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NEWSLETTER

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1. No Permanent CASA CEO & No Airworthiness Manager.

Reform in limbo again! When will the organisational structure of CASA be stabilised by legislating a basic ICAO organisational model in the Civil Aviation Act to stop each new CEO or Board restructuring CASA? Millions of dollars and resources have been wasted since the CAA started in 1988. CASA and its predecessors have been treated as a political football changing as governments or Ministers change. Review and amend the Act to bring back stability.

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If we look back at all the restructures since the creation of CAA in 1988, the redundancy payouts of skilled staff and middle managers has cost millions.

2. CASR Part 66 Post Implementation Review.

Please don't hold your breath waiting for this to happen – CASA is already talking two years. **The major reason for a PIR is that CASA's implementation of the partially based EASA AME licencing has been a total failure.** One aspect not addressed relates to the decision many years ago when government decided to replace aircraft renewable certificates of airworthiness with a continuing inspections system that is no longer prescribed in Australian regulations. This is an important ICAO standard that is in other countries regulatory systems.

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Annex 8 details "standards" to be complied with when an "indefinite" CoFA is used. Annex 1 specifies the LAME's role in certifying aircraft as "airworthy" and when.

3. CASR Part 145 Post Implementation Review ???

When CASA adapted EASR Part 145 and left out some very important provisions, it knew that it did not address Australia's general aviation system. Since then, the EASR Part 145 has not covered our general aviation. The FAA, on the other hand, carried out a very intensive review and modified FAR Part 145 to improve industry productivity and improve safety – something you won't find as a reason to change EASR Part 145. One system is over prescriptive and the other is performance based placing clearer responsibility with the AMO.

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The number of CAR 30 AMOs are declining and now some of the Part 145 AMOs are also closing doors. Why? Two decades back, there was a push to consolidate approvals.

4. Basic Airworthiness Safety Principles.

Experience teaches you to realise that you cannot inspect safety into maintenance. It is why this profession still uses the hands-on assistance and the experienced artisan's knowledge so each AME/AMT does not make errors. We would be foolish if we thought humans won't make errors and that is why experienced AMEs/AMTs always double check as they do work. It is why flight controls need double checking. This is why many decades ago, aviation skill training was developed to create a mental culture of safety to remove the possibility of induced errors by maintenance staff. Is this mental safety culture still an outcome of modern training?

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Basic Airworthiness Safety Principles are those unwritten principles that have been learnt over the years and passed down from the older generation.

1. No Permanent CASA CEO – No Airworthiness Manager.

Reform in limbo again? When will the organisational structure of CASA be stabilised by legislating a basic ICAO “organisational model” in the Civil Aviation Act? This would stop each new CEO or Board restructuring CASA? Millions of dollars and restructuring resources have been wasted since the CAA started in 1988. CAA/CASA’s staff have been treated as a political football changing as governments change and Ministers change. Review and amend the Act to bring back stability.

This industry, like all other industries needs a reduction in public service created requirements both regulatory and administratively. Amend the Act will bring back stability if a basic ICAO NAA organisational structure was included.

It is hard to compare CASA to other mature NAAs as more than 50% of the functions of an ICAO CAA are not the responsibility of CASA.

CASA is basically an ICAO Flight Safety Standards (FSS) Division with a regulatory oversight function for aerodromes. Air Navigation Services are administered by Airservices.

ICAO further prescribes what a FSS should be structured like in their Airworthiness Manual that provides for an AID & AED under Airworthiness.

Of course, Aircraft Operations are also divided based on size of operations within the country.

Personnel licencing is also split by disciplines – e.g. LAME, pilots, etc. A close look at these ICAO charts show a basic structure government should specify in the Civil Aviation Act to save millions of future restructuring dollars. By stating what the basic organisational structure should be, CASA future CEOs may concentrate on fixing the requirements so industry can prosper.

It is very obvious, the basic ICAO structure is similar

to other mature NAAs. Today, how the major divisions within CASA are functioning is questionable.

Governments themselves have also lost the reform drive to have a regulatory system that harmonised with a “region system”. John Anderson and John Sharp were supportive of a Single Aviation Market with NZ. We now need a “regional system” in the Pacific. NZ is the leading aviation regulator in this region and has basically set up a “regional system” in the Pacific that is now expanding into Asia. Australia is the only country that is out of step with our Pacific neighbours.

ICAO Regulatory Oversight Manual

2.2 A Strategy for Establishing a Regional System

2.2.1 A commitment to the provision of a safe civil aviation system must be made at the highest levels of every government and with the involvement of the aviation industry in the State. A strong regional partnership and cooperation are two of the conditions needed to develop and integrate efforts to improve regional aviation safety oversight. Contracting States of a specific region can expand their aviation safety oversight capability by working together at least in the performance of safety oversight tasks. Agreements implemented among States of a region will contribute to a better execution of regional plans related to the establishment of air navigation facilities and services and the implementation of SARPs.

Time to dump the current regulations and adopt the Kiwi “regional” system.

Only government can produce this change in direction and that is not likely.

