



**Australian Government**  
**Civil Aviation Safety Authority**



# **CASR 21.J Approved Design Organisations**

***A presentation to the NZ CAA Design Delegation Holders Seminar***

*Chris De Luis – Manager, Airworthiness and Engineering Branch (interim)*

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*Ben Challender – Manager Airworthiness Standards*



# About CASA

The function of the Civil Aviation Safety Authority's (CASA) is to conduct the safety regulation of civil air operations in Australia, Australian civil airspace and the operation of Australian aircraft overseas

# CASA operating environment

35,000 pilots

15,500 aircraft

900 AOC

8700 LAME

100 ATC

320 Aerodromes

700 Maintenance orgs



## **Purpose of an aviation safety regulator**

1. *Assure* safety by managing a safety regulatory regime
2. Don't unnecessarily impede the public/industry



## Purpose of an aviation safety regulator

1. *Assure* safety by managing a safety regulatory regime
2. Don't unnecessarily impede the public/industry

## Identify threats to aviation safety

'sources of the hazards'

- state of the aircraft  
(airworthiness)
- how it is flown  
(flight operations)
- where it is flown  
(airspace)
- where it  
departs/arrives from  
(aerodromes)



## Purpose of an aviation safety regulator

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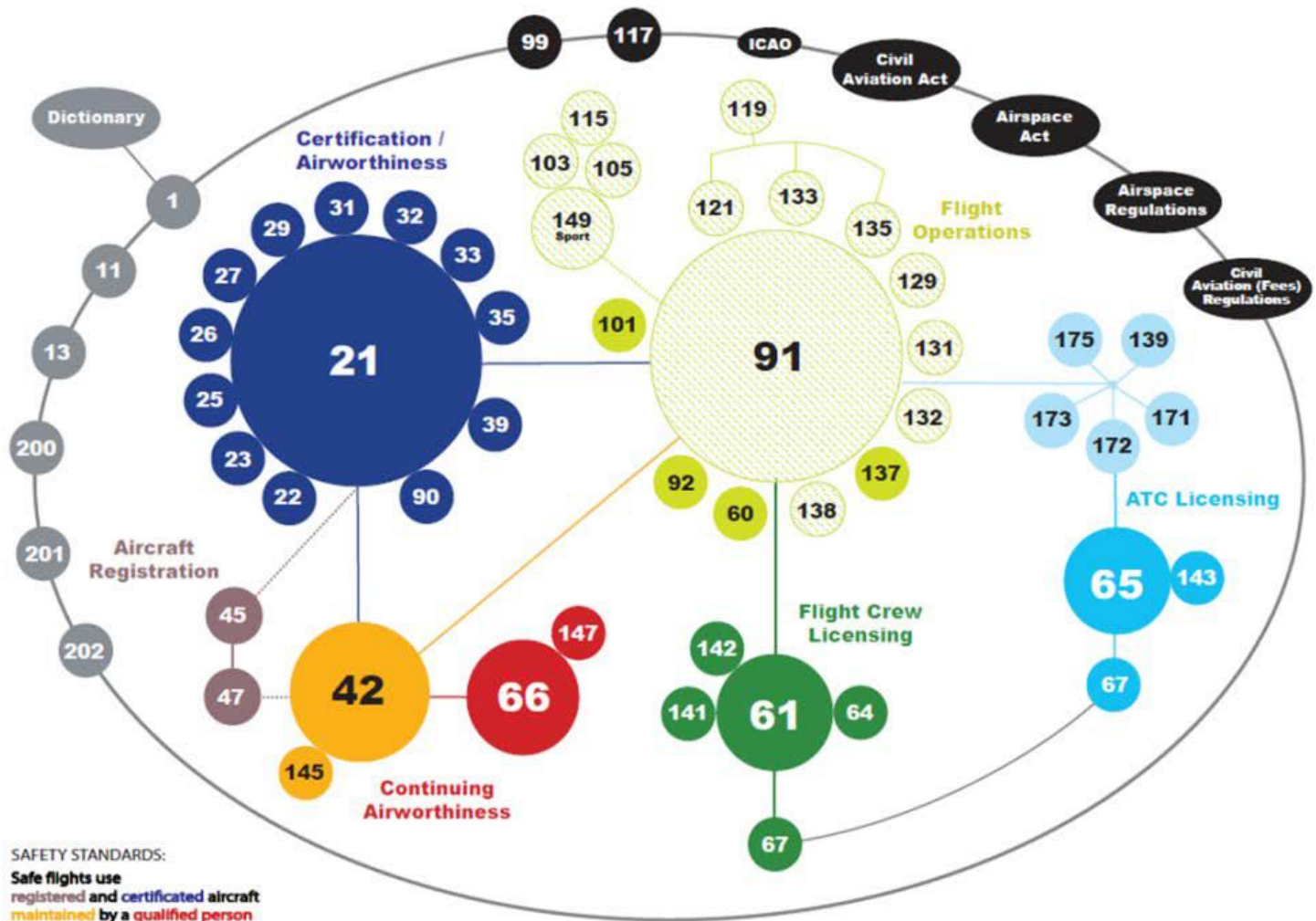
- airworthiness
- flight operations
- airspace
- aerodromes

