

Senate Review CASA – 2020 – Submission 1 Continual Restructure of CAA/CASA by each CEO.

Ever since the CAA was created in 1988, every new CEO restructures the Authority as an answer to multiple reviews and inquiries that this Authority has been subject to. Every restructure has seen experienced aviation technocrats leave the Authority. This loss of regulatory experience is deskilling the Authority so proper development of a harmonised regulatory system with the global aviation industry has not yet been achieved.

ICAO states: "To effectively fulfil its responsibilities, the State civil aviation system must be properly organized and staffed with qualified personnel capable of accomplishing the required wide range of technical duties involved in safety oversight.

All State <u>technical personnel</u> authorized to ensure the maintenance of competency and to conduct a surveillance or safety oversight function, as applicable, <u>must possess appropriate credentials identifying them as technical experts</u> employed by the State [Australia] authorities, with the right to unhindered access to inspect aircraft, documents, aerodromes, air traffic services and other relevant facilities, as well as normally restricted civil aviation-related sites."

Solution

The solution will not come from within CASA or its Board, government action required.

To stop this continual restructuring of CASA by its CEOs, government must identify the basic ICAO Authority Technical Divisions, relevant to Australia's aviation industry, in the Civil Aviation Act. This would stop the continual restructure by every new CEO and the loss of valuable regulatory experience from within CASA. (see USA Act)

The Basic Divisions appropriate for Australia:

- 1. Product Certification (design, aircraft, aircraft parts, etc.),
- 2. Airworthiness (maintenance & manufacturing, etc.),
- 3. Operations (commercial, non-commercial, sport & recreational, etc.),
- 4. Personnel licensing (Pilots/Maintenance, etc.)
- 5. Aerodromes, airports, etc.
- 6. Airspace, (domestic, international, etc.)
- 7. International technical agreements. (open trading markets for Australian aviation businesses)

Each Technical Division would be responsible for promulgating harmonised standards, entry control and provide regulatory oversight of those approved. The creation of jobs should be a priority when each Division creates cost effective "aviation safety standards".

Once the Act is amended, industry will be dealing with a stable government agency whose structures and aims have been defined – international design, parts manufacturing and MRO agreements will then open the Australian aviation industry to global markets.



Senate Review CASA - 2020

Senate Submission No. 2

Submission to Overcome Continual Inquiries into CASA, Government Departments & Associated Agencies.



Submitter: Aviation Maintenance Repair Overhaul Business Association, Inc.



AMROBA SUBMISSION TO SENATE INQUIRY – 2020 STATUTES

Australia's aviation legislative, regulatory and administrative system is fundamentally flawed causing the Civil Aviation Safety Authority (CASA), and its predecessor, to be regularly subjected to *Inquiries & Reviews*, of all kinds, since its inception in 1988. No other Government Department, Agency or regulatory framework has been subjected to as many *Inquiries/Reviews* over the past 20 odd years.

During this period, the ability of the industry to produce pilots and aircraft maintenance engineers has continued to decrease to the point this country now suffers with a pilot and maintenance engineer shortage. Past *Inquiries/Reviews* have made hundreds of recommendations, apparently without success to improve industry participation, so CASA, and industry, are once again subjected to another Government CASA *Inquiry*.

WHY?

This *Inquiry* asks whether the Civil Aviation Act is "fit for purpose." AMROBA contends that the main reason that many **Inquiries** are is the Civil Aviation Act and Regulations are not 'fit for purpose'.

The current functions of CASA that are prescribed in Section 9 of the Civil Aviation Act that relate to the "safety related elements" of "operations of aircraft", i.e. The ICAO "State of Operator" functions and responsibilities limited to safety related elements. This narrow function is why aviation is not flourishing — CASA has not been properly enabled to perform the functions of a National Aviation Regulator.

9 CASA's functions

- (1) CASA has the function of conducting the safety regulation of the following, in accordance with this Act and the regulations:
 - (a) **civil air operations** in Australian territory;
 - (b) the operation of Australian aircraft outside Australian territory;
 - (ba) ANZA activities in New Zealand authorised by Australian AOCs with ANZA privileges;

This function is the partial function of an ICAO "State of the Operator" only.

- Australia also designs aircraft, components and parts.
- Australia also manufactures aircraft, components and parts.
- CASA also has the function of Airspace and Aerodromes.

Therefore, where are the ICAO State's functions and responsibilities for:

- 1. "State of Registry";
- 2. "State of Design" and "State of Manufacture"
 - a. "Maintenance" is a subset of manufacture & operations.
 - b. ICAO is currently transferring maintenance organizational requirements from the Operations Annex 6 to the Airworthiness Annex 8 of the Convention.
- 3. Airspace/Aerodromes Administration should also be a function of CASA.



Table of Contents

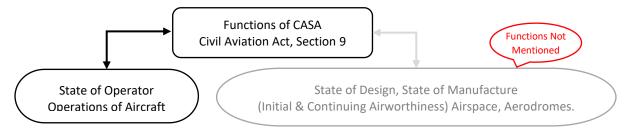
Table o	of Contents	3
Part 1 -	– Aviation Act & Regulations	0
1.1	Functions of CASA	0
Reco	ommendation 1: Add to Section 9(1) of the Civil Aviation Act	0
1.2.	Convention Compliance	1
1.3.	Aviation Statutes Confusion/Duplication	2
Re	ecommendation 2:	4
1.4.	CASA's Convention Obligations and ICAO Responsibilities	5
Re	ecommendation 3:	5
1.5.	Convention Excerpts	6
Uı	niformity of Regulations and Standards	6
Re	ecommendation 4:	6
1.6.	ICAO – Responsibilities of the State of Registry	7
1.7.	ICAO – Responsibilities of the State of Design and the State of Manufacture	8
ICAO	0 1.2.1. State of Design	8
1.2.2	2. State of Manufacture	8
1.8.	Functions of a Flight Safety Standards Department (ICAO Doc 9745, 3.4.3)	9
1.9.	Airworthiness Organizational Chart (ICAO Doc 9760)	9
1.10.	Objective of (NZ) Authority (Act Section 72AA)	10
Func	ctions of (NZ) Authority (Act Section 72B)	10
Append	dix A Inquiry Terms of Reference	11



Part 1 - Aviation Act & Regulations

1.1 Functions of CASA

NB: Australia's international aviation Convention Functions & Responsibilities are more than the restrictive "safety related" approach of the Civil Aviation Act.



The Department of Infrastructure, the government's portfolio Department, states, on its website, that CASA has the responsibilities for the following Annexes to the Convention:

Annex	Description	Agency Resp	Function/Standards
ANNEX 01	Personnel Licensing	CASA	Ops/AW
ANNEX 02	Rules of the Air	CASA	Ops/Airspace
ANNEX 06	Operations of Aircraft	CASA	Ops/AW
ANNEX 07	Aircraft Nationality and Registration Marks	CASA	AW
ANNEX 08	Airworthiness of Aircraft	CASA	AW
ANNEX 10	Aeronautical Telecommunications	Airservices/CASA	Airspace/Stds
ANNEX 11	Air Traffic Services	Airservices/CASA	Airspace/Stds
ANNEX 14	Aerodromes	CASA	Airports
ANNEX 18	The Safe Transport of Dangerous Goods by Air	CASA	Ops
ANNEX 19	Safety Management	CASA	All

To provide clarity and permanency, it is recommended these "functions" be included in the Civil Aviation Act, like other countries, as "Functions" of CASA. All Annexes specify the <u>minimum</u> standards to be adopted and the need for government regulatory oversight.

The current function of CASA, focuses too closely on "safety related elements of aircraft operations", without specifying other functions which are important if government supports the export of Australian aviation manufactured goods and aviation (maintenance) services.

Aviation is a job creating industry, but only if we also have CASA focusing on opening trading markets by obtaining recognition, in our own rights, of Australian (CASA) aviation documents and Australian manufactured aircraft, parts and maintenance services. This will open Australia's aviation manufacturing and maintenance potential to access foreign markets.

Recommendation 1: Add to Section 9(1) of the Civil Aviation Act

- "(bb) the **design** and **manufacture** of aircraft and aeronautical products including Australian designed/manufactured aircraft operating outside Australia.
- (bc) the **continuing airworthiness** of aircraft and aeronautical products registered in Australia, including Australian designed/manufactured aircraft outside Australia.
- (bd) to **enter into** technical or operational arrangements, or both, with civil aviation authorities of other countries to benefit Australian businesses.
- (be) Aerodrome/Airspace administration within the Australian territories."



