the added emphasis on instrumentation, navigation systems and communication systems will discourage replacement and upgrades to legacy avionics systems resulting in aircraft flying older, less capable technology. While certainly not an intended purpose of the proposed change, the change as written will discourage avionics upgrades which is providing safety-enhancing situational awareness technology to the pilots. The technology that this proposal will discourage has a proven record of reducing accidents in general aviation operations...

Modernization of the fleet relies on voluntary equipage as new products are introduced into the marketplace. The unneeded and unnecessary emphasis on avionics systems, as proposed, will cause at a minimum regulatory confusion and at the maximum unnecessary installation expenses thereby discouraging modernization.

Submission:

“The proposed changes suggest that companies have different processes depending on the type of modification or repair intended. This is simplistic. Companies adopt the same rigorous process approach regardless of the type of modification or repair.

The NPRM 3.2.1 states that the definitions of Major modification and repair are not clearly drafted. We do not believe this is the case. The existing definition is very clear and supports a safety objective.

The additions to the FAA wording of “instrumentation, navigation systems, communication systems, electrical loads: are at odds with the overall definition in that they are systems and reactions to installation of those systems, they are not the effects of failure to correctly modify the aircraft.

We believe either the current definition is acceptable and does not need the introduction of the wording “instrumentation, navigation systems, communication systems, electrical loads”.

CAA response:

As a result of industry feedback on the proposed Part 1 definitions for “Major modification” and “Major repair”, the CAA recognises that additional work is required in relation to these and potentially other related definitions not currently addressed in the NPRM. The CAA accepts that the proposed definitions, by identifying specific aircraft systems, go to a level of detail below that intended by the current definitions’ inclusion of higher-level hazardous situations.

It is not the CAA’s intention to broaden the scope of these definitions, rather to provide additional clarification as to what modifications and repairs could potentially have an appreciable effect on an aircraft’s airworthiness, and therefore be considered as “major”. The CAA agrees that this intention may be better achieved by way of additional guidance material to support any potential rule changes. The CAA will revisit these definitions in light of industry’s feedback and will provide further draft proposals in the future.

Definition of CAA notice:

Submission:

A submitter supports introducing the term “CAA Notice” into CAR Part 1 “Definitions and Abbreviations”.

Submission:

The introduction of CAA Notices is not, in our opinion a “small change” as indicated by NPRM. Cabinet records show that they agreed to amend the Civil Aviation Act to provide rules that delegate to the Director the power to determine technical matters such as testing equipment, syllabi and examinations. These records do not appear to indicate authority to introduce new additions to the rules...It is common understanding of industry that this was the intent at the time of enactment...

We agree that there should be a means by which rules can be kept abreast of technological advances but this needs to be clearly defined in part 28(5) of the Act. We question, however, the need for the introduction of CAA Notices as the powers they bestow on the Director are already available utilising Airworthiness Directives.

We do not agree that CAA Notices, which are able to introduce new rules, were discussed or even thought of at the time when revisions to the Act was passed...

The ability for the Director to create new rules without going through the full legal process is not acceptable without clear, defined controls and procedures in place....

We believe CAA Notices as defined in the NPRM do not meet the intent of the rule and should be removed from the NPRM and go through a full industry consultation process.”

Submission:

A submitter has concerns on cost incurred where CAA notices will now be an additional category of regulations to address in addition to FAR/Cs, NZ CARs and ADs.

The submitter proposes to add procedural means to initiate prior consultation (via an NPRM or equivalent) with all Part 146 Dos within appropriate scope (who sign off SOC) on modifications, before issuing a mandatory CAA Notice.”

CAA response:

Some submissions have a different view of the background to the law reform which enacted section 28(5) in 2010 regarding notices and their uses and purposes or consider that the CAA should now consult with industry about CAA notices. The CAA respectfully does not accept this view. Section 28(5), the provision enabling this approach was developed via a transparent process, and followed a review by the Ministry of Transport (the Ministry) which indicated the need for change and flexibility in the aviation regulatory environment. Parliament has mandated these changes by enacting legislation. Consequently there is this power in the Act for the Director and others to exercise. The use of CAA notices is simply one tool for exercising this existing power.

Upon further reflection on the views expressed, the CAA has decided to remove the proposed definition of ‘CAA notice’ in Part 1, and remove references to ‘CAA notice’ and replace with ‘notice’, in Part 61. The removal of reference to ‘CAA notice’ in Part 61 does not prevent the Director from issuing requirements in a notice, under rule 61.365, for instance. It simply means that the term ‘notice’ will take on its ordinary meaning. Despite removal of the proposed definition of ‘CAA notice’, the CAA anticipates the use of the term ‘CAA notice’ as a catch-all term for any instruments issued under section 28(5) of the Act. More information is published on the CAA website.

Abbreviation of ‘**TALPA ARC**’:

Although no submission was made in respect of the proposed abbreviation, the CAA decided to remove this abbreviation upon finding that the Advisory and Rulemaking Committee (ARC) no longer exists.

Part 21: Ensuring most relevant standards for aircraft design changes

Submission:

“Rule Part 21.505 (6)(i) states that a major modification must comply with the airworthiness requirements of rule 21.31 applicable at the date of application for the modification.

Rule Part 21.118(b) allows an applicant for a STC may demonstrate that the changed product complies with an earlier amendment of the airworthiness requirements required by paragraph (a), but does not precede the airworthiness, aircraft noise and engine emission requirements incorporated by reference in the type certificate for any of the following:

- (1) a change that the Director finds not to be significant; or
- (2) each area, system, part or appliance that the Director finds is not affected by the change; or
- (3) each area, system, part or appliance that is affected by the change, for which the Director finds that compliance with an airworthiness requirement described in paragraph (a) would not contribute materially to the level of safety of the changed product or would be impracticable.

Can this same logic that is applied to STCs be applied to a Major modification approved under Rule Part 21.505?”

Submission:

Rules 21.102 and 21.118 have an identical title but seem to apply to Tcs and STCs respectively. Recommend the titles are reworded to clarify.