### Define safe

'the regulation'

- aircraft certification
- aircraft production
- aircraft maintenance
- maintenance personnel
- continuing airworthiness
- flight operations
- flight crew licensing
- air traffic management
- air traffic controller licensing
- aerodromes

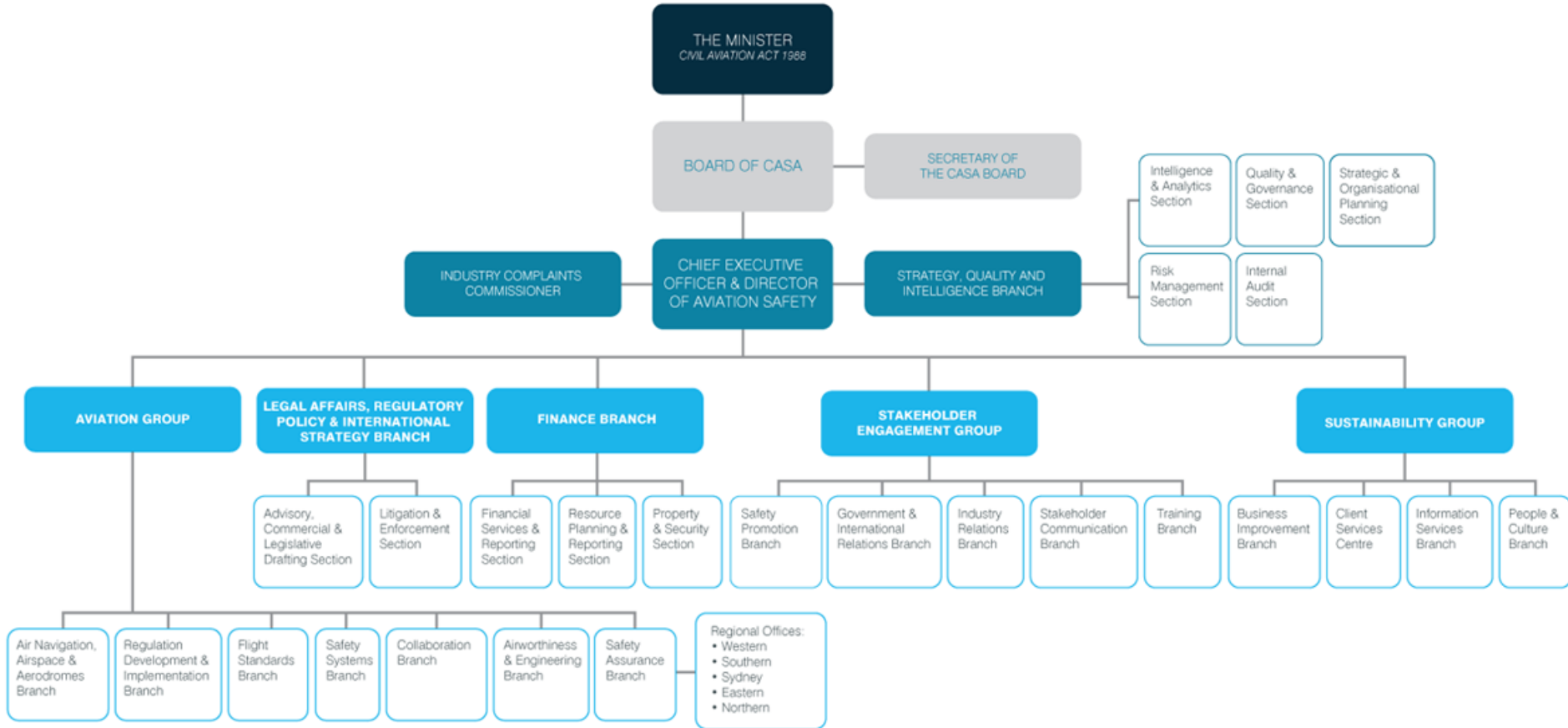