1.2. Convention Compliance

As the State of Registry, Design and Manufacture, as well as Operator, there are major critical safety functions to be performed by CASA related to Registry, Design & Manufacture and also responsibilities to the State of Design and/or Manufacture for foreign designed/manufactured aircraft that have been registered in Australia.

ICAO: "The public interest would best be served by a balanced approach, where both the State [government] and the aviation community <u>have clearly defined responsibilities</u> for the safe and efficient conduct of their functions."

Important elements of the Convention are Articles 12, 37 & 38. Article 12 is important when defining domestic, as well as international obligations to enable participation in the global aviation system.

Convention Article 12

"Each contracting State undertakes to keep its own regulations in these respects uniform, **to the greatest possible extent**, with those established from time to time under this Convention."

- **Article 12** dispels the theory that Australia only has to apply ICAO aviation requirements to our international aviation operators.
- **Article 37** clearly states that the government should, as close as practical, maintain uniformity with the Annexes Standards and Recommended Practices and Procedures.
- **Article 38** provides a method to lodge a difference when a government cannot meet the ICAO minimum Standards and Recommended Practices.

When compared to New Zealand, see later article, and other mature aviation nations' Civil Aviation Acts, the Civil Aviation Act does not clearly specify the functions and responsibilities of CASA for Australia to meet its ICAO obligations, nor does it clearly demarcate government and the aviation community responsibilities for the safe and efficient conduct of their functions.

As an ICAO contracting State, also being a State of Aircraft Registry, State of Operator/Service Provider, State of Design, State of Manufacture and State of Airspace Administration and Aerodromes, each element includes additional functions, obligations and responsibilities of CASA.

These are detailed in ICAO documents such as Doc 9734 Safety Oversight Manual, Part A – The Establishment and Management of a State's Safety Oversight System. This document details the eight elements of a safety oversight system that relies on the "primary aviation legislation" (Act) and specific operating regulations.

- Airworthiness Manual (Doc 9760) engineering guidance, design, manufacture and maintenance
- Manual on the Competencies of Civil Aviation Safety Inspectors (Doc 10070)
- Plus, several more Documents and Manuals.



1.3. Aviation Statutes Confusion/Duplication

To understand the reason why there are continual reviews, the Senate committee has to understand the endless political and lobbyists pressures that were applied in the formation days of the Civil Aviation Authority.

The obligations and responsibilities of an ICAO compliant aviation Authority were, in the late 1980s, lobbied <u>against</u> by sectors of the industry, and some politically, that wanted the aviation regulator to be limited to safety related matters only. This is obvious when reading the current Act. This is not beneficial to the engineering fields.

Instead of adopting the obligations of the Conventions for an ICAO 'Contracting State', many wanted the new CAA to be limited in its capabilities to safety related matters and removal of the economic restrictions that had been applied generally under the two-airline policies of the past. The intentions were right – the results were wrong.

Initial Failure of Regulatory System

The transition from Department to a government Agency meant a new Act and adoption of certain Air Navigation Regulations as Civil Aviation Regulations in 1988. However, the regulations that were made as Civil Aviation Regulations did not provide the head-of-power for Annex requirements that enabled many general aviation businesses, e.g. pilot training and maintenance, to exist under the CARs. What was covered by the Air Navigation Regulations and Orders was not included in the CARs.

The failure to maintain these previous regulatory provisions had a direct negative effect on the training of pilots and the "cottage" maintenance industry maintaining many general aviation aircraft. Additional costs and administrative processes were applied to these small businesses by applying larger business requirements. This regulatory change disenfranchised many individuals, operators and organisations that were approved under previous regulations but did not have the same regulatory provisions in the new Civil Aviation Regulations.

A result of lobbying by medium size businesses removed cost effective opposition.

Small direct-supervision pilot training and maintenance providers were approved by the Authority requiring compliance with promulgated standards.

In addition, many lobbyists during the 1980s/1990s, with some political support, were adamant that there should be a two-tier legislative system (Act & Regulations) supported by advisory documents.

The inability of the CAA to provide this two-tier regulatory system was confirmed in the 1995 amendments to the Civil Aviation Act that introduced Section 9(1)(c) into the Act to enable CASA to develop and promulgate "aviation safety standards" as a third tier. The intention was a three-tier regulatory system supported by industry.

- (1) *Act*, plus (government made)
- (2) Section 9(1)(c) **Aviation Safety Standards** & (developed & issued by CASA)
- (3) Section 98 *Regulations*. (government made)

Australia's general aviation industry 46th Parliament Submission 10



Note: Very similar to the legislative structure of Canada and the previous Act, Civil Aviation Regulations and Civil Aviation Orders.

Basically, government provided a three-tier system in 1995 that should have been properly adopted and implemented.

What wasn't clarified in the Act is the Section 9(1)(c) *Aviation Safety Standards* should be referred to in the Act or Regulations to provide a regulatory head-of-power.

ICAO provides Minimum Standards

The ICAO model is an Act to create an aviation regulator with ICAO obligations and the Authority promulgate regulations, standards and advisory practices.

Past governments have never passed the responsibility fully to the Authority and have retained the need for the Governor General to make regulations. The Regulations are a responsibility of CASA to develop in consultation with interested parties.

Corrective Action Required to remove duplication and confusion

This three-tier system was changed to a four-tier system when CASA had Section 98 of the Act amended so CASA can issue "Manual of Standards" associated to each Regulatory Part with no correlation with Section 9(1)(c) of the Act. Section 9(1)(c) Aviation Safety Standards should be contained within each Section 98 Manual of Standards.

- (1) Act;
- (2) Sect 9(1)(c): **Aviation Safety Standards**, (should be contained in MoS)
- (3) Sect 98: Regulations,
- (4) Sect 98: Manual of Standards (where Aviation Standards are contained)

There is no clarity in the Act that CASA's *Aviation Safety Standards* are to be referred to in regulations. The Canadian aviation regulations refer to "Standards" promulgated by Transport Canada Aviation.

A three-tier system is similar to the same regulatory structure pre 1988, i.e. Act, Regulations and Air Navigation Orders (Standards) – the three-tier system works worldwide. USA: Act, Regulations and Orders. Canada: Act, Regulations and Standards.

This also aligns with the ICAO model of Act, Regulations, Standards and advisory guidance. This needs to be clarified with the Act.

Three-tier System: Civil Aviation Act enabling Regulations that specify Standards supported by technical guidance documents (e.g. Advisory Circulars).

Civil Aviation Act: Tier One

Civil Aviation (Safety) Regulations: Tier Two (as required by the Act)

Civil Aviation (Safety) Standards: Tier Three (as required by Regulations)

Technical Guidance Material: As Required

Act, 9(1)(c) developing and promulgating appropriate, clear and concise aviation

(safety) standards (referred to in Regulations);

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ICAO Standards go beyond simple "safety" standards and are fundamental if Australia is to be part of the global aviation industry.

Recommendation 2: That the Civil Aviation Act be amended to implement and clarify a three-tier legislative system. i.e.

- 1: Act,
- 2: Section 98 Regulations; and
- 3: <u>Section 9(1)(c)</u> CASA promulgated *Aviation Safety Standards "that are referred to in Regulations"*.

Amend 9(1)(c) to include a statement "referred to in Regulations" thus technically removing the need for Section 98's Manual of Standards.

Removes duplication of Section 9(1)(C) "Aviation Safety Standards" and Section 98 "Manual of Standards".

Remove the word "Safety" so the ICAO standards can be properly applied in Australia. (refer to the following for explanation why the word "Safety" is globally restrictive to proper regulatory development.



1.4. CASA's Convention Obligations and ICAO Responsibilities

The Department of Infrastructure, on their website, state that CASA is responsible for the following Annexes to the Chicago Convention. (Adoption of the Annexes also enables compliance with applicable Convention Articles.)