There is guidance available within the FAA system (FAA AC-21.101-1B) and similar guidance within the EASA and CASA systems to clarify the use and interpretation of the changed product rule. Recommend the publication of an Advisory Circular to provide similar guidance for the implementation of the change product rule within the context of the New Zealand aviation system. The list of example design changes provided within FAA Ac 21-101-1B are an extremely valuable resource in making a determination of significant or non-significant for a design change. Recommend a similar approach is taken for the New Zealand AC.

Paragraph 21.505(a)(6)(i) effectively mandates the rule amendments effective at the date of application for a major modification, which is consistent with the change product rule intent. However, the rule does not contain any provision to revert to an earlier amendment of the rule (no earlier than TCDS amendment) using similar criteria as outlined by [rule] 21.118(b). Currently the provisions of 21.118(b) seem to be reserved for TCs and STCs. Recommend 21.505(a)(6)(i) is updated to include/reflect the intent of 21.118(b) such that the certification basis for a major mod can be assessed in the same way as that of an STC.

Paragraph 21.505(a)(6)(ii)(A) effectively mandates the rule amendments effective at the date of application for a minor modification by direct reference to 21.31. Since 21.31(1)(i) explicitly states ‘effective at the date of application’ this would suggest any reference to ‘airworthiness requirements of rule 21.31’ means using the rule amendment at the date of application. The author suggests that a minor modification would be, by definition, a non-significant modification and would automatically qualify as a scenario whereby the applicant may demonstrate compliance with an earlier amendment of the airworthiness

requirement (not preceding the tCDS amendment. Recommend 21.505(a)(6)(ii) is updated to allow a minor modification to revert to an earlier amendment of the airworthiness requirement in a similar manner to 21.118(b).

Paragraph 21.505(a)(6)(ii)(A) effectively mandates the rule amendments effective at the date of application for a major/minor repair by direct reference to 21.31. The author suggests that the definition of repair is to return structure to the capability of its original OEM type certified configuration. As such it is not possible to certify a repair to an airworthiness requirement beyond that of the TCDS – to do so would be locally increasing the capability of the structure, which would arguably be a modification, not a repair. Furthermore, the industry standard design practice for repair design is based upon reverse engineering of the OEM structure. Recommend 21.505(a)(6)(ii) is updated to allow repairs to revert to the TCDS amendment of the airworthiness requirement.”

Submission:

“New rules 21.102 and 118 are introduced under Sub e pertaining to Supplemental type certificates which has the same effect as FAA FAR 21.101(a) and (b), often referred to as the “changed product rule”. Whilst it makes sense to implement the intent of this rule into the NZ CAR system. The submitter also identifies an important inconsistency for this requirement to be effective for STCs but not for modifications approved by way of form 337. Instead this NPRM in effect proposes to mandate modifications vis 337 to comply with the design requirements effective at the date of application (i.e. to the current amendments) by referencing to the amended 21.31 for major and minor modifications (21.505(a)(6)(i) and (ii)) and for major modifications (by adding (D)).

This is contrary to adopting the original amendment status as per the type certificate, which has been standard practice within the aviation industry and acceptable within the definition of “not significant” now incorporated within 21.118(d) or within the provisions of FAR 21.101(c) even if the modification is classified as major within the proposed new definition. This will:

Potentially impose an inconsistency with existing type certificates and not necessarily materially improve the level of safety with the product.

Cause undue burden (cost and resource among NZ CAA ACU and Part 146 Dos) to the certification process of approvals via Form 337 since the current amendment is generally more stringent than the original amendment form the type certificate.

Submitter’s proposal:

- An addition to the wording in 21.505(a)(6)(i) below (D): “applicable at the date of application for the modification, *unless the change is found to be not significant as provided in rule 21.118(b), (c) and (d) or a combination of these, or to an amendment status as provided for in subsection (e).*”
- The same amendment is made below (D) of 21.505(a)(6)(ii).

In order to follow the logic and harmonise with FAA, it would make sense to also allow sub (c) of FAR 21.101 within the NZ Part 21 system, which alleviates the requirement

from the current amendment for design changes for planes of 6000lb or less and non-turbine rotorcraft of 3000lb or less.

Submitter's proposal:

- An inclusion of a new subclause to 21.118(e) to the effect of FAR 21.101 (c).

Submitter's query:

Why there is no consideration to also include subs (d), (e), (f) and (g) of FAR 21.101 into NZ CAR 21.118, the NZ equivalent of the change product rule?

What is the purpose of rule 21.102 being separate from 21.118?"

CAA Response

With regards to the proposed changes to Part 21, the CAA's intention is for all applicants for major design changes (except repairs), irrespective of the means by which the design change is approved (F337, STC, Change to a Type Certificate etc.), to show compliance to the applicable airworthiness requirements at the latest amendment level, unless the change can be shown to be not-significant, not contributing materially to the level of safety, or impractical. For these reasons, the rule is not intended to apply to minor design changes and all repairs.

The proposed changes to Part 21 involve 'minor modification' and 'major modification'; of which new definitions were proposed for these terms in Part 1. In line with the intent to remove the proposed definitions at this stage, the CAA also intends to remove the draft rules for Part 21. When revised definitions for 'minor modification' and 'major modification' are finalised, the CAA may re-submit these amendments to Part 21 together with the revised definitions.

The reportage of tonnage carried on cargo-only flights (Rule 12.151)

Submission:

"In the background information on page 13 it says

"It is proposed to amend Part 12 to introduce a requirement for cargo-only operators to provide data to the CAA showing the tonnage of freight carried by the operator. The requirement would apply to operators of New Zealand registered aircraft being operated on domestic and international air operations, and of non-New Zealand registered aircraft departing from and/or operating within New Zealand on cargo-only air operations."

However on the rule amendment page the table does not include any requirement for non-New Zealand registered aircraft to report the total tonnage of cargo carried. Therefore can you please confirm 1) whether non-NZ registered aircraft operating cargo-only operations from, and within New Zealand will be required to report total cargo tonnage; 2) and if they are required to report, will they be liable to pay the proposed cargo only safety levy (as proposed in the CAA's funding review)?"

