

CIVIL AVIATION
SAFETY AUTHORITY
AUSTRALIA

Notice of Proposed Rule Making

Air Operator Certification – Air Transport

Proposed Civil Aviation Safety Regulation
(CASR) — Part 119

Who this NPRM applies to

It is expected that this proposal will affect the following groups in the aviation industry:

Current and potential charter and RPT operators; professional crew members

Foreword

Section 27 of the Civil Aviation Act 1988 mandates the requirements for an Air Operator's Certificate (AOC). The Civil Aviation Safety Authority (CASA) issues AOCs to authorise prospective air operators who wish to conduct an aviation business. This includes the conduct of aerial work operations such as aerial survey and flying training, and the transport of persons or cargo for hire or reward being regular public transport (RPT) and charter operations.

Civil Aviation Regulation (CAR) 1988 206 [1(b) and (c)] prescribes the requirement for an AOC for RPT and charter operations. The proposed Civil Aviation Safety Regulation (CASR) Part 91 *General Operating and Flight Rules* proposed to amalgamate RPT and charter operations into a new category called air transport operations (see definitions page 5). Aerial work operations that are currently covered by CAR 206 1(a) will not be discussed in this NPRM.

The proposals contained in this Notice of Proposed Rule Making (NPRM) seek to implement CASA's corporate aims: to develop standards that are appropriate, clear, concise and aligned with international practice. This NPRM introduces and invites consultation on proposed new regulatory standards relating to the issue and retention of AOCs for air transport operations regardless of the size and complexity of that operation. The majority of the proposed rules contained in this NPRM have not changed from the current situation. The NPRM proposes to:

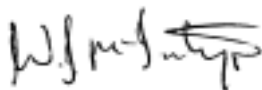
- Review the existing Civil Aviation Regulations and Civil Aviation Orders covering AOC issue that regulate the conduct of air transport operations;
- Consolidate the existing relevant legislation contained in the Civil Aviation Regulations and Civil Aviation Orders into one set of regulations;
- Bring the Australian AOC processes and practices, as far as practicable, into alignment with international standards; and
- Provide increased guidance and advisory material to the aviation industry.

CASR Part 119 will place requirements on applicants for the issue and retention of an AOC. This Part should be read in conjunction with the operational CASR Part appropriate to the type of aircraft to be operated. These CASR Parts are 121A – Air transport operations large aeroplanes, Part 121B – Air transport operations small aeroplanes, and Part 133 – Air transport operations – rotorcraft. Note: CASR Part 133 has a dual function for rotorcraft operations by providing regulations for both air transport and aerial work. CASR Part 119 will provide AOC issue and retention requirements for only the air transport sections of Part 133.

The proposals in this NPRM have been developed using the aviation industry feedback from Discussion Paper *DP0003OS Air Operator Certification – Commercial Air Transport*, which was published by CASA in May 2000.

Your comments on the proposals contained in this NPRM are invited for which a response sheet is provided, together with telephone, fax and e-mail contact details for further information, at the end of this proposal. The closing date for comments is **31 July 2002**. A Summary of Responses (SOR) to this NPRM will be prepared subsequent to the closing date for comments, and will be made publicly available.

I would like to thank you for expressing interest in this proposal, and wish to emphasise that no rule changes will be undertaken until all responses and submissions have been considered.



Bill McIntyre
Acting Assistant Director
Aviation Safety Standards

8 April 2002

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Abbreviations

AAR	Authorised Airworthiness Representative
AC	Advisory Circular
AD	Airworthiness Directive
AIP	Aeronautical Information Publication
AMP	Aircraft Maintenance Program
AMRD	Australian Maintenance Requirements Document
AOC	Air Operator Certificate
ATSB	Australian Transport Safety Bureau
BASI	Bureau of Air Safety Investigation
CAA	Civil Aviation Authority
CAAP	Civil Aviation Advisory Publication
CAO	Civil Aviation Order
CAR	Civil Aviation Regulation
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulation
CEO	Chief Executive Officer
CDL	Configuration Deviation List
DP	Discussion Paper
FAA	Federal Aviation Administration of the USA
FAR	Federal Aviation Regulations of the USA
FMS	Fatigue Management System
HAM	Head of Aircraft Maintenance
HAMC	Head of Aircraft Maintenance Control
ICAO	International Civil Aviation Organization
JAR	Joint Aviation Requirements of the European Joint Aviation Authorities
MCM	Maintenance Control Manual
MEL	Minimum Equipment List
MSOS	Maintenance Specific Operation Specification
NAA	National Airworthiness Authority
NPRM	Notice of Proposed Rule Making
NZCAA	New Zealand Civil Aviation Authority
OC	Operating Certificate
RFP	Regulatory Framework Program
RIS	Regulation Impact Statement
RPT	Regular Public Transport
SAPCOM	Safety Program for Commercial Operators
SCC	Standards Consultative Committee
SMS	Safety Management System
SOR	Summary of Responses
TC	Training Certificate
USA	United States of America