Annex	Annex Description		Convention Articles
Annex 01	Personnel Licensing	CASA	32, 37, 38, 39, 40, 42,
Annex 02	Rules of the Air	CASA	8, 12, 37, 38, 40
Annex 06	Operations of Aircraft – includes maintenance	CASA	29, 30, 37, 38
Annex 07	Aircraft Nationality and Registration Marks	CASA	17, 18, 19, 20, 21, 37. 38
Annex 08	Airworthiness of Aircraft – design,	CASA	31, 37, 38, 39,
Allilex 08	manufacturing & maintenance		40, 41
Annex 14 Aerodromes		CASA	37, 38
Annex 18 The Safe Transport of Dangerous Goods by Air		CASA	37, 38
Annex 19 Safety Management		CASA	37, 38

If CASA has the responsibility for these Annexes then the Civil Aviation Act, Section 98 must be amended to clearly state Australia's ICAO obligations under the above Annexes be conducted by CASA and Annex Functions & Responsibilities.

In addition, many of the Annexes have requirements and State responsibilities that go beyond being directly "relating to safety" but are essential if Australia is to participate in the global aviation market.

It is therefore necessary to amend Section 98 of the Civil Aviation Act to ensure compliance with the above Annexes can be achieved.

"Section 98 (1) The Governor-General may make regulations, not inconsistent with this Act:"

Should this not state, not inconsistent with this Act and the Convention?

Recommendation 3: Amend Section 98 – Civil Aviation Act

Sect 98 1(c) currently states: "for the purpose of carrying out and giving effect to the provisions of the Chicago Convention relating to safety;

To be more specific to CASA:

change paragraph 1 (c) to read: for the purpose of carrying out and giving effect to **Annexes 01, 02, 06, 07, 14, 18 & 19 of the Chicago Convention**.

Note: The Annexes are more than safety related so we do not need to be restricted to those aspects of the Annexes "relating to safety".

Remove the reference to "Safety" and replacing with a reference to the Annexes will provide a safer aviation system, globally recognised, in Australia.

Australia's general aviation industry 46th Parliament Submission 10



1.5. Convention Excerpts

Uniformity of Regulations and Standards

Article 37 of the Convention is the 'key' to developing aviation regulations, standards, practices and procedures with the highest practical degree of uniformity with ICAO and other ICAO compliant nations.

Article 37 - Adoption of international standards and procedures

Each contracting State <u>undertakes to collaborate in securing the highest practicable</u> <u>degree of uniformity</u> in regulations, standards, procedures, and organization in relation to <u>aircraft</u>, <u>personnel</u>, <u>airways</u> and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation. <u>To this end the International Civil Aviation Organization shall adopt and amend from time to time, as may be necessary, **international standards and recommended practices and procedures** dealing with:</u>

- (b) Characteristics of airports and landing areas;
- (c) Rules of the air and air traffic control practices;
- (d) Licensing of operating and mechanical personnel;
- (e) Airworthiness of aircraft;
- (f) Registration and identification of aircraft;
- (h) Log books;
- ICAO states "Through the provision of national regulations, States are **expected** to implement and enforce SARPs contained in the Annexes to the Convention".
- Article 37 states the SARPs should be adopted to the <u>highest practicable</u> <u>degree of uniformity</u>. It is time Australia implemented what other aviation trading nations expect Australia to adopt and adapt to have uniformity in regulatory requirements with aviation trading nations to remove duplication.

Recommendation 4: "After Section 98 1(c) <u>add new paragraph stating</u> "for the purpose of carrying out Article 37 of the Convention when giving effect to the [Annexes stated in **Recommendation 2**.]"



1.6. ICAO - Responsibilities of the State of Registry

- 1.2. The following are responsibilities normally associated with **States of Registry**. There may be additional responsibilities based on the complexity of the State aviation industry.
 - a) Ensure the development and promulgation of regulations and national standards regarding the airworthiness of aircraft, continuing airworthiness of aircraft, registration of aircraft and noise certification of aircraft.
 - b) Ensure the development and promulgation of national regulations regarding import and, if required, export requirements of aeronautical products.
 - c) If applicable, ensure development and promulgation of national regulations for validation of type certificates for which the State of Registry is not the State of Design.
 - d) Approval or acceptance of modifications and repairs relevant to the continuing airworthiness of aircraft.
 - e) Notification to ICAO of differences between ICAO Standards and national regulations and practices.
 - f) Ensure the aircraft register is properly maintained and aircraft is issued a registration certificate that conforms to the provisions of Annex 7.
 - g) Ensures when it first enters on its register an aircraft of a particular type for which it is not the State of Design and issues or validates a certificate of airworthiness, it advises the State of Design that it have entered such an aircraft on its register.
 - h) Determine the continuing airworthiness of aircraft in relation to the appropriate airworthiness requirements in force for the aircraft.
 - i) Develop or adopt requirements to ensure continuing airworthiness of aircraft during its service life.
 - Upon receipt of MCAI from the State of Design, adopt the information directly or assess the information and take appropriate action.
 - k) Ensure the State of Design is kept informed of all MCAI it issues, where applicable.
 - Ensure a system exists for aeroplanes over 5 700 kg and helicopters over 3 175 kg MTOM
 where by information on faults, malfunctions, defects and other occurrences that might
 cause adverse effects on the continuing airworthiness of the aircraft is transmitted to the
 organization responsible for the aircraft type design.
 - m) Establish in respect of aeroplanes over 5 700 kg and helicopters over 3 175 kg MTOM the type of service information to be reported to its airworthiness authority by air operators, and maintenance organizations.
 - n) Issue C of R, C of A, special flight permits, export C of A and aircraft noise certification.
 - Evaluate and approve or accept MCMs, maintenance organization procedures manuals, modifications and repairs, and aircraft maintenance programmes, including, if applicable, maintenance programmes for aircraft operating under EDTO.
 - p) Perform certification inspections of maintenance organizations and air operator with respect to airworthiness requirements.
 - q) Maintain appropriate records for aircraft on its register.
 - $r) \quad \hbox{Develop annual surveillance work plans.}$
 - Note. It is recommended to refer to Doc 9734, Part A, 3.8 during the planning of surveillance work programmes.
 - s) Conduct surveillance of its certified air operators (airworthiness requirements), maintenance and training organizations.
 - t) Ensure timely corrective action on deficiencies noted during oversight of certified air operators, maintenance and training organizations.
 - Take appropriate enforcement action of certified air operators, maintenance and training organizations and licensed technical personnel where necessary.



1.7. ICAO – Responsibilities of the State of Design and the State of Manufacture

The following are responsibilities normally associated with State of Design and State of Manufacture. There may be additional responsibilities based on the complexity of the State's aviation industry.

ICAO 1.2.1. State of Design

- a) Ensure the design aspects of the appropriate airworthiness requirements of the aircraft type comply with the standards in Annex 8;
- b) Issue a type certificate to define the design and to signify approval of the design of the aircraft type upon receipt of satisfactory evidence that aircraft type is in compliance with the design aspects of the appropriate airworthiness requirements;
- c) Review and approve, as required, requests for modification to the type certificate and make this information available to other Contracting States;
- d) As required in Annex 8, Part II, Chapter 4, transmit to every Contracting State which has in accordance with Annex 8, Part II, 4.2.3a) advised the State of Design that it has entered an aircraft on its register, and to any other Contracting State upon request, any MCAI necessary for the safe operation of the aircraft and notification of the suspension or revocation of a type certificate:
- e) As required in Annex 8, Part II, Chapter 4, ensure there is a system to address the information received from the State of Registry on faults, malfunctions, defects and other occurrences that might cause adverse effects on the continuing airworthiness of the aircraft;
- f) Ensure that, for aeroplanes over 5,700kg MTOM, there exists a continuing SIP to ensure the airworthiness of the aeroplane;
- g) Ensure that, where the State of Design is not the State of Manufacture of an aircraft, there is an agreement to ensure the organization responsible for the type design cooperates with the manufacturing organization in assessing the information received on the experience with operating the aircraft;
- Ensure that the State of Design of an engine or propeller, where it is different from the State of Design of the aircraft, transmits any continuing airworthiness information to the State of Design of the aircraft and any other Contracting State upon request;
- i) Ensure that the State of Design for a modification, where it is different from the State of Design of the product being modified, transmits the MCAI to the States that have the modified aircraft in their registries;
- Ensure the development and promulgation of national regulations regarding the design of aeronautical products; and
- k) Notify ICAO of differences between ICAO Standards and national regulations and practices.

