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## Too Many Inquiries, Policy Changes & Recommendations!!

Before the Green and White Paper are published, one has to ask, why would industry participants expect the policy in the White Paper ever to be implemented?

Like the last White Paper, it is a political party’s policy. The Coalition produced their Aviation Policy as soon as they were elected. The White Paper was forgotten.

With every change of government, the ruling party implements their policy.

Aviation has had more government and judicial Inquiries than any other industry within Australia.

### Why?

Since 1999, the number of recommendations, statements of expectations, policy statements that have been the result of these inquiries, etc., is astounding, many have repeated recommendations from one inquiry to the next.

The real reason they fail, except for the “*Advisory Report from the House of Representatives Standing Committee on Transport, Communications and Infrastructure May 1995*” [Morris Report], is because they conclude with recommendations, policy change and Minister’s Statement of Expectations.

Unlike other mature regimes, the first action should be to review which Act needs changing so the recommendations become permanent. The Morris Report recommended Act changes and they were made. In North America, both Canada and the US have political direction to change.

Canada has a [Cabinet Directive on Regulation](#) that is very comprehensive and ensures implementation.

The US mostly uses [Bills passed in both Houses](#) to direct the FAA to make specific regulations.

These methods ensure results. To obtain results in Australia, **Sec 98** of the Civil Aviation Act would need continual amendment by government to get specific aviation safety regulation changed by CASA. Other Acts, e.g. Airports Act, also need to be changed to bring about permanent change.

The portfolio department is responsible for most other associated aviation Acts & Regulations.

AMROBA recommends that DITRDC, as the portfolio department, should have a Steering Committee for all aviation legislative changes, irrespective whether the Department or an Agency is responsible for consulting with those affected.

The confidence of industry participants in government departments and agencies to implement directions, expectations and recommendations how industry expects them to be implemented is at an all-time low. Clear and concise standards seem to be a figure of imagination, not actual.

### Refocus civil aviation

Ever since the Civil Aviation Act limited the ICAO SARPs to matters of safety, there has been an issue.

Limiting the making of regulations to safety, without regulatory explanation of safety, has meant that entry standards, businesses regulations harmonising globally have not been a priority.

### Recommendation

*“The Governor-General may make regulations, not inconsistent with this Act:*

*(c) for the purpose of carrying out and giving effect to the provisions of the [Chicago Convention relating to safety](#);*”

**This has to change – reword to include:**

*“(c) for the purpose of carrying out and giving effect to the provisions of the [Chicago Convention and its Annexes assigned to CASA](#);*”

The Convention and its Annexes are all very safety focused. *Note: Assigned to CASA by government.*

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## The Global Aviation Regulatory System

The whole purpose of the Chicago Convention is for all member States to adopt global standards and practices, as they are developed by ICAO, so all nations operated to the same standards & practices. From an engineering aspect, all aircraft and components are maintained to same global standards so they can be moved from aircraft to aircraft without affecting the aircraft's airworthiness standard.

Not since the Department of Civil Aviation has our regulatory system been primarily based on ICAO developed Annexes Standards and Recommended Practices especially engineering.

Basically, the emphasis changed from ICAO's *Classification of Activities* to ICAO's *Classification of Operations after CASA's predecessors were moved to Canberra*.

Besides Commercial Air Transport & General Aviation (Class of Ops) the Classification of Activities include Engineering sectors of design/manufacturing, Design/Maintenance and Overhaul, plus Aviation Training, Regulatory Functions (devolved to industry), Airports, Air Navigation and Other Activities.

November 2022, Annex 8 was revised with significant changes that need to be adopted and implemented.