Submission:

“The additional reporting of tonnage carried on cargo only flights singles out large freight-only operators and adds administration burden and cost overhead to both the operator and the CAA that does not correlate directly to any specified improvements in aviation safety management or value add to end customers.

In relation to paragraphs 3.11.2 to 3.11.5 of the NPRM:

3.11.2 - “We are opposed to an operations safety levy for ‘freight only flights per CAA Proposal 13”

3.11.3 - “ This statement does not align with the proposed changes to Part 12 Subpart D Table 1. Per that table, the requirement to record total tonnage of cargo carried on all cargo-only flights would not apply to non- new Zealand registered aircraft, which would only be required to report number of flights. The proposal also does not impose any reporting on operations that carry anything else other than freight. It is also only targeting larger aircraft, as by implication “tonnage” would exclude any aircraft carrying less than one tonne of cargo. There is no reason given and no logic to suggest that cargo-only operations have any higher accident or incident risk than combined passenger and freight operations, neither is there any apparent correlation between cargo weight carried per flight and safety incidents for correctly loaded aircraft. Without any substantive evidence that such a correlation exists ...the change as proposed does not add any value to the main purpose or intent of Part 12 in terms of safety management.

3.11.4 – “We are opposed to that change (Triennial Funding Review) and do not believe that it is right to pre-empt any decision with this NPRM at this stage.

3.11.5 – “The proposal does not include any requirement for non cargo-only flights to report cargo volumes, which omits a significant portion of the economic activity, thereby negating the potential meaningfulness and usefulness to government or the public. The imposition of additional bureaucratic overhead on one sector of the cargo-freight community also has the potential to benefit the other sectors, swinging a slight competitive advantage in their favour, and ultimately providing the tipping point to shift the actual freight activity. An important basic principle of statistical methods is to ensure that the process of data collection in itself does not have an impact on the statistical results. For this reason, it is recommended that Statistics NZ continue to be responsible for any data collection and sampling of the cargo freight industry as a whole.”

CAA response:

Paragraph 3.11.3 correctly states that the policy proposal is to amend Part 12 to introduce a requirement for freight-only operators to provide data to the CAA showing the tonnage of freight carried by the operator. The requirement in the future will apply to operators of New Zealand registered aircraft being operated on domestic and international air operations and on non-New Zealand registered aircraft departing from and/or operating within New Zealand on freight-only air operations. The last bullet point for item two was inadvertently omitted. It should have read “the total tonnage of freight carried on all freight-only flights”.

Whilst it is true that the proposal does not impose any reporting on operations that carry anything else other than freight, it should be noted that air transport operations are already subject to reporting of passenger volumes and agricultural aviation is subject to reporting fertiliser volumes. The policy proposal merely brings freight-only operators into line in terms of reporting with other operators.

The CAA disagrees with the view that the proposal only targets larger aircraft because by implication “tonnage” would exclude any aircraft carrying less than one tonne of freight. Tonnage includes fractions of tonnes. The CAA also disagrees with the view that there is no suggestion that freight-only operations have a higher accident or incident risk than combined passenger and freight operations. The CAA notes that the recent large aircraft losses have been freight-only operators and not passenger transport operations (three of the five medium/large aircraft destroyed in accidents since 2000, were on freight-only operations). Thus there is an established safety risk with such operations which requires a substantial safety oversight by the CAA.

Submissions also refers to the New Zealand Transport Domain Plan released by the Government in 2016 and notes that the proposed rule change did not include any requirement for non freight-only flights to report freight volumes, which omits a significant portion of economic activity thereby reducing its meaningfulness to government or the public. While this is a valid point, CAA notes that its current policy proposal does substantially give effect to the intent of the Transport Domain Plan.

While it would be preferable to also include freight carried on passenger only flights, to date the evidence shows that the volume of freight carried on combined passenger and freight flights is relatively small and there is reasonable visibility of it. The higher priority in policy terms due to the higher volumes is freight-only flights as these account for most of the freight carried by air in New Zealand. The Transport Domain Plan is the joint effort of Statistics NZ and the transport agencies. It assumes that the responsible agencies (not Statistics NZ) are best placed to collect sector specific data through existing arrangements.

Submission:

“..we do have an issue with changing the wording from “Cargo” to “Freight” whereby CAA gets no recovery from cargo/freight/goods carried on passenger operations.

This carriage is extensive, does not fairly recover fees from like carriage, and immediately creates an unfairly competitive situation where one operator carrying the same type of goods does not pay the fee applicable to another operator..”

CAA response

Passenger carrying operations would be levied multiple times if levies were to be assigned for those operations. Currently passenger carrying operations are already levied for the number of passengers they carry whereas freight-only operators pay a participation levy and registration fees. The levying of freight-only operations proposal aligns with the outcome of the Triennial Funding Review and the CAA considers that the proposal creates a more equitable situation than the status quo.

Submission:

“Exclude helicopter sling loads from 12.151 Table 1.”

CAA response:

It is the CAA’s view that helicopter sling loads, where the helicopter is being used to reposition materials over short distances, are excluded from the expression “freight only flights”. Sling loads are considered commercial transport operations as opposed to air transport operations.

Finally a number of submissions expressed the view that in consulting on the policy proposal the CAA was in effect predetermining the outcome of the Triennial Funding Review.

The CAA disagrees with this view. Consultation with industry on a policy proposal assists in gauging the views of industry upon which the CAA makes informed decisions when finalising civil aviation rules. However since the NPRM was published, the government has made its decisions which support the outcomes of the Triennial funding Review.

Rule Part 61

Submission:

A submitter supports the use of CAA Notices in appropriate circumstances, as provided for by s28(5) of the Civil Aviation Act 1990.

In particular the submitter’s involvement with the New Southern Sky work to modernise the national airspace and air navigation has highlighted the need for rules to keep pace with rapidly changing technologies – both to enable the efficiencies and gains from adopting new technologies and to ensure the safety of the aviation system in the face of new technologies.