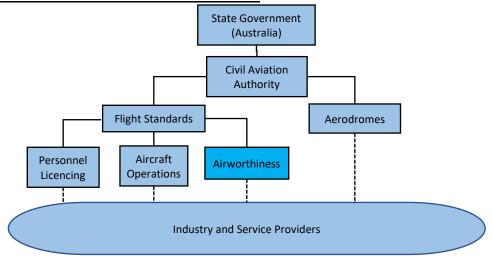
1.2.2. State of Manufacture

- a) Ensure that, where the State of Manufacture of an aircraft is not the State of Design, there is an agreement to ensure the manufacturing organization cooperates with the organization responsible for the type design in assessing the information received on the experience with operating the aircraft;
- b) Ensure that the production of aircraft parts manufactured under the design approval referred to in Annex 8, Part II, Chapter 1 are airworthy;
- c) Ensure that all aircraft and aircraft parts, including aircraft parts manufactured by contractors and/or suppliers, are airworthy;
- d) Issue a production approval to the manufacturing organization upon satisfactorily evaluation of its processes and systems and inspection of the production facilities;
- e) Ensure the development and promulgation of national regulations regarding the manufacture of aeronautical products; and
- f) Notify ICAO of differences between ICAO Standards and national regulations and practices.



1.8. Functions of a Flight Safety Standards Department (ICAO Doc 9745, 3.4.3)

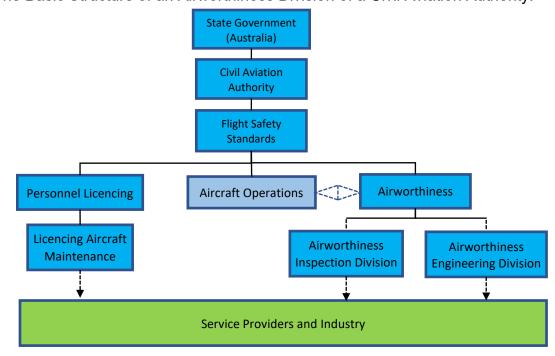
"The Flight Safety Standards Department bears the overall responsibility for the safety oversight-related activities of the CAA. It is the top technical department responsible for the implementation of technical policy related to personnel licensing, aircraft operation and airworthiness of aircraft. As such, it is also responsible for the harmonization of operating regulations and coordination among the various sections responsible for the implementation of national and international Standards."



1.9. Airworthiness Organizational Chart (ICAO Doc 9760)

ICAO provides the guidance for a structure of a Civil Aviation Authority that is basically limited to the Flight Standards Department and an Aerodrome Department.

"The Basic Structure of an Airworthiness Division of a Civil Aviation Authority."





1.10. Objective of (NZ) Authority (Act Section 72AA)

(Note: The NZ Functions make more sense than the CASA Functions)

"The objective of the Authority is to undertake its safety, security, and other functions in a way that contributes to the aim of achieving an integrated, safe, responsive, and sustainable transport system."

Functions of (NZ) Authority (Act Section 72B)

- (1) [Repealed]
- (2) The Authority has the following functions:
 - (a) to promote civil aviation safety and security in New Zealand:
 - **(b)** to promote civil aviation safety and security beyond New Zealand in accordance with New Zealand's international obligations:
 - (c) [Repealed]
 - (ca) to establish and continue a service to be called the Aviation Security Service:
 - (d) to investigate and review civil aviation accidents and incidents in its capacity as the responsible safety and security authority, subject to the limitations set out in section 14(3) of the Transport Accident Investigation Commission Act 1990:
 - (e) to notify the Transport Accident Investigation Commission in accordance with section 27 of accidents and incidents notified to the Authority:
 - (f) to maintain and preserve records and documents relating to activities within the civil aviation system, and in particular to maintain the New Zealand Register of Aircraft and the Civil Aviation Registry:
 - (g) to ensure the collection, publication, and provision of charts and aeronautical information, and to enter into arrangements with any other person or organisation to collect, publish, and distribute such charts and information:
 - (h) to provide to the Minister such information and advice as the Minister may from time to time require:
 - (i) to co-operate with, or to provide advice and assistance to, any government agency or local government agency when requested to do so by the Minister, but only if the Minister and the Authority are satisfied that the performance of the functions and duties of the Authority will not be compromised:
 - (ia) to provide information and advice with respect to civil aviation, and to foster appropriate information education programmes with respect to civil aviation, that promote its objective:
 - (j) to enter into technical or operational arrangements, or both, with civil aviation authorities of other countries.



Appendix A

Inquiry Terms of Reference

RRAT Senate Inquiry Terms of Reference

Under Standing Order 25(2)(a), the Senate Rural and Regional Affairs and Transport Legislation Committee will inquire into and report on the current state of Australia's general aviation industry, with particular reference to aviation in rural, regional and remote Australia.

The committee will consider the operation and effectiveness of the Civil Aviation Safety Authority (CASA) and other relevant aviation agencies, with particular reference to:

- a. the legislative and regulatory framework underpinning CASA's aviation safety management functions, <u>including</u>:
 - i. the application of the Civil Aviation Act 1988 and the Civil Aviation Safety Regulations 1998 to Australia's aviation sector, and whether the legislation is fit for purpose;
 - ii. the safety and economic impacts, and relative risks, of CASA's aviation safety frameworks; and
 - iii. the engagement of CASA with other relevant Australian Government agencies;
- b. the immediate and long-term social and economic impacts of CASA decisions on small businesses, agricultural operations and individuals across regional, rural and remote Australia;
- c. CASA's processes and functions, including:
 - i. its maintenance of an efficient and sustainable Australian aviation industry, including viable general aviation and training sectors;
 - ii. the efficacy of its engagement with the aviation sector, including via public consultation; and
 - iii. its ability to broaden accessibility to regional aviation across Australia, considering the associated benefits of an expanded aviation sector; and
- d. any related matters.

The committee will present its interim report on or before the final sitting day of **December 2020**, and will present its final report on or before the final sitting day of **November 2021**.

This inquiry's terms of reference have at last identified where the problems actually stem from. Paragraph a (i) refers to the Civil Aviation Act and Regulations and whether they are fit for purpose.



Senate Review CASA - 2020

Senate Submission No. 3

Submission to Address General Aviation and Associated Issues.

Includes

"Direct Supervision" Businesses support General Aviation.

"AMROBA fully supports the return of the "direct supervision businesses regulatory model" where small businesses, approved or not approved by CASA, only have to comply with CASA promulgated aviation safety standards."



Submitter: Aviation Maintenance Repair Overhaul Business Association, Inc.



AMROBA SUBMISSION TO SENATE INQUIRY – 2020 (GENERAL) AVIATION

"... regulatory frameworks that support a stronger, more productive and diverse economy where innovation, investment and jobs are created."

When will this government "Better Regulation" principle be applied to aviation regulatory development? "that support a stronger, more productive and diverse economy where innovation, investment & jobs are created".

This principle is in direct conflict with the Objective of the Civil Aviation Act.

3A Main object of this Act

The main object of this Act is to <u>establish</u> a <u>regulatory framework for maintaining</u>, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents.

General aviation in Australia went from a popular form of air transport used by private owners and many small businesses utilising a "direct supervision" business model that had been nurtured by previous Government Aviation Departments before the decision to create a Government Aviation Department then Agency in Canberra.

The fact that only a handful of government employees from the Department's Head Office in Melbourne moved to Canberra changed the whole safety approach that had been developed over decades. Loss of continuity of regulatory development.

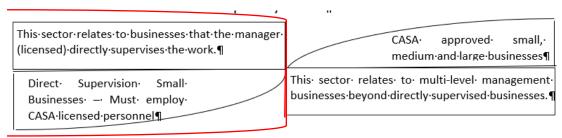
Add the decision of the Bosch Report on Cost Recovery, divestment from Federal to private and community operated aerodromes and then the decision to create a separate Aviation Regulatory Agency that has kept the industry in turmoil under continual regulatory reform that really started in 1990.

The Australian Government Guide to Regulation (2014)

Policy makers must seek practical solutions, balancing risk with the need for <u>regulatory frameworks</u> that support a stronger, more productive and <u>diverse economy where innovation</u>, investment and jobs are created.