- *Part II – Procedures for Certification & Continuing Airworthiness*
  - *Chapter 6 – Maintenance organisation approval and Personnel standards*
- *Part IVA – Helicopters application pre 13 December 2007*
- *Part IVB – Helicopters application post 13 December 2007*
- *Part VA – Aeroplanes **over 750Kg** not exceeding 5700Kg/Application **pre 7/3/2021***
- *Part VB – Aeroplanes not exceeding 5700Kg/Application **post 7/3/2021***
- *Part VIII – Remotely Piloted Aeroplanes*
- *Part IX – Remotely Piloted Helicopters*
- *Part X – Remote Pilot Stations*

All these changes to Annexes are notified to each ICAO member State with an effective date:

*“The effective date is the date by which States must advise ICAO that they do not approve the amendment. If more than 50 per cent of States indicate disapproval, the amendment does not become effective, but this has not yet happened in the over 70 years that ICAO has been supporting global civil aviation.”*

From an engineering aspect, Australia, to participate in the global aviation design, manufacture and maintenance sectors, needs the regulations and standards promulgated to harmonise with these standards.

**Use of the text of the Annex in national regulations.** *The Council, on 13 April 1948, adopted a resolution inviting the attention of Contracting States to the desirability of using in their own national regulations, as far as practicable, the precise language of those ICAO Standards which are of a regulatory character and also of indicating departures from the Standards, including any additional regulations that are important for the safety or regularity of air navigation. Wherever possible, the provisions of Part II of this Annex have been written in such a way as would facilitate incorporation, without major textual changes, into national legislation. The provisions of Parts IIIA and IIIB of this Annex, on the other hand, are applicable to aeroplanes through the medium of national codes more comprehensive and detailed than the Standards, so that the Council Resolution of 13 April 1948 does not apply to Parts IIIA and IIIB. [airworthiness codes].*

*In plain English, use the text in the actual ICAO Standards and Recommended Practice in Commonwealth Regulations and Standards*

Australia does not have to adopt the 'airworthiness codes' because the CASRs refer to the FAR or CS airworthiness codes. States are also required to notify any differences that may exist between their detailed national regulations, practices and guidance material in the Airworthiness Manual.

e.g. In 2018, Annexes introduced new standards for *“Approval and global recognition of approved maintenance organizations and Design Standards.”* 2023 and global recognition of Australian maintenance organisation certificates or delegates approved designs have not happened.

If only we had government, its departments and agencies committed to implementing global aviation regulations and standards so businesses can compete domestically and internationally.

**THINK GLOBALLY – HARMONISE WITH ANNEXES** [Back to the Front Page.](#)

## Understanding the Convention's Annex Maintenance Release

If Australia had maintained harmonisation with, and implemented these Standards and Recommended Practices by the effective dates, then GA would still be a much larger sector than it is currently.

An important reason why AMROBA supports alignment with the Convention Annexes, is that operations outside Australia removes pilots learning the regulatory differences to operate in or through other nations. Staying harmonised also enables aircraft and aeronautical products manufactured/maintained in Australia to be accepted by other nations when the aircraft or aeronautical product is released to service.

### ***Major Issue with Maintenance Release Form 918***

The aircraft's Certificate of Airworthiness has to remain valid during the life of aircraft and this is achieved by an annual inspection or an approved inspection program to ensure aircraft remain airworthy.

The maintenance release, on the other hand, is a certification of completion of maintenance to return the aircraft to service.

The concept that a maintenance release itself is issued for the next 100 hours or 12 months, whichever comes first has caused some organisations to be unfairly taken to court when defects appear within that period of validity required by CASA maintenance release standards.

CASA itself has taken maintenance organisations to court because of this unique requirement.

CASA proposed to remove this unique requirement in 2000/2001 but dropped the amendment when a new CASA CEO/DAS was employed.

The CASA Maintenance Release Form 918 should be retained as a "***Flight and Technical Log***" provided for those registered operator's that opt to use it without the period of validity boxes.

All references to the period of validity of a maintenance release should be expunged from regulations, CASA standards and guidance material.

Adopt the Annexes requirements for a maintenance release to be issued post maintenance using either the FAA Return to Service system or EASA's Certificate of Return to Service system.