The submitter expresses that because a CAA Notice carries the same regulatory effect as a rule, the enabling rule should as a matter of principle require the CAA Notice to be subject to the same level of consultation as occurs with an NPRM.

The CAA Notice can minimise, or avoid, some of the bureaucracy associated with the making of rules, however consultation and notification as widely occurs with an NPRM should not be short-circuited.

The submitter’s view is that as a matter of principle, any rule enabling the issue of a CAA Notice should require the same publication and consultation as s34 of the Civil Aviation Act as if it were a rule being made by the Minister.

“Rule 61.367 sets out the process proposed to apply prior to issuing a CAA Notice (or amending an existing CAA Notice)...requiring the Director to “consult with the aircraft manufacturer and organisations representing affected parties or any other party that the Director considers appropriate”

This requirement to consult is considerably narrower in scope than would apply to a rule under s34 of the Civil Aviation Act. Further, the proposed requirement for the CAA Notice to be published (CAR 61.369) only applies as soon as practicable after a CAA Notice has been issued.

The submitter requests that the proposed rule 61.367 be amended to reflect the notification and consultation that would apply as if the CAA notice were a rule being made in accordance with s34 of the Civil Aviation Act.

CAA response:

The CAA disagrees with the submission with regards to consultation in all cases should follow the NPRM procedures under section 34 of the Act. Section 28(5) of the Act, in part, was enacted to add more flexibility in view of the more substantive and lengthier procedures associated with rule amendments. The NPRM procedures are appropriate and are mandated when rules require amendment. Initial notices and the enabling rules associated with them will still go through the normal NPRM procedures. It is expected that all rules enabling notices will require consultation on those draft notices. Consequently, the rule, which undergoes the NPRM process, will generally require consultation on notices, which may be different from the usual full NPRM process.

Submission:

“The introduction of CAA Notices is not, in our opinion a “small change” as indicated by NPRM. Cabinet records show that they agreed to amend the Civil Aviation Act to provide rules that delegate to the Director the power to determine technical matters such as testing equipment, syllabi and examinations. These records do not appear to indicate authority to introduce new additions to the rules...It is common understanding of industry that this was the intent at the time of enactment. We agree that there should be a means by which rules can be kept abreast of technological advances but this needs to be clearly defined in part 28(5) of the Act. We question, however, the need for the introduction of CAA Notices as the powers they bestow on the Director are already available utilising Airworthiness Directives.

We do not agree that CAA Notices, which are able to introduce new rules, were discussed or even thought of at the time when revisions to the Act was passed...

The ability for the Director to create new rules without going through the full legal process is not acceptable without clear, defined controls and procedures in place....

We believe CAA Notices as defined in the NPRM do not meet the intent of the rule and should be removed from the NPRM and go through a full industry consultation process.”

CAA response:

The CAA appreciates that Part 61 Subpart I (providing for CAA notices) may appear to be a significant change. However, for each new or amended notice issued under Subpart I,

there will be a dedicated consultation with industry on that notice. As such, Subpart I will not affect stakeholders until a notice is issued, and that notice will be consulted on prior to being issued. The CAA considers that a separate consultation on Subpart I would be an unnecessary duplication of that conducted for NPRM 17-02 and any future notices issued under this Subpart.

The CAA disagrees with the view that CAA notices will in themselves introduce new rules or empower the Director to create new rules. The purpose of a CAA notice is to allow the Director to issue requirements or determinations in a notice, relating to a matter specified in the rules. For instance, rule 61.365(1) allows the Director to issue a notice in relation to the operation and use of a Robinson helicopter for the training required before a person can manipulate the controls or fly a Robinson helicopter solo.

Upon further consideration, the Ministry of Transport made the decision to revise Subpart I to limit the Director's powers to issue a notice, in respect of Robinson helicopters only, in order to progress the amendment as soon as possible. The original proposal will be re-submitted in the coming months.

Submission:

“In our view, the introduction of notices is a significant change and there has been little prior consultation with either industry or ACAG. It is not a small change and in our view, should be the subject of a separate consultation process...

There may be some support to the introduction of notices, as there may be safety value in having a notice produced from time to time. However, the Director has other tools under the Civil Aviation Act and we need to understand, through a proper consultation process, why these are not adequate....

At a high level, we don't currently see why notices are necessary...

At a detailed level, the info provided is insufficient – we have been told informally and by email that the Director will not delegate authority to issue a Notice but this is not included in the NPRM. Confirmation is needed. The development of notices across rules should be consistent but this is not apparent in the NPRM. Notices will only be used with new rules, they won't be used retrospectively?

CAA response:

Refer to the CAA's response above regarding the introduction of notices being a significant change. With regards to the delegation of notices by the Director, the CAA confirms that this will not be the case. The CAA is establishing policies and processes to ensure that notices are developed in a robust manner according to the empowering rule, and will only be approved by the Director or the Authority (where the rule grants the Director or the Authority this power) and not be delegated.

The consultation provision

Submission:

The consultation provision is too narrowly framed, focussed as it is on consultation with the manufacturer, representative bodies or other parties. Also, that as it is currently framed it allows the Director to in effect determine the scope of consultation.

CAA response:

The CAA accepts these points and notes that the wording was based on s28(5A) of the Act. On reflection, the CAA acknowledges this provision could be interpreted more narrowly than is intended which is – consultation with the manufacturer, industry, and relevant government departments and agencies with an interest in or affected by the proposal. This is better expressed as public consultation. The CAA also accepts the need for consultation, not only on initial notices, but also the amendment of notices. The intention is that all proposals be published on the CAA’s website and other mechanisms as appropriate in each case. The CAA proposes to make these changes to the draft rules.

Bi Annual Review of Airworthiness(Rule 91.615)

Two submitters supported this proposal with no suggested changes. Whilst those that opposed proposal are as follows:

Submission:

“I consider the introduction of Bi Annual Review of Airworthiness as a mistake and is based entirely on economic factors. I process more than 60 reviews a year and there would be at least 20% that still have defects identified, granted many are certification, flight manual revision and general errors in recording and updating log of supplements etc. but there are a lot that do have some serious issues mainly from other maintenance organisations that are not doing the basics well...