This basic principle has not been the basis of developing aviation regulations since the creation of the Civil Aviation Authority/Civil Aviation Safety Authority. It is a sad indictment that jobs have been lost, not created.

General aviation was supported by many "direct supervision" businesses in flying training and general aviation maintenance pre 1990. No longer exist.



These issues and this small business model are discussed in this Submission.



Table of Contents

Tab	le of	Contents	3
Sum	nmai	ry and Recommendations	4
	Re	commendations:	4
A.	Th	e Issues	5
1		Airport Costs Killing General Aviation	5
	Re	commendation	
2		Regulatory Change/Reform/Development	7
	Re	commendation	8
3		Shortage of Licenced Maintenance Personnel (LAME)	8
	Re	commendations	12
4		Shortage of pilots	12
	Re	commendations	13
В.	Th	e Direct Supervision Business Model	13
	Re	commendations	14
C.	W	hat is General Aviation?	15
D.	Ge	neral Aviation Reduction in Red Tape	16
	Re	commendations	17
E.	Ве	nefits of ICAO SARPs for General Aviation	18
	Re	commendations	18
Арр	end	ix A Inquiry Terms of Reference	19



Summary and Recommendations

As explained in this submission, and AMROBA submissions 1 & 2, the real reason there is a decline in general aviation is that Civil Aviation Act's "Objective" does not require regulatory change to not only provide a "safety" regulatory framework but to provide a regulatory framework for a sustainable industry that can create jobs.

In addition, there is no provision for CASA to promote Australian aviation business capabilities globally or to obtain agreements with foreign countries for the acceptance of Australian aviation businesses and CASA documentation associated with releasing products to service.

Note: Aviation is a global industry that has many barriers requiring government to government, regulator to regulator agreements to recognise Australian businesses and aircraft products in their own right. To do so, our aviation regulatory system must be globally compliant and accepted, support be at least Technical Agreements between Regulators.

Until foreign countries accept Australian aviation products and services in their own right without Australian businesses obtaining foreign countries approvals, we remain a third world aviation industry restricted to performing business within Australia.

Numerous previous Inquiries have made hundreds of recommendations with little effect to develop a safe, sustainable global aviation industry. Until provisions of the Act are changed, CASA will continue to comply with the Act as they deduce its intent.

Recommendations:

- Amend Section 3A Main object of this Act to adopt a broader object, similar to NZ, that will require CASA to establish a regulatory framework that will provide for the regulation and promotion of civil aviation in such manner to best <u>foster its</u> <u>development and safety</u>, and to provide for the safe and efficient use of airspace by both civil and military, and for other purposes.' (FAA Act Excerpt).
 - a. ICAO: "Primary aviation legislation. The provision of a comprehensive and effective aviation law consistent with the environment and complexity of the State's aviation activity and compliant with the requirements contained in the Convention on International Civil Aviation".
 - b. UK: "The Civil Aviation Act 2012 (the Act) is designed to modernise key elements of the regulatory framework for civil aviation in the UK in order to enable the <u>sector to make a full contribution to economic growth without compromising standards."</u>
 - c. NZ: "The objective of the [NZ] Authority is to undertake its safety, security, and other functions in a way that contributes to the aim of achieving an integrated, safe, responsive, and <u>sustainable transport system</u>."
- 2. Amending Section 3A of the Act, and Section 9 of the Act as proposed in AMROBA's Submission 2, which will refocus the government's approach to aviation.
 - a. Proposed wording: "The main object of this Act is to establish a safe, efficient and sustainable regulatory framework with an emphasis on safety, by enhancing and maintaining the ability of individuals and businesses to participate both domestically and globally."

Unless the focus of government and its agencies are permanently changed by amending the Act, then the industry will continue to have Inquiry after Inquiry making recommendations one after the other.

The industry has been subject to regulatory change for too long and too many Inquiries.

Until Government changes (amend the Act) the focus, nothing will permanently fix the issues.



A. The Issues

1. Airport Costs Killing General Aviation

The benefits of small aerodromes/airports to the local community are harder to define than those of their large counterparts because they don't measure passenger movements or represent regular flying schedules.

- a. Airports are needed for, but not limited to, postal services, water bombing activity, air ambulances, the SES, police, tourism, crop dusting, survey planes, flight training schools, maintenance services and simple connectivity of people.
- b. General aviation has long been a home of ideas, where knowledge, experience and innovation have helped drive the future of flying forward.
- c. In Europe, tiny aerodromes/airports are being used to develop new environmentally and economically efficient aviation technologies.
- d. Some airports develop extraordinary Master Plans and then expect noncommercial airport tenants to pay for it by increasing tenancy rates.

The responsibility of airport operators has not been **defined in relation to encouraging aviation growth at their airport like other countries have done**. There is, however, a lot of motherhood statements made by government.

"The Australian Government recognises the importance of aviation to remote and regional Australia. It offers connections to community members and for tourism, travel, business, health and education. It is vital the regional aviation sector remains vibrant and competitive.

The Australian Government also recognises that the benefits arising from the deregulation of the domestic aviation industry have been less extensive in relation to the provision of air services to small regional, rural and remote communities, simply because the benefits of competition cannot be realised in markets that are too small to support competition.

This is not to say there is no role for government in circumstances where important air services are of marginal commercial viability, impacting the affordability of airfares.

Given that the provision of air services to regional Australia continues to be a key facilitator of broader economic development and service delivery, the Australian Government has commenced work on developing a strategic and forward-looking Regional Aviation Policy statement. The statement will consider the unique challenges and opportunities facing people living in regional and remote areas of Australia and will identify strategies to ensure regional aviation remains vibrant, competitive and viable into the future."

Ever since the creation of Airports Act, Industry has had to rely on Airport Operators to "promote efficient and economic development and operation of airports". There is nothing that states it means economic "aviation" development.

Economic development is seen as an opportunity to increase non-aviation economic development to the detriment of aviation businesses. The importance of these small, mainly rural, airports have been confirmed during recent fire and floods



The Productivity Commission's report and government response stated:

 that the Australian Competition and Consumer Commission (ACCC) undertake a review of quality of service indicators to ensure they have a greater focus on outcomes and more closely reflect the expectations of passengers, airlines <u>and</u> other airport users.

If there is to be growth in general aviation, then airport owners must be required to report on what economic aviation growth has happened at their airport. <u>There is a crucial need for airport operators to be responsible for encouraging aviation growth</u>.

Local government managed airports mostly see an opportunity to sub-lease these Commonwealth properties to the highest bidder and increase the tenancy rates for aviation businesses residing on the airport. Increases beyond the industry's capability to absorb. These costs have crippled general aviation.

AMROBA members have been faced with exorbitant tenancy rate increases that double every few years. Aviation that can move of the airport to cheaper commercial locations do so, whilst those directly associated with aircraft services have no option.

Any current aviation business can tell you the industry is regulatory in a mess and has been for a long time. Ever since government created the Civil Aviation Regulations in 1988 and subsequent amendment/repeal between 1988 & 1993 of many regulatory provisions, the number of industry participants in General Aviation declined dramatically in this period. Major changes in regulations since then has seen further decline. Rural airports once had many aviation small businesses – they no longer exist.

Misconception

Many airport operators seem to think that owning an aircraft means the owner has unlimited funds they can plunder aircraft owners and raise airport fees so they separate parcels of the airport property for non-aviation commercial businesses.

Why should the airport be used for any other purpose than an aviation airport?

This is what has enabled airports use to be restricted to more than an airport, as airport operators see more profit in using the airport for other "uses".

Recommendation

That the Airports Act be reviewed and be amended to clarify the use of the airport to be restricted to being used as an airport not providing loop holes so shopping centres and other non-aviation uses are more attractive.

For example: Section 5:

- "(d) if the airport is neither a joint-user airport nor Sydney West Airport—the lease provides for the use of the site as an airport (whether or not the lease also provides for other uses); and
- (e) if the airport is a joint-user airport—the lease provides for the use of the leased area for purposes in connection with the airport (whether or not the lease also provides for other uses); "



2. Regulatory Change/Reform/Development

The CAA or CASA has never been tasked with establishing "a regulatory framework that supports a stronger, more productive and diverse economy where innovation, investment and jobs are created." If it had been, then industry would not be in the condition it is today. Aviation, with the right regulatory framework, is an industry where innovation, investment and jobs are created.