### ***Recommendation***

AMROBA recommends the adoption of the FAR RTS system will be more appropriate considering CASA is going to promulgate CASR Part 43 based on FAR Part 43. This change must be implemented to make CASR Part 43 operate in the same manner as in the USA.

### ***History/Background***

The Annexes "maintenance release", as depicted by current and past regulations for GA, is misleading when looking to be globally aligned. This needs to be corrected. DA741/CASA Form 918 is unique to Australia. It is a Flight & Technical Log with a MR certification on the top. Each clearing endorsement is an ICAO Maintenance Release just like the FAA (RTS) Return to Service and EASA (CRS) Certificate of Release to Service. A MR, globally, does not have a life, it confirms the maintenance was completed and certified by a LAME as completed. Adopt global standard ASAP to remove major differences.

**CAAP 43.** *"The maintenance release also provides a certification record for the purpose of recording maintenance **that has been completed during the life of the maintenance release.**"*

This form was originally based on the British defence force post WW II. A little dated.

### ***ICAO SARPs***

Annex 6, Part II relates to ***Aeroplanes used in General Aviation*** and Article 12 of the Convention states contracting States should keep their domestic requirements as close as practical to the Annexes. For instance, is Australia compliant/harmonised with the SARP's maintenance release standards.

- Section 1. *General*
- Section 2. *General Aviation Operations*
- Section 3. *Large and Turbojet Aeroplanes.*

*"It is to be noted that some Standards in this Annex incorporate, by reference, other specifications having the status of Recommended Practices. In such cases, the text of the Recommended Practice becomes part of the Standard"*

To understand the plain English approach used by ICAO, look at Annex 6, Part II Section 2.

## 2.6.1 Owner's Continuing airworthiness responsibilities.

2.6.1.1 *The owner of an aeroplane, or in the case where it is leased, the lessee, shall ensure that, in accordance with procedures acceptable to the State of Registry:*

- a) *the aeroplane is maintained in an airworthy condition;*
- b) *the operational and emergency equipment necessary for an intended flight is serviceable; and*
- c) *the certificate of airworthiness of the aeroplane remains valid.*

2.6.1.2 *The owner or the lessee shall not operate unless maintenance on the aeroplane, including any associated engine, propeller and part, is carried out:*

- a) *by an organisation complying with Annex 8, Part II, Chapter 6 that is either approved by the State of Registry of the aeroplane or is approved by another contracting State and is accepted by the State of Registry, or*
- b) *by a person or organisation in accordance with procedures that are authorised by the State of Registry.*

*and there is a maintenance release in relation to the maintenance carried out.*

2.6.1.3 *The owner or the lessee shall ensure that the maintenance of the aeroplane is performed in accordance with a maintenance programme acceptable to the State of Registry.*

[Note: In both cases, it relies on the procedures that are either issued or authorised by CASA]

## 2.6.4 Maintenance Release

2.6.4.1 *When maintenance is carried out by an approved maintenance organisation, the maintenance release shall be issued by the approved maintenance organisation in accordance with the provision of Annex 8, Part II, 6.8.*

2.6.4.2 *When maintenance is not carried out by an approved maintenance organisation, the maintenance release shall be completed and signed by a person appropriately licenced in accordance with Annex 1 to certify that the maintenance work has been completed satisfactorily and in accordance with data and procedures acceptable to the State of Registry.*

[Note: Annex 8, Part II, 6.8 states: a maintenance release includes b) the date such maintenance was completed]

Section 3, Large and Turbojet Aeroplanes is the same as 2.6.4.1 & .2 plus the following:

3.8.5.3 *when maintenance is not carried out by an approved maintenance organisation, the maintenance shall include the following:*

- a) *basic details of the maintenance performed;*
- b) *the date such maintenance was completed; and*
- c) *the identity of the person or persons signing the maintenance release.*

It is important to note that a 'maintenance release', however called, is only related to the scope of work being signed for; it is not a declaration of airworthiness of an aircraft.