The standard of some of the IAs out there is appalling. Until CAA sort out the standards of the RA process and bring the standard up to an acceptable level the annual review of Airworthiness should stand.”

Submission:

“The rationale for this change (3.1.2, 3.1.3) is not valid as there is a misconception that the ARA is a maintenance inspection event of the aircraft additional to 100hr annual inspection. The primary objective of the ARA is to review the maintenance of the aircraft carried out in the previous 12 months with particular attention to its records.

Having reviewed the logbooks of numerous not used for hire or reward aircraft around the country for pre-purchase appraisals the standard of logbook keeping and entries has a trend towards mediocre quality that do not reflect the aircraft status or maintenance carried out. Including entries by Pt 145 organisations where maintenance events have been carried out. The vast majority of the omissions and erroneous entries are very basic items that would

not occur if the certifying LAME read, understood and complied with the directions for logbook usage inside the front cover...

From 3.1.3 “for standard category aircraft not used in hire or reward operations imposes costs on operators that does not appear justified” – Why is this differentiation limited to aircraft not used for hire or reward? The standard for safety in the maintenance review of aircraft must be the same. What is the rationalisation that operators of aircraft used for hire and reward must absorb the costs of review annually?

Additionally, there has been an oversight with regard to rule 66.207 recent experience requirements. As proposed the majority of aircraft will go to 24 monthly reviews this will make compliance with rule 66.207 difficult as it was written for annual reviews. It will affect a significant number of IAs as the aircraft reviewed annually will change. There are numerous IAs who do less than 8 reviews now so they will not meet the experience requirements of 66.207.

The rationale of a financial saving for the operator because the review will only be carried out each 24 months is deceptive. At the 24 month period significant extra time will be spent reviewing twice the data as at the 12 month cycle. This additional time will be charged to the operator therefore the cost saving would be very minimal or nil.”

Submission:

A submitter questions the need for the rule amendment to include “not used for hire or reward” at all. Does the CAA data indicate that hire or reward operations have a greater incidence of maintenance-related issues than those not for hire or reward that would not be identified during 100/12 month maintenance inspections? The submitter thinks not.

“Hire or reward “ is not defined in the CAA Act or rules so interpretation issues are likely to arise unless the CAA provides clear guidance as to what constitutes hire or reward in various aviation contexts. A legal information bulletin or advisory circular may be needed. It would be better if the rule avoided this need.

For example, does the CAA consider these operations to be hire or reward?

1. Club training flights, where the aircraft direct operating and a share of fixed costs are charged to members via subscriptions and flying fees (instructors not paid)
2. Glider private owners pay their club for aero tows by club towing aircraft (tow pilots not paid).
3. Members of the public pay a gliding club for trial (introductory) flights (instructors and tow pilots not paid).
4. A privately-owned towing aircraft provides glider tows at a competition and charges the organiser for aircraft operating costs (pilot not paid).
5. An aero club charges its pilot members for hiring club aircraft.”

CAA response

Two submissions were opposed to the proposal on the grounds that the changes were made for economic reasons and that there were still errors and omissions made on current annual reviews. However the submissions revealed that these errors were minor or basic omissions, and there is no demonstration that this would affect the safety of aircraft. In view of that fact, and that reviews are effectively a second-check of the maintenance records and that 100 hours inspections are maintained, the CAA sees no reason to change its proposal.

Hire or reward operations

Two submissions queried the definition of hire or reward in the context of the proposal for non-hire or reward aircraft to move to biennial reviews of airworthiness.

A submitter sought to have clear guidance from the CAA as to what constitutes hire or reward in various aviation contexts and suggested a legal information bulletin or advisory circular may be needed. Its submission also sought clarification on whether various scenarios were hire or reward operations.

The CAA is separately working on a first principles review of hire or reward and the definition of crew member. As part of this project, the CAA will consider whether there is a need to provide further guidance on what hire and reward is by way of advisory circulars or legal information bulletins, or other appropriate means.

The CAA considers whether an operation is hire or reward on a case by case basis. For instance, the CAA recently considered the issue of whether glider towing in a club environment is hire or reward, and it will be communicating with the submitter on this issue and the scenarios raised in this submission in the near future.

Part 66 Issues

Submission:

One submission noted a possible oversight with regards to recent experience requirements for Part 66 license holders with an Inspection Authorisation (IA) certificate. Rule 66.207 provides a number of options for Part 66 license holders with IA privileges to maintain recent experience. The option relating to carrying out reviews of airworthiness is not limited to non-hire or reward aircraft. Consequently, no changes are required to Part 66 as a result of this proposal.

Requirements for leaving helicopter unattended (Rules 91.120 and 135.67)

Submission:

The submitter has a number of concerns regarding these changes as they will greatly impact the way they run their operation and potentially stand in the way of them taking all steps practical to mitigate risk.

The submitter feels it is simply not practical to apply these rule changes for the following reasons:

- Often in windy conditions it is not safe or practical to shut a machine down.
- Despite telling passengers to sit and wait until the door is opened, the submitter has had them remove their headsets so the submitter cannot talk to them and start disembarking the machine.
- By waiting for another 2-3 minutes to shut the machine down it will increase the likelihood of a passenger walking into the tail rotor.
- There is a higher likelihood of blade sailing once the engine is shut down.
- The submitter believes that most accidents that have occurred to prompt these rule changes. Have all been a result of poor airmanship and nothing that proper training and procedures wouldn't fix.
- There are also certain modifications that can be made to lock the collective and prevent it from inadvertently raising and standard procedures that can be applied to prevent this type of accident occurring in future.
- In a remote situation, if the pilot is not allowed to leave the aircraft while it is running it is going to be very difficult to manage any situation outside of the helicopter....”

Submission:

“In considering the proposed changes to this section, the submitter asks the basic question - Why is this only appropriate to helicopters? What about an Ag Fix wing pilot or a recreational pilot hopping out of his/her aircraft to talk to a farmer or to load/unload passengers?”