**SAFETY STANDARDS:**  
 Safe flights use  
 registered and certificated aircraft  
 maintained by a qualified person  
 flown by a qualified person  
 in airspace controlled by  
 a qualified person.

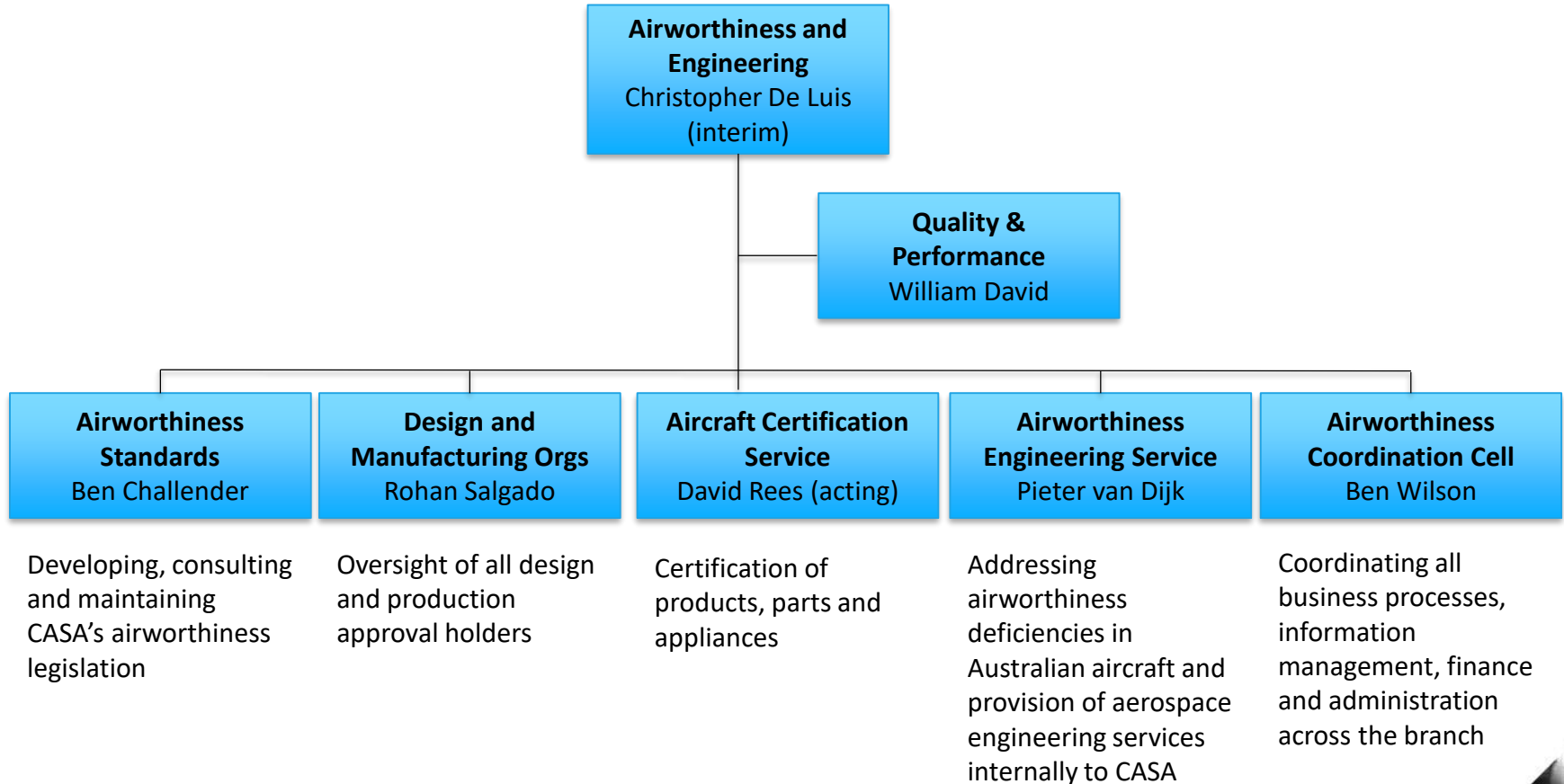
CASR Parts still outstanding are shown with dotted inner circle lines.