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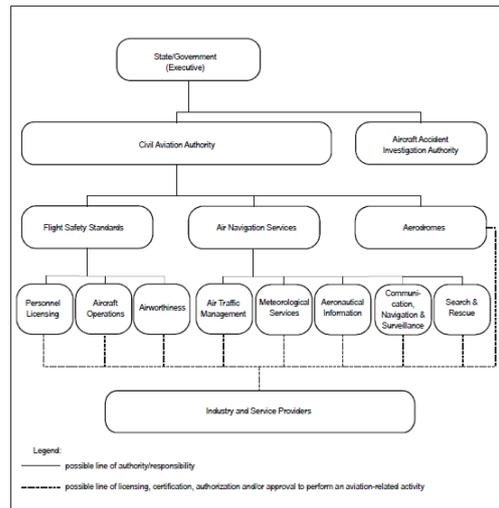
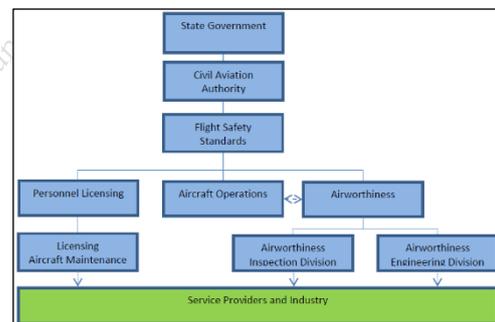


Figure 3-1. Example of the organizational structure of a State civil aviation system



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2. CASR Part 66 Post Implementation Review.

Please don't hold your breath waiting for this to happen – CASA is already talking two years. **The major reason for the PIR is that CASA's implementation of the partially based EASA AME licencing has been a total failure.** One aspect not addressed in the privileges of the LAME relates to the government decision taken many years ago to replace aircraft renewable certificates of airworthiness (CofA) with a continuing inspections system that is no longer prescribed in Australian regulations. Annex 8 specifies how this is accomplished – it was the role of the LAME. This is an important ICAO standard that is in other countries regulatory systems. The LAME plays an important role in maintaining the validity of the “indefinite certificate of airworthiness”.

Before the review starts, CASA should negotiate with the Federal Education Department to adopt the EASR training standards specified in EASR 147.A.200 that specifies standards related to the training course. The Appendix to this Regulation states: B1.1, 1.3, 1.4 & B2 courses have a duration of 2,400 classroom hours and the theoretical training ratio 50-60%. The B1.2 has a duration of 2,200 classroom hours. Until we have like training course hours nobody can convince employers we have the same standard as we had under the trade training system, pre CASR Part 66.

The EASA training course standards should be promulgated by CASA in CASR Part 147.

Only when the Department of Education agrees to these training hours will we get the (L)AME skills and knowledge that employers, AMEs and LAMEs have demanded since the introduction of CASR Part 66 AME licences. The current education qualification is not meeting EASA standards, nor do they meet ICAO SARPs.

How did/does CASA approve training courses that do not meet the EASR course duration when it falsely states that they had adopted the EASR Part 66 system?

The cost benefits and better skills that were achievable under CAR 31 have diminished because the training facilities cannot provide the skills and knowledge CASA demands. However, the real question is “How does CASA approve a Maintenance Training Organisation under Part 147?”

If we use the course standards promulgated by EASA, or by ICAO as they are similar, – they would not have any approved courses or training organisations. This is not because of the will of the RTOs that CASA has approved under Part 147, it is simply because CASA did not obtain the Education Department's support for the imported training from EASA Parts 66/147.

This is an inter-government problem and CASA must sort it out with the Department of Education. Most sectors are stating that the education qualification is not worth the document it is written on.

ICAO realised that competence in practical skills should be taught in trade schools. The practical skills were separated from the knowledge requirements. Exactly what was happening under CAR 31.

EASR Part 66 enables what the CAR system provided – the EASR part 66 has flexibility and specifies self-study + experience + examination to obtain an AME licence. Qualified tradespersons, AME & Allied Trade, use this process.

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3. CASR Part 145 Post Implementation Review?

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In Phoenix, Arizona, June 2002, The Associate Director of the FAA and the Acting Deputy Director of CASA shook hands on a proposal to amend the BASA/IP to cover a maintenance agreement similar to what the USA has with Canada. This was based on the completed FAR based maintenance regulatory package that CASA's Byron stopped just before the completed package was delivered to the Minister.

In hindsight, the costliest mistake CASA has made in the last three decades.

It is now 2016 and we are nowhere near harmonised with the FAR system, let alone the EASR system. The EASR system is now outdated since FAR Part 145 was amended in

FAR Part 145 has been modernised during the last 5 years to improve productivity and accountability. It is seen as world's best standard and is ICAO compliant. It also enables the FAA to concentrate its resources on regulatory oversight.

The biggest problem with maintaining a Bilateral Agreement is maintaining the expertise within CASA. For instance, CASA now lacks avionics regulatory expertise that impacts on industry accessing the US market by taking benefits of recognition of the regulatory certification processes used in Australia and harmonised with FAA.