The current rule as it stands should be sufficient to alert the pilot that he/she has to take responsibility for themselves, passengers, third parties and machine, otherwise where will this ever end...The reference to the flight manual should be that unless it prohibits it, you can do it to best and safest practise... Coupled with a manual that clearly states how you leave a helicopter running with no one at the controls, and best practice as to how far you will move from the helicopter considering the circumstances, combined with other factors such as is it behind a closed off fence, or is it sitting on a pad with free access to other people, should be sufficient to create a sufficient level of safety for all involved.”

Submission:

“The proposal could be acceptable if:

- The “one size fits all” nature of paragraph 3.8.5 of the NPRM document was corrected;
- The vagueness of the situational descriptions in 3.8.6 of the NPRM document was corrected;
- An SOP allowing a pilot to leave an aircraft with rotors in motion was not limited to Part 135 operations only;
- SOPs included in an operator’s exposition were accepted rather than approved;
- The factors to be considered by the Director in [approving] an SOP were made specific, with clear criteria to indicate what would not be acceptable.

Economic/Commercial Factors

It goes without saying that there is a huge potential economic impact to operators should even some prohibition of pilots leaving aircraft with rotors in motion be progressed in CAA rules. Helicopter based tourism will be significantly affected and impacted, as a huge majority of operations allow for a pilot being outside an aircraft with passengers at remote, mountainous, scenic landing sites.

The economic costs associated with shutting an engine down, while not insignificant, are relatively minor when compared to the operational inefficiencies that will result from the time involved in this practice if adopted.

The option of carrying an additional crew member to disembark and embark passengers at remote scenic landing sites is too impractical to consider as this will lead to an absolute and unreasonable increase in costs and a minimum 17% drop in 85-90% of the revenue stream.

Safety Factors

There are safety factors that appear not to have been considered in this rule proposal:

- The risk of shutting down an engine at altitude at a remote mountainous landing site and not being able to re-start it. If this was to happen near the end of the day, or if weather closed in prior to another machine arriving, then risk of exposure along with other hazards presented by hostile mountainous terrain increases.
- Regularly during snow landings, aircraft heaters are turned on keeping the cabin warm and dry. ..If the engine is off, then there is no cabin heating capability. If cold/wet passengers are loaded into a cold machine there is a likelihood of cabin windows fogging or partially fogging after lift-off which represents a significant risk to the machine and its occupants. This risk would be further exacerbated should the landing site be subjected to bright out, flat light or blowing snow.
- Given the commercial and economic impacts [above] there is an associated increase in risk of undesirable behaviours with some operators possibly under-recording

engine start cycles. This would increase the risk of an unexpected mechanical failure.

Additional Maintenance

Excessive wear on engines caused by unnecessary additional starts will undoubtedly lead to an increase in mechanical problems being encountered. Additional starts...not only affect engines, but potentially, other dynamic components also. Further, batteries and starter generators will experience reduced longevity.

These issues will increase the cost burden on operators which could potentially lead to safety issues.

Submission:

“The rule is not acceptable the way it is currently written. Although I agree with the first part of the intended Part 135.67 rule, Part 135 operators should have a procedure of some sort in their Exposition for pilots leaving helicopters unattended with rotors turning under power (RTUP), I do not agree the Civil Aviation Authority should be stating what conditions are acceptable or not acceptable

...The decision for pilots to exit the helicopter with RTUP should be at the discretion of the pilot for the given situations they are in as risk levels vary immensely.

Many factors drive the necessity for pilots to exit the helicopter with RTUP. New Zealand is a unique operating environment [with] glacier snow landings and high amounts of scenic flights and commercial transport operations into remote areas. It would be very unwise and unsafe to make a pilot shut the helicopter down every time there is a need to unload passengers.

[Dangers include:]

Flapping blades – On engine shut down as the rotor system loses its energy the blades will start to flap. The rotor blades in windy conditions can flap down to shoulder height on an adult which would dramatically increase the chance of a passenger being hit by a blade tip as they move away from the helicopter. Several helicopters are not fitted with rotor brakes and if there is wind the blades will continue to windmill and flap for long periods of time. Engine starts and shut downs during windy conditions can be a nervous time for pilots. Wind will increase the risk of the rotor blades flapping down to a point where they will contact the tail boom causing both damage to the blades and the tail boom...

Turbines – Turbine engines especially are not designed to be continually started and shut down as it puts immense stress on various components. At peak times of the year certain operators would be needing to start the helicopter more than 20 times a day. Aside from the economics, the risk of the turbine having a hot start is increased, the risk of the pilot cutting corners in the warm up and warm down procedures to save time is also increased both of which could easily lead to an inflight engine failure further into the life of the turbine...

Passenger control – Passengers at times would need to unload themselves, another very dangerous scenario if pilots are unable to exit the helicopter with RTUP. [Dangers include]

passengers walking into spinning tail rotors or hot exhaust, passengers throwing objects, passengers not closing doors properly and leaving seat belts hanging out.

Over the years and literally hundreds of thousands of landings throughout New Zealand, pilots exited the helicopter with RTUP to unload passengers, load passengers, talk to rescue services plus multiple other reasons. Not one single passenger has been injured, in fact the passenger injuries have come when the pilots have been at the controls....I strongly feel that if the Civil Aviation Authority advocates that pilots must not exit the helicopter with rotors under power we will see a rise in injuries to passengers and ..fatalities in the years to come.”

Submission:

“It appears to us that the intent of the proposed rule is to restrict or prohibit Part 135 operators from leaving a helicopter unattended whilst on Part 91 operations.

We think that a robust SOP on the pilot exiting the helicopter with the rotors in motion is a good idea. It should address the obvious factors that will keep the helicopter crew and passengers safe. The practice of exiting a running helicopter is not new and has been safely practiced for a long time in this country. Safe operating procedures have been established and, as a result, few genuine accidents have occurred. There is no doubt rules should be formalized around the procedure but the CAA should be careful not to attempt to fix something which is genuinely not broken the result of which would create a huge impediment on helicopter operations in New Zealand.”