# CASA organisational structure





# Airworthiness and Engineering Branch



# CASA regulatory philosophy

1. committed to maintaining trust and respect
2. takes account of all considerations, including cost
3. risk-based approaches to regulatory action
4. consistently with international obligations
5. consultatively and collaboratively

# CASA regulatory philosophy

6. communicates fully and meaningfully

7. balances consistency with flexibility

8. employs just culture principles

9. proportionality and discretion in decision-making

10. legitimate but limited role pursuing punitive action

Section 9A of the *Civil Aviation Act 1988* requires that in exercising its regulatory powers and performing its functions, CASA must regard the **safety of air navigation as the most important consideration.**



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# CASR 21.J Approved Design Organisations

# CASA 21.J – introduction

Rules for certification and operation of approved design organisations (ADO)

Replaces the Approved Persons scheme (instrument of appointment) issued under CASR 21.M

Commenced 1 Mar 2014

## **CASA 21.J – purpose**

Provide the frame work for an ADO to describe HOW it will carry out design activities

The performance rules for WHAT must be done in relation to a particular design activity remain in other sections of CASR Part 21

# CASR 21.J – underlying principles (1)

Internationally harmonised (EASA based), to facilitate international acceptance of Australian design approvals

Organisational approval as opposed to assessment of, and reliance on, individuals

Requires a design assurance system



## CASR 21.J – Underlying principles (2)

Increased autonomy and flexibility – ability to appoint design approvers internally with scope and structure to suit the business

Perpetual, legal entitlement, with standards set in legislation, as opposed to a discretionary privilege

# CASR 21.J – requirements

Exposition

Design assurance system

Personnel

Facilities

Equipment, tools and design reference data

Accountable Manager

Head of Design

# Design assurance system

**Purpose:** to ensure aircraft remains compliant with applicable airworthiness standards

Includes:

- Independent monitoring (and feedback)
- Independent checking
- Assessment of key personnel (competent, independent)

# Benefits of CASR 21.J

Increased flexibility – appoint own personnel, scope

Opportunities for reduced CASA surveillance

Opportunities for increased scope – e.g. major changes

Entitlement, not privilege

Perpetual approval

## Subpart 21.J – further amendments

Independent checking qualification requirements

Include assessment of safety effect

Remove dual layers of independent checking associated with subpart 21.M approval

These changes will be made via the Part 21 MOS, and later integrated into the regulations where appropriate

# International agreements

CASA will actively pursue international agreements for reciprocal acceptance of design approvals granted by Subpart 21.J ADOs

CASA will not pursue international agreements for reciprocal acceptance of design approvals granted by authorised persons

## Further information

CASA Advisory Circular AC 21.J-01 contains extensive guidance material and acceptable means of compliance

For all design and production queries:

[aircraft.certification@casa.gov.au](mailto:aircraft.certification@casa.gov.au)