For any Bilateral Agreement to be successful, governments must ensure the technical expertise and experience is maintained in CASA and they should obtain FAA training specific to their disciplines.

OECD: *“Much recognition is based on the principle of equivalence – generally understood to mean that, where the host country's regulatory goal is addressed by home country regulation, the host country should accept the home country's regulation as equivalent. Where aspects of the host country's regulatory goals are not met (e.g. with regard to required local knowledge, or where there are differences in the scope of the licensed activities between jurisdictions), the host country is permitted to set additional requirements for recognition (“compensatory measures”). In practice, recognition is rarely “pure” recognition. Most recognition agreements require a considerable degree of cooperation, including in terms of analysis of the respective parties' regulatory regimes and, often, some regulatory adaptation. In general, recognition agreements: leave considerable residual powers to the host country; involve mutual monitoring between the regulatory authorities; involve some pre-conditions before recognition is granted; and include the possibility to reverse or remove recognition in view of changes to the other party's regulatory system. Additionally, many recognition agreements include a general safeguard, in addition to the specific rules of recognition, enabling the authorities to reassert regulatory jurisdiction in order to “protect the public good” or the like.”*

In other words – CASA must maintain its “technical expertise” to enable our businesses to totally benefit from Bilateral Agreements. The host country (FAA) needs CASA at the same level.

If CASA concentrated on harmonisation and maintaining technical expertise, then the regulatory system would be more harmonised than it is today. The challenge is to harmonise.

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To be discussed at the Maintenance Conference



4. *Basic Airworthiness Safety Principles*

Experience teaches you to realise that you cannot inspect safety into maintenance. It is why this profession still uses the hands-on assistance and the experienced artisan's knowledge so each AME/AMT does not make errors. We would be foolish if we thought humans won't make errors and that is why experienced AMEs/AMTs always double check as they do work. It is why flight controls need double checking. This is why many decades ago, aviation skill training was developed to create a mental culture of safety to remove the possibility of induced errors by maintenance staff. Is this mental safety culture still an outcome of modern training?

Basically, a read of the FAA's Safety Alerts 'Dirty Dozen' refreshes the basic reasons behind human factor mistakes.

1. **Lack of Communication**

Failure to transmit, receive, or provide enough information to complete a task. Never assume anything. Only 30% of verbal communication is received and understood by either side in a conversation. Others usually remember the first and last part of what you say.

Improve your communication—

- Say the most important things in the beginning and repeat them at the end. •
- Use checklists.

2. **Complacency**

Overconfidence from repeated experience performing a task.

Avoid the tendency to see what you expect to see—

- Expect to find errors.
- Don't sign it if you didn't do it.
- Use checklists.
- Learn from the mistakes of others.

3. **Lack of Knowledge**

Shortage of the training, information, and/or ability to successfully perform.

Don't guess, know—

- Use current manuals.
- Ask when you don't know.
- Participate in training.

4. **Distractions**

Anything that draws your attention away from the task at hand. Distractions are the #1 cause of forgetting things, including what has or has not been done in a maintenance task.

Get back in the groove after a distraction—

- Use checklists.
- Go back 3 steps when restarting the work.

5. **Lack of Teamwork**

Failure to work together to complete a shared goal.

Build solid teamwork—

- Discuss how a task should be done.
- Make sure everyone understands and agrees.
- Trust your teammates.

6. **Fatigue**

Physical or mental exhaustion threatening work performance.

Eliminate fatigue-related performance issues—

- Watch for symptoms of fatigue in yourself and others.
- Have others check your work.

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7. Lack of Resources

Not having enough people, equipment, documentation, time, parts, etc., to complete a task.
Improve supply and support—

- Order parts before they are required.
- Have a plan for pooling or loaning parts.

8. Pressure

Real or perceived forces demanding high-level job performance.
Reduce the burden of physical or mental distress—

- Communicate concerns.
- Ask for extra help.
- Put safety first.

9. Lack of Assertiveness

Failure to speak up or document concerns about instructions, orders, or the actions of others.
Express your feelings, opinions, beliefs, and needs in a positive, productive manner—

- Express concerns but offer positive solutions.
- Resolve one issue before addressing another

10. Stress

A physical, chemical, or emotional factor that causes physical or mental tension.
Manage stress before it affects your work—

- Take a rational approach to problem solving.
- Take a short break when needed.
- Discuss the problem with someone who can help.

11. Lack of Awareness

Failure to recognize a situation, understand what it is, and predict the possible results.
See the whole picture—

- Make sure there are no conflicts with an existing repair or modifications.
- Fully understand the procedures needed to complete a task.

12. Norms

Expected, yet unwritten, rules of behaviour.
Help maintain a positive environment with your good attitude and work habits.

- Existing norms don't make procedures right.
- Follow good safety procedures.
- Identify and eliminate negative norms.

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[MAINTENANCE CONFERENCE -- PLAN FOR THE FUTURE](#)



[1ST MARCH - 2017](#)