Submission:

The proposed additions of 91.120 and 135.67..are significant to helicopter operators and will have an impact in a variety of areas. The impracticality of having to shut a helicopter down each time the pilot needs to exit the aircraft would be huge. Also given frequent landings are made in remote, sometimes high altitude sights, the increased risk to passengers and pilot should the helicopter not restart greatly increases. The economic costs with starting and stopping the engine each time the pilot needs to exit the helicopter, whilst not insignificant are relatively minor compared to the operational inefficiencies that would be created with the increased time to achieve if this practice is adopted.

The submitter is of the view that some of the substantiating information contained in Chapter 3.8 of the NPRM 17-02 document is inaccurate:

Paragraph 3.8.1 is imply incorrect. If the collective is “down” and locked and the engine is set at idle, none of the conditions described will cause the helicopter to fly.

Paragraph 3.8.3, “the current rules do not provide operators with clear or sufficient requirements on this issue”. At the moment there is no current rule on this practice, this is what is now being proposed.

Paragraph 3.8.5, “Regulatory interventions will create a consistent standard for all relevant operators” The needs of different operators can be vastly different. For example, tourism compared with agriculture , commercial compared with private flights.

Paragraph 3.8.5 is complicated and leaves more questions than it answers. Any company with an SOP surely would assess all the risks associated with exiting the helicopters with the rotors turning[and] implement satisfactory risk mitigating techniques to prevent the helicopter inadvertently taking off with no one on board.

Also, “no other passengers or people near the aircraft” – what does “near” mean. What about if the passengers are escorted to and from the aircraft by crew or pilot?

-“a collective control lock is installed and applied” – what sort of collective lock? How does it get applied?

- “wind speed is minimal” – what is minimal?

“and the landing area is flat” – what does this mean” Is the slope landing limitations of the RFM acceptable as “flat”?

Summary

The current proposed rule additions:

- Do not appear to permit non Part 135 operators to develop an SOP that would allow them to have a pilot exit an aircraft with rotors in motion.
- Do not appear to allow a Part 135 operator to allow a pilot to leave the helicopter with the rotors in motion when carrying out Part 91 operations.
- Imply that the SOP would have to be “approved”. Is this going to be the case with all SOPs now or will it be “accepted” like the majority of an operator’s SOPs are currently.
- We think that a robust SOP on the pilot exiting the helicopter with the rotors in motion is a good idea. It should address the obvious factors that will keep the helicopter, crew and passengers safe.”

Submission:

“Approved SOP written to state PIC to lock down fictions and return to ground idle.

- Take note of the local winds not exceeding 25kts of wind.
- Machine to be well grounded in the snow.
- PAX unloaded and moved away to the front or the side outside the disc area.
- PIC to keep a watchful eye on machine at all times, relative winds and changing weather conditions.
- PIC to be in constant view and control of PAX.”

Submission:

“Under section 10 of the Company Exposition ... a pilot must not leave the helicopter with the engine running and rotors in motion unless:

- The throttle is in idle position,
- All frictions are tight,
- Wind gusting no more than 15kts+/-2 kts,
- Any persons other than those essential to the operation are well clear of the helicopter,
- He remains in sight of the helicopter at all times.”

Submission:

Three submitters expressed that the concept of something not being acceptable unless stipulated in the flight manual is a major change from current practice. In terms of being open and in consulting, it would be useful understanding why this change is proposed and then discussing it in an informed manner.

The submitters are of the view that in some circumstances it is safer to leave rotors running than to stop them especially on glaciers and in snow.

Submission:

A submitter shared that they had dealt with this issue (as below) in Dec 2015. CAA can audit/inspect any 135 certificate holder's SOP on this issue. Therefore, there is no requirement for a new rule.

We finished the year with a significant win for the helicopter community. CAA had identified that because a number of helicopters had flown off on their own, there was a risk that people nearby could be injured in such circumstances. They discussed the implementation of a requirement to make it illegal to leave the controls of helicopters whilst the rotors are in motion. We argued that this was not practical and would severely handicap helicopter potential by reducing utilisation and increasing cost quite substantially. We promoted the view that operators need to have the flexibility to leave the controls with rotors turning provided they have solid procedure documented and followed at all times. CAA has accepted this view.

It is not acceptable to 137/133 operators as only 135 AOC holders are permitted to have a SOP under this proposed rule wording.

Regardless..the proposed rule is already covered by CAR 91.109. No person shall operate an aircraft unless it is operated in compliance with the operating limitations specified in the aircraft flight manual. If the aircraft manufacturer has requirements for leaving a helicopter unattended, then they will have those requirements in the flight manual. End of story.

The proposed rule states that if aircraft flight manual does not specifically address the issue of leaving the helicopter unattended, then the practice is prohibited. This could then be interpreted as a precedent that “unless the flight manual actually permits a particular activity, then it is prohibited”. This is not an acceptable precedent to be set.

CAA Response

The submissions received on the proposal for leaving helicopters unattended appear to assume that the proposal is to prohibit the practice. The intent behind the rule is to ensure that the practice of leaving a helicopter unattended with the rotors turning under power is done in a manner that is safe for any person involved, or any risk to any other person or that person’s property is either eliminated or minimised. The proposed rules regarding leaving a helicopter unattended with the rotors turning under power are not inconsistent with ICAO standards Annex 6 Part III 2.2.42 which require helicopter rotors to not be turned under power for purpose of flight without qualified pilot at the controls.

The CAA appreciates the safety and economic arguments raised in the submissions. The CAA considers safety is paramount, but recognises in some circumstances safety can be maintained while allowing economic benefits to be gained. Consequently, the rules allow for leaving a helicopter unattended with the rotors turning under power where certain requirements are met.

The CAA interprets these submissions as supporting that the practice not be completely prohibited but that some measures are required to maintain safety and clarity. Upon further consideration, the Ministry of Transport decided not to progress draft rules 91.120 and 135.67 regarding leaving a helicopter unattended with the rotors turning under power at this time. It is envisaged that the proposed amendments will be re-submitted in the coming months.