Without the "Objective" of the Civil Aviation Act mirroring the principles of the government's *Guide to Better Regulation*, the regulatory framework established is based on the current "Objective" of the Civil Aviation Act.

3A Main object of this Act

The <u>main object of this Act</u> is to establish a <u>regulatory framework for</u> maintaining, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents.

"Promoting safety and preventing accidents and incidents" does not provide a regulatory framework that encourages innovation, investment or job creation.

It is not acceptable to have government stating that their regulatory reform/development will establish a regulatory framework that encourages innovation, investment and job creation but then insert an "Objective" in the Civil Aviation Act that prevents it from happening.

A government Guide principle does not overrule a legislative requirement.

This "Objective" does not support the establishment of a regulatory framework to support innovation, global participation and create jobs which is possible.

Government Guide to Better Regulation

"Regulation can't eliminate every risk, nor should it. We therefore seek better regulation, not more regulation. Policy makers must seek practical solutions, balancing risk with the need for regulatory frameworks that support a stronger, more productive and diverse economy where innovation, investment and jobs are created. With this new approach stakeholders can look forward to a future with substantially less red tape and Australia's economy continuing to grow and prosper."

The New Zealand Act is a sample of a more comprehensive "Objective"

"The objective of the [NZ] Authority is to undertake its <u>safety</u>, security, and other functions in a way that <u>contributes</u> to the aim of achieving an <u>integrated</u>, <u>safe</u>, responsive, and sustainable transport system."

An aviation regulatory framework that does not enable international trade agreements with foreign countries to recognise Australian businesses providing aviation services in their own right is a failure.

CASA must be tasked in the Civil Aviation to obtain technical agreements with foreign countries/NAAs for the recognition of Australian aviation businesses



Recommendation

- Amend Section 3A Main object of this Act to adopt a broader object, similar to NZ, that will require CASA to establish a regulatory framework that will provided for the regulation and promotion of civil aviation in such manner to best <u>foster its</u> <u>development and safety</u>, and to provide for the safe and efficient use of airspace by both civil and military, and for other purposes.' (FAA Act Excerpt).
- 2. Amending Section 3A of the Act, and Section 9 of the Act as proposed in AMROBA's Submission 2, which will refocus the government's approach to aviation.
 - a. Proposed wording: "The main object of this Act is to establish a safe, efficient and sustainable regulatory framework with an emphasis on safety, by enhancing and maintaining the ability of individuals and businesses to participate both domestically and globally."

3. Shortage of Licenced Maintenance Personnel (LAME)

The transition of ownership of aerodromes from the government to private and community operators increased costs of aircraft parking fees. Without aircraft residing at an airfield, the need for maintenance personnel decreases.

The removal of the direct-supervision maintenance organisations when the CAA was created in 1988 meant many general aviation businesses collapsed thus removing an employment pathway for mainly rural licenced and unlicensed aircraft maintenance engineers.

Even the Expert Panel identified the problem with licences and training.

- a. An over-complicated aircraft maintenance engineer training system and licence system has seen a reduction in young people entering aviation.
- b. A National Vocational Education Training System that has not kept pace with the changing standards and are over a decade behind CASA regulatory changes.
- c. An aircraft maintenance engineer licencing system not appropriate to the aviation industry outside the airline system.
- d. Previous trade training was applicable to all segments of the maintenance industry not specific to a segment as implemented and proposed.
- e. European trade training is the responsibility of each EU member State, not EASA.

Previous system

From a general aviation perspective, the previous aircraft maintenance engineering licencing system was more appropriate to general aviation in Australia and was based on mechanical or avionics plus additional aircraft systems.

This system was based on a basic licence (airframe, engines, electrical, instruments & radio) plus group ratings that broaden the scope of mechanical or avionics licence before adding specific aircraft type ratings.

The trade training system was based on the mechanical and avionic training standards of ICAO AME Training Manual, Doc 7192, Part D1. The only difference between trade training and licencing training is in Chapter 3 of that ICAO manual.



A system that provided broad trade skills enabling a person to obtain employment across the various maintenance sectors.

Adoption of Partial EASA system introduced problems

The European system, when CASA partially copied it more than a decade ago, was in development stage by EASA. It was drastically amended in 2018 to introduce LAME general aviation licence "group" ratings similar to what CASA had 3 decades ago.

Full adoption provides improved safety standard and licences & ratings.

A benefit of the EASR Part66/147 2018 amendments is that they have now created AME licencing for recreational aircraft (gyrocopters/ultralights/balloons) and added a LAME rating (B3) for small aircraft up to 2000Kgs that would be beneficial to general aviation. In addition, they have also introduced a basic avionics aircraft licence (B2L) that would also benefit general aviation but CASA refuses to adopt.

If you adopt another country's aircraft maintenance licencing system, then you must adopt all provisions, not create a hybrid regulatory system that does not work. The 2018 amendments to the EASR Part 66 and Part 147 provided licence ratings closer to the system we once had.

Training

When CASA partially adopted the EASA AME licencing system they also introduced a requirement for CASA to approve Registered Training Organisations already approved by the Education Department, duplicating the approval process.

The European regulatory system states that a country's education system does not need aviation regulatory approval if it complies with certain regulations.

CASA's predecessors devolved the maintenance training to the Education system way back in the 1950s. CASA's predecessors used to promulgate the ICAO AME training standards and State Education Departments provided trade training based on these standards. World recognised maintenance personnel skills.

Why did CASA want to re-introduce CASA approval of RTOs duplicating RTO approvals instead of working with Education Departments to implement the promulgated regulatory training standards?

EASR Part 147 regulation removing duplication.

"147.B.25 Exemptions

- a) The competent authority [CASA] may exempt a State education department school from:
 - being an organisation as specified in 147.A.10.
 - having an accountable manager, subject to the limitation that the department appoint a senior person to manage the training organisation and such person has a budget sufficient to operate the organisation to the standard of Part-147.
 - having recourse to the independent audit part of a quality system subject to the department operating an independent schools inspectorate to audit the maintenance training organisation at the frequency required by this Part."



The Australian Skills Qualification Authority (ASQA) provides the competency training criteria and also the auditing of RTOs throughout Australia. AMROBA cannot understand why the two regulators, ASQA and CASA, have not agreed on a consensus approach to the training to reduce duplication.

Question: Australia's aviation trade training had progressed to a stage where it was providing tradespersons that met the regulators requirements without approval by the aviation regulator. Why did CASA suddenly adopt a system for CASA to approve the RTOs that is not a compulsory system from Europe?

Industry Expectations – Basic Modules Qualifications – Trade/Licence			
Aircraft Maintenance Engineer	Trade Modules	Licenced AME Modules	
Aeroplane (turbine) maintenance engineer	1 – 9, 11, 15 & 17	B1.1 . Same as trade plus module 10	
Aeroplane (piston) maintenance engineer	1 – 9, 11, 16 & 17	B1.2 . Same as trade plus module 10	
Helicopter (turbine) maintenance engineer	1 – 9, 12 & 15	B1.3 . Same as trade plus module 10	
Helicopter (piston) maintenance engineer	1 – 9, 12 & 16	B1.4 . Same as trade plus module 10	
Avionics maintenance engineer	1 – 9, 13 & 14	B2. Same as trade plus module 10	
Not Yet Adopted	– Required for GA Sec	tor	
Basic Avionics maintenance engineer	Limited Modules	B2L. Basic upgradable to full B2	
Aeroplanes up to 2000Kgs	Limited Modules	B3. Limited Trade standards and module 10	
Not Yet Adopted – Recreational Aircraft Licences			
Sailplanes, ultralights, balloons, airships, gyrocopters.	Specified Training	L. Ratings for each kind of recreational aircraft	

Different Training Standards - ASQA & CASA

ASQA applies "competency-based standards and assessment" and CASA demands knowledge to be tested by examination with a 75% pass mark. Over a decade since Part 66 introduced these standards and ASQA and CASA has not come to an arrangement of testing/assessment. Two government agencies that won't cooperate so industry can obtain a consensus training system.

This means the RTOs are trying to provide education to students that has to meet two different training standards – duplication adding to the costs of providing training.

The loss of the trade training system pre CASR Part 66 being made has removed the transportability of trade skills between segments. This means retention within the industry is hard when the skills are not industry wide compatible.