For instance, instead of looking at the EASRs or FARs, Canadian Regulatory Standard 571.10, Maintenance Release:

*"Pursuant to section 605.85 of the CARs, where an aircraft has undergone maintenance, a maintenance release with respect to maintenance performed shall be completed prior to take off in the affected aircraft.*

*It is a declaration that, with respect to the maintenance performed, the performance rules of section 571.02 of the CARs have been complied with and the applicable standards of airworthiness have been met.'*

## ICAO Airworthiness Manual

### 7.9.2 Requirements of Maintenance Release

A maintenance release is a certification which includes:

- a) details of the maintenance carried out including detailed reference of the approved data used. Where appropriate, a statement that all items required to be inspected was inspected by a qualified person who determined that the work was satisfactorily completed;
- b) the date such maintenance was completed and the total flight hours and cycles;
- c) when applicable, the identity of the AMO; and
- d) the identity and authorization of the person signing the release.

## Conclusion

CASA identified this as an issue during the 1990s. This change would provide aircraft records that comply with ICAO Annexes and the FAA system as used or recognised by the majority of ICAO contracting States. These issues have to be addressed before CASR Part 43 is made. [Back to the Front Page](#)

## Who is Responsible for Safety in Aviation

To ‘err is human’ has been around since the 1770s and it infers that it is good people are working in bad systems that need to be made safer.

To reduce the human error rate, aviation has, over time, raised the personal education and skill standards to reduce human errors. This is very evident if the ICAO Aircraft Maintenance Engineers Training Standards and Pilot Training Standards are monitored over the years.

Aircraft and its components have continually improved over the decades with ever greater reliability.

In addition, Artificial Intelligence has been continually built into the aircraft and its systems. It is also built into the testing and associated support system to remove the human element from errors

Reliability has introduced complacency, a human factor because the “bad” system is now so “good”.

The continuing improvement in materials used in aircraft has reduced the amount of work required to keep aircraft airworthy during its life cycle.

Even aircraft design standards are moving to “consensus standards” where the designer makes a statement that if an aircraft or component is manufactured to the design it will be safe.

For in service aircraft there are two aspects, continual maintenance and servicing confirming the aircraft conforms that it complies with the design standards and it is serviceable. This releases the aircraft to the owner & pilots.

AI is so advanced today it can take-off, cruise and land an aircraft without a pilot. Some new technology aircraft will have a ‘pilot’ on the ground flying an aircraft or, in some cases, monitoring the flight completely managed by AI.

However, as experience has demonstrated, ever so often because of an unforeseen incident, this AI fails and an experienced pilot on board has saved countless lives.

Maintaining new technologies, especially those miniaturising the AI equipment, fast becoming available in general aviation is changing the maintenance of these more reliable products.

For those that have experienced it, small aircraft are being retrofitted with cost effective high tech avionic packages that have improved safety; or has it?

### Summary

So “good” systems don’t become “bad” systems, they need to be continually improved and key personnel like the LAME and the Pilot need to be provided with continually improving knowledge and skills so human errors are reduced to a minimum.

Today, modern regulatory systems are providing clarity on the responsibilities of those that approve aircraft/systems/parts designs, manufacturers of certified designed products, persons returning the aircraft or part to service and the pilot operating the aircraft.

What is missing nowadays is a discussion on insurance of aircraft and personnel in general, especially those that hold regulatory responsibilities.

### Liability

Whether someone is an independent contractor or an employee depends on a number of indicators. These include:

- the amount of control over how work is performed;
- financial responsibility and risk;
- who supplies the tools and equipment;
- ability to delegate or subcontract work;
- hours of work; and
- expectation of work continuing.

Liability insurance protects you against financial loss if your actions, your negligence or the condition of your property is found to cause a person to be injured or killed, or a person's property to be damaged or destroyed or they suffer loss as a result of relying on your services or advice.

### Conclusion

If you are issuing and/or signing a return to service, you need to understand that you can be held liable if an accident or incident happens and others are involved.

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