Acceptable to the Director

A number of submitters indicated that the language of the proposed rules should reflect convention and provide for SOP “acceptable to the Director”. As the proposal regarding leaving a helicopter with the rotors turning under power has been withdrawn at this time, this feedback will be considered further prior to re-submitting this proposal.

Prohibition on manipulation of controls (rules 115.215, 115.613, 115.667 and 115.759)

Submission:

“I vehemently oppose the NPRM to revoke the ability of Part 115 pilots to allow passengers to enjoy the opportunity to take limited control of ..aircraft in flight...

I have been offering passengers’ control of my aircraft since 1997 with ZERO incident[s].

I have developed the following rules during my time providing instructional and joy rides.

Passenger manipulation of controls guide:

The following is suggested as the minimum considerations to be assessed by the Pilot-in-command as to the risk profile of allowing passengers to manipulate the controls:

1. Language barrier.
2. Physical size and strength of passenger in comparison to the PIC (Risk of passenger locking up on control).
3. PIC interventions: ability to intervene with both hands and in a timely manner.
4. Pendulum energy of glider: In all circumstances allowing a passenger to put any appreciable energy into the pendulum action of the glider is inviting high risk scenarios and is extremely ill advised.
5. Observing and manoeuvring around other gliders in a way that makes your intentions clear to other pilots and maintains good separation.
6. The PIC must maintain a high level of situational awareness, be thinking well ahead and anticipate all of the points above at all times.”

CAA response

The submission appeared to assume that the proposal was to take away the ability of Part 115 operators to offer this experience to passengers and opposed this on the basis of experience and safety considerations.

This is not the intention. The submitter subsequently confirmed (verbally) a misunderstanding of the intention of the rule change. The proposal is to consolidate existing rules in Part 115 which allow operators to offer this experience into one rule (proposed 115.215) and to open up the ability to offer to passengers the experience of manipulation of controls to all Part 115 operators. Currently the practice is restricted to some Part 115 operators (only operators to which rules 115.613, 115.667 and 115.759 apply affecting gliders, hang gliders and paragliders and simulated military operations). These rules are proposed to be revoked as they will be superseded by the proposed rule 115.215.

Landing Distance Assessment (Rules 121.221, 121.223, 125.233, 125.235, 135.233 and 135.235)

Submission:

“**R121.221(4)**: the term “appropriate training” is currently subjective as neither the FAA nor ICAO provide guidance on such training. There exist knowledgeable subject matter experts at various airlines and at both Boeing and Airbus. These persons have been involved over the course of the TALPA procedures development and materials from them have been shared across the industry. A submitter would like to understand what the Director deems as “appropriate training” in order to comply with this paragraph.

Rule Part 121 Appendix D1(a): :”destination aerodrome and at any alternate aerodrome”
– This is unclear whether this occurs at dispatch or in flight. There is a difference in how destination and enroute alternates are assessed. Reasoning – enroute alternates cannot be accurately assessed at dispatch as it would be impossible to determine an arrival weight to base the performance assessment. Diverting to an enroute alternate could happen at any point along the route, even returning to the airfield after passing it. The landing weight could also depend on fuel burn after an engine failure or depressurization diversion which cannot be easily estimated at dispatch. Only destination and destination alternates can be accurately and easily be assessed for landing weights at the time of dispatch.

Propose:

- (1) “at the destination and at any alternate” should be removed as redundant.
- (2) (1) should provide 60% of the landing distance available.
- (3) (2) should be removed as redundant and should provide “70% of the landing distance available for a propeller powered aeroplane; and
- (4) (d) the reference to “paragraph (d)” is incorrect and should be to “paragraph (c)”.

Rule 125.233: the same comments as above apply as the provisions are similar in structure.

Rule 125.233: the same comments as above apply as the provisions are similar in structure.”

Submission:

A submitter supports the removal of conflict with existing rules to enable methodologies developed by the FAA that align with revised manufacturer’s performance data and international practice.

The submitter notes that the rule is an enabling rule, and that procedures will be subject to approval from the Director.

Although not stated, it is probably intended that these methodologies will make use of the rule changes that come into effect in CAR Part 139 after 31 July 2018, providing for the measurement and provision of real-time surface condition reporting when a runway is contaminated using standardised reporting methods (CAR 139.103). The submitter wishes to support the use of real-time runway condition reporting where it is warranted and can be provided effectively and safely.

...The purpose of this part of submission is to draw attention to the fact that the safety and reliability of real-time runway condition reporting is not at a stage where the parties involved with the flight operating rules should make assumptions about the availability of data by relying on CAR 139.103.”

CAA Response

Two submissions were made in relation to the proposed landing distance assessment rules.

The CAA agrees with the conclusion made by the submission with respect to relying on rule 139.103.

In response to a submission seeking clarification on what “appropriate training” means, the CAA advises that the term ‘appropriate’ would carry its ordinary meaning in the context of training of personnel for the purpose of reporting of runway conditions, calculation of data and flight operations. In view of rapid technological developments in this area, the CAA envisages that the training will be flexible and fit for purpose to meet current and future needs.

To clarify further, the normal aeronautical MET operation is not concerned about runway surface conditions as that involves many non-MET aspects and aeronautical MET systems should not be used for assessing or communicating runway surface conditions.

As regards calculation of data and flight operating using TALPA procedures, the existing industry or manufacturer training is the only available training and is acceptable.

One submission also drew attention to the fact that for the purposes of Appendix D.1(a) it is unclear for the estimation of landing whether this occurs at dispatch or in flight. The submission indicated that there are differences in how destination and enroute alternates are assessed and concluded that only at dispatch can destination and destination alternates be accurately assessed for landing. The CAA agrees with this view since adding the words ‘for dispatch of’ has fundamentally changed the base requirement to apply only to dispatch, and not to landing requirements once the aircraft is airborne. Amendments are therefore made to Appendix D.1 in Parts 121, 125 and 135 to remove the phrase ‘dispatch of’ in paragraphs (a) and (c).

Emergency Electrical Supply Requirements for Single Engine Aircraft

A submitter supported this proposal with no suggested changes.