The European system has added a B3 licence for aircraft up to 2000Kg and a basic avionics B2L licence which is ideal for GA. EASA's developing system has also added "group" ratings to the B1 licence as did the Australian licensing system in the 1960s and 1970s before additional group ratings in the 1980s.

At this stage, CASA has given no commitment to harmonise with the latest amendment to EASR Part 66/147, the source document for CASR Parts 66/147.

Retention of Qualified Licenced Engineers

CASA, not the aviation industry, decided to partially adopt the EASA maintenance personnel licencing system that was not, is not and continues to not be compatible with the needs of the general aviation industry.

Unless the basic maintenance personnel trade skills are transportable across the full aviation industry, then retention in the industry is almost impossible. A basic fault of the current Part 66 aircraft maintenance engineer licencing system is trade training to separate sectors of the aviation industry.

CASA partially adopted the relatively new European aircraft maintenance engineer knowledge based licencing system mainly to meet lobbying pressures from the major airlines. The European knowledge-based system is not compatible with Australia's education competency-based system.

The aviation Education Department's Industry Reference Committee has just obtained government funding to align the VET training system with the aviation regulatory prescribed modules in CASR Part prior to introducing Part 66.

When CASA introduced the European system, they should have obtained Education Department support, including <u>Australian Skills Qualification Authority</u>, who apply a different standard to training than what CASA is promulgating in regulatory standards.

EASA Training courses specified

CASA does not promulgate the European theoretical/practical course ratio or the course duration period that almost doubles the current allocated training time.

EASR Part 147 Appendix I

Basic training course duration

The minimum duration of a complete basic training course shall be as follows:

Basic Course	Duration (in hours)	Theoretical Training Ratio (in %)
A1	800	30–35
A2	650	30–35
А3	800	30–35
A4	800	30–35
B1.1	2400	50–60
B1.2	2000	50–60
B1.3	2400	50–60
B1.4	2400	50–60



B2	2400	50–60
<mark>B2L</mark>	<mark>1500</mark>	<mark>50–60</mark>
<mark>B3</mark>	<mark>1000</mark>	<mark>50–60</mark>

CASA is carrying out a review and the project team has ruled out adopting the latest changes to EASR Part 66.

This we cannot understand.

Recommendations

- 1. That the latest revision of CASR Part 66 and 147 source documents, EASR Parts 66/147 be adopted as soon as practical.
- 2. That the intent of the FAR Part 65 Inspection Authorisation be added to the Module 10 of the CASR Part 66 modular training system:
 - a. This will make the Australian LAME a compliant Convention Annex 1, Chapter 4 licenced aircraft maintenance engineer.
 - b. FAR Part 65 2-year renewal system was not used in Australia when our LAMEs held this responsibility prior to regulatory development experimentation.
- 3. That the direct-supervision model explained in Section B of this submission be applied to the aviation maintenance sector to revive general aviation and create jobs.

4. Shortage of pilots

The transition from Air Navigation Regulations/Orders to Civil Aviation Regulations/Orders in 1988 disenfranchised over a thousand one-person flying schools that were scattered throughout rural Australia.

- a. This removed the entry sector into aviation that these rural flying schools provided. Where do local school leavers go if there are no local flying instructors at the local airport?
- b. The regulatory removal of the small one-person flying schools, a slightly more formal system similar to the US FAR Part 61 independent flight instructor, decimated general aviation, especially in rural aviation.
- c. It has been partially replaced by non-regulatory controlled sport and recreational aviation sector that only muddles the situation.

The fact is, general aviation went into major decline as soon as the Civil Aviation Regulations were made in 1988 and the amendments made over the following 5 years. Instead of supporting small directly supervised businesses, the regulations were based on larger organisations business models.



The existence of "direct supervision" small businesses that were scattered throughout rural Australia became regulatory extinct. Most of these participants were in general aviation and many accused the CAA of being "captured" by bigger businesses to remove their competition.

As an ex-regulator with some experience in regulatory development, I can confirm that businesses are always looking at increasing standards for smaller businesses suggesting they are not as safe as larger business.

What was not understood by larger businesses is that these larger businesses survived and prospered because potential aviators could go to the local rural airport and make contact with a flying instructor or small maintenance business.

No system introduced by government/CAA/CASA since 1988 has reversed the regulatory ability to increase participation in general aviation. It is probably true that most of the employees within CASA or the Government's portfolio Department of Infrastructure were not involved when the successful "Direct Supervision" businesses were more than half the businesses in general aviation.

Costs Associated

The resultant higher costs by larger organisations mainly based at larger airports, and the fact so many rural flying training small businesses disappeared, the economics of travel and accommodation to the larger airport has become cost prohibitive to potential applicants in rural Australia.

The cost comparison in the USA, who have independent direct supervision flying schools and approved flying schools enables students to select between the non-approved and the approved. The more cost-effective, but with same career prospects, is the independent flying schools that must use the FAA pilot flying standards and practices.

Recommendations

- 1. That the small direct supervision model prescribed in Section B of this submission be applied to aviation flying training schools.
- 2. The inclusion of the small direct-supervision model will provide competition in the aviation regulatory framework that it had pre 1988 when the CAA was created without affecting safety standards.

Note: This method is the most popular method of learning to fly in the United States as it was in Australia prior to the creation of the Civil Aviation Act and Regulations.

B. The Direct Supervision Business Model

General aviation was prosperous and growing in the boom years of 1970s/80s when the aviation regulatory system included what was a "Direct Supervision" model. Direct supervision small businesses provided flight training or maintenance services utilising Authority promulgated standards, procedures and practices, including the Authority's

Australia's general aviation industry 46th Parliament Submission 10



pilot training syllabi. These small businesses were directly supervised by a person holding an appropriate CASA licence.

They were based on the non-approved Fixed Base Operator providing flight training and maintenance services in the USA. No business procedures manual; simply comply with FAA promulgated standards, procedures and practices.

Transition Failure (Industry Perspective)

When the CAA was formed, these "direct supervision" businesses were disenfranchised when the legislative system transitioned from ANRs/ANOs to CARs/CAOs omitted the regulatory provisions that allowed "direct supervision" businesses to exist. Thousands of jobs disappeared across Australia because "direct supervision" businesses were regulatory removed.

Many were of the opinion that larger Authority approved organisations "captured" the Authority and lobbied to remove these "directly supervised" small businesses by stating they were less safe.

Until the directly supervised organisations are resurrected, general aviation economics will not reverse.

The FAA Direct Supervision Businesses. (Very Popular)

The FAA Direct Supervision Business system enables flight training, to the FAA pilot training syllabi, and maintenance services to be provided by a registered business on the condition that the business employs a FAA licenced person to control and supervise the services being provided.

Previous Direct Supervision Businesses.

Whether it was flight training or maintenance services the Authority issued approvals without the need of the red tape association with multi-layered business models. The aviation Authority had not progressed to removing their approval of "direct supervision" businesses and enabling them to operate in the same manner as the American Fixed Based Operators, not approved by the FAA.

Recommendations

That "direct supervision" small businesses, based on the FAA Fixed Based Operator system (refer FAA AC150/5190-7) be adopted. FBO includes "Specialized Aviation Service Operations" such as aircraft flying clubs, flight training, aircraft airframe and powerplant repair/maintenance, aircraft charter, air taxi or air ambulance, aircraft sales, avionics, instrument or propeller services, or other specialized commercial flight support businesses. These businesses begin as not approved by the FAA.

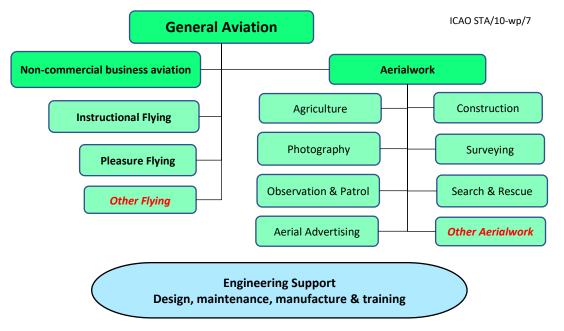


C. What is General Aviation?

The Department of Infrastructure defines General Aviation as:

"The International Civil Aviation Organization classifies general aviation as covering a range of operations that are not commercial air transport services. This includes aerial work (such as agriculture, photography, surveying, search and rescue), instructional flying and pleasure flying."

ICAO provides a simple flowchart that includes "other" segments for countries like Australia that has other flying sectors like "mustering".



Under the ICAO classification, the operations sectors are supported by individual licenced personnel (pilot & LAMEs) with the need for major airlines and complex helicopter being maintained by approved design, maintenance and parts manufacturing organisations.

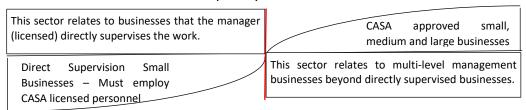


D. General Aviation Reduction in Red Tape

General aviation small aircraft operations have not reached the potential that it once had because the Civil Aviation Regulations are not "fit for purpose". The standards of medium to large business requirements imposed on small businesses has seen a marked decline in small aviation businesses.

There is a way out of the red tape system currently being applied by bringing back direct supervision small businesses with standards promulgated by CASA similar to the USA Federal Aviation Regulatory system for general aviation.

This submission provides background, samples and recommendations to resurrect the general aviation small aircraft transport system.



Until the Act and Regulations are made 'fit for purpose' then jobs will not be created.

The regulatory expectations of ICAO for a mature aviation industry is to properly place responsibility with industry employed personnel and not with the regulator.

- 1. Adopt FAR Part 43 as the basic aviation maintenance safety standard.
- 2. Two provisions in this FAR Part demonstrate the flexibility of the FAR system and the clarity it has specifying responsibilities.

"43.2 Records of overhaul and rebuilding.

- (a) No person may describe in any required maintenance entry or form an aircraft, airframe, aircraft engine, propeller, appliance, or component part as being **overhauled** unless—
- (1) Using methods, techniques, and practices acceptable to Administrator CASA or NAA responsible for the design/manufacture, it has been disassembled, cleaned, inspected, repaired as necessary, and reassembled; and
- (2) It has been tested in accordance with approved standards and technical data, or in accordance with current standards and technical data acceptable to the AdministratorCASA or NAA responsible for design/manufacture, which have been developed and documented by the holder of the type certificate, supplemental type certificate, or a material, part, process, or appliance approval under part 21 of this chapter these Regulations.
- (b) No person may describe in any required maintenance entry or form an aircraft, airframe, aircraft engine, propeller, appliance, or component part as being **rebuilt** unless it has been disassembled, cleaned, inspected, repaired as necessary, reassembled, and tested to the same tolerances and limits as a new item, using either new parts or used parts that either conform to new part tolerances and limits or to approved oversized or undersized dimensions."

This replaces a number of provisions in the Civil Aviation Regulations.

AMROBA

43.7 Persons authorized to approve aircraft, airframes, aircraft engines, propellers, appliances, or component parts for return to service after maintenance, preventive maintenance, rebuilding, or alteration.

- (a) Except as provided in this section and regulation 43.17, no person, other than the Administrator, may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service after it has undergone maintenance, preventive maintenance, rebuilding, or alteration.
- (b) The holder of an mechanic certificate or an inspection authorization aircraft maintenance engineer B licence may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service as provided in Part 65 66 of this chapter these Regulations. (Amend Part 66 to include IA provision)
- (c) The holder of a repair station maintenance organisation certificate may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service as provided in Part 145 of this chapter these Regulations.
- (d) A <u>manufacturer</u> may approve for return to service any aircraft, airframe, aircraft engine, propeller, appliance, or component part which that manufacturer has worked on under <u>sub-regulation</u> 43.3(j). However, except for minor alterations, the work must have been done in accordance with technical data approved by CASA or the NAA responsible for designthe Administrator.
- (e) The holder of an air earrier operating certificate or an operating certificate issued under Part 121 or 135, may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service as provided in Part 121 or 135 of this chapter these Regulations, as applicable.
- (f) A person holding at least a private pilot certificate may approve an aircraft for return to service after performing preventive maintenance under the provisions of regulation 43.3(g).
- (g) The holder of a repairman certificate (light-sport aircraft) with a maintenance rating may approve an aircraft issued a special airworthiness certificate in light-sport category for return to service, as provided in part 6566 of this chapter these Regulations.
- (h) The holder of at least a sport pilot certificate may approve an aircraft owned or operated by that pilot and issued a special airworthiness certificate in the lightsport category for return to service after performing preventive maintenance under the provisions of regulation 43.3(g).

Note: Changes in red match the Australian system.

This explains who may return which type of aircraft to service. Note that it includes AOC holders, maintenance organisations, aircraft manufacturers and individuals.

Recommendations

- 1. Adopt the documentation used by the regulatory system that is the source document for each particular CASR Part that CASA adopts.
 - a. E.g. FAR Part 21 and 43 and associated provisions in other FAR Parts for engineering design, manufacture and maintenance.
 - b. E.g. EASR Parts 66 & 147, plus FAR Part 65 Inspection Authorisation, and associated provisions for the aircraft maintenance engineer licence



E. Benefits of ICAO SARPs for General Aviation

This Inquiry has made it quite clear that it will: "inquire into and report on the current state of Australia's general aviation industry, with particular reference to aviation in rural, regional and remote Australia".

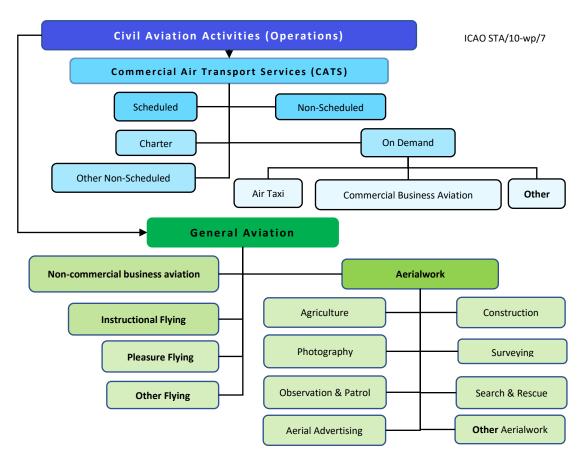
ICAO General aviation operation. An aircraft operation other than a commercial air transport operation or an aerial work operation.

In other words, general aviation covers aircraft of all sizes that are not being used commercially.

The main Convention Annexes that apply to General Aviation are:

- ➤ Annex 8 Airworthiness of Aircraft;
- > Annex 6, Part 2 Aeroplanes; and
- ➤ Annex 6, Part 3 Helicopters

ICAO states "Through the provision of national regulations, States are expected to implement and <u>enforce SARPs contained in the Annexes to the Convention</u>".



Recommendations

To assist with global recognition, adoption of ICAO Standards and Recommended Practice should be as close as practical to the international standards and practices.



Appendix A

Inquiry Terms of Reference

RRAT Senate Inquiry Terms of Reference

Under Standing Order 25(2)(a), the Senate Rural and Regional Affairs and Transport Legislation Committee will inquire into and report on the current state of Australia's general aviation industry, with particular reference to aviation in rural, regional and remote Australia.

The committee will consider the operation and effectiveness of the Civil Aviation Safety Authority (CASA) and other relevant aviation agencies, with particular reference to:

- a. the legislative and regulatory framework underpinning CASA's aviation safety management functions, including:
 - i. the application of the Civil Aviation Act 1988 and the Civil Aviation Safety Regulations 1998 to Australia's aviation sector, and whether the legislation is fit for purpose;
 - ii. the safety and economic impacts, and relative risks, of CASA's aviation safety frameworks; and
 - iii. the engagement of CASA with other relevant Australian Government agencies;
- b. the immediate and long-term social and economic impacts of CASA decisions on small businesses, agricultural operations and individuals across regional, rural and remote Australia;
- c. CASA's processes and functions, including:
 - i. its maintenance of an efficient and sustainable Australian aviation industry, including viable general aviation and training sectors;
 - ii. the efficacy of its engagement with the aviation sector, including via public consultation; and
 - iii. its ability to broaden accessibility to regional aviation across Australia, considering the associated benefits of an expanded aviation sector; and
- d. any related matters.

The committee will present its interim report on or before the final sitting day of **December 2020**, and will present its final report on or before the final sitting day of **November 2021**.

This inquiry's terms of reference have at last identified where the problems actually stem from. Paragraph a (i) refers to the Civil Aviation Act and Regulations and whether they are fit for purpose.