Definitions

Previously forming part of the Dictionary, Part 1 of the CASR Part 91 – *General Operating and Flight Rules* NPRM. Included for reference purposes only.

air transport means the transport of passengers or cargo for remuneration or hire, excluding the following:

- (a) the carriage of passengers, in accordance with subregulation 91.1045 (7), by an aircraft certified in the limited category;
- (b) the carriage of passengers for the purpose of engaging in parachuting operations;
- (c) the carriage of passengers in accordance with CASR Part 115 [passenger operations for hire or reward in gliders and balloons];
- (d) the carriage of passengers as permitted under CASR Part 136 [aerial work operations];
- (e) a cargo-only flight conducted wholly within Australia in an aircraft having an MTOW not exceeding 5,700 kg).

Australian operator means an operator whose principal place of business, or whose place of permanent residence, is in Australia.

operator means a person, organisation or enterprise responsible for making available an aircraft for an operation to the aircraft's pilot in command.

The Proposals

1. Background

Why have an Air Operator's Certificate?

1.1 An Air Operator's Certificate (AOC) is a permission, issued by the Civil Aviation Safety Authority (CASA), that authorises an entity to conduct an aviation activity identified in Civil Aviation Regulation (CAR) 206, subject to any condition placed on that AOC. Before an AOC can be issued, in accordance with section 28(1)(b) of the Act (extract below in italics), an applicant is required to demonstrate to CASA that:

- *The organisation is suitable to ensure that the AOC operations can be conducted safely, having regard to the nature of the AOC operations;*
- *The organisation's chain of command is appropriate to ensure that the AOC operations can be conducted or carried out safely;*
- *The organisation has a sufficient number of suitably qualified and competent employees to conduct and carry out the AOC operations safely;*
- *Key personnel in the organisation have appropriate experience in air operations to conduct or to carry out the AOC operations safely;*
- *The facilities of the organisation are sufficient to enable the AOC operations to be conducted or carried out safely;*
- *The organisation has suitable procedures or practices to control the organisation and ensure that the AOC operations can be conducted or carried out safely; and*
- *If CASA requires particulars of licences held by flight crew members of the organisation that the authorisations conferred by the licences are appropriate, having regard to the nature of the AOC operations.*

1.2 The purpose of the air operator certification process is to provide a means by which prospective air operators are authorised by CASA to conduct business in a manner that complies with the applicable Civil Aviation Act, Civil Aviation Regulations and Civil Aviation Orders. The application assessment process is designed to ensure that applicants comply, or are capable of complying, with the regulatory requirements.

1.3 AOC holders are required to be compliant and to maintain those authorised operations with an acceptable level of safety. In this way AOC holders benefit the community as a whole by providing a safe, quality service that can be monitored through an ongoing surveillance program.

Classification of operations and air transport

1.4 For the purposes of aviation safety, aircraft can be identified in many different ways, such as by *type certification category* (e.g. normal, aerobatic, limited) or by *kind* (e.g. aeroplane, rotorcraft, glider). Another method is based on how an aircraft will be used or operated – this is known as the *classification of civil air operations*.

1.5 The purpose of different classifications of operations is to be able to apply a range of safety standards appropriate to the operation undertaken. For example, compared to private flights, fare-paying passenger flights have:

- higher safety standards;
- mandatory insurance requirements; and
- greater regulatory oversight by CASA.

1.6 Australia currently has four classifications of civil air operations as they relate to safety regulation:

- Regular Public Transport (RPT);
- charter;
- aerial work; and
- private.

1.7 The four classifications are illustrated in the table below:

Australia's current classifications of civil air operations	
Safest	REGULAR PUBLIC TRANSPORT (RPT)
↑	CHARTER
↑	AERIAL WORK
Safe	PRIVATE

1.8 A Regular Public Transport operation, in broad terms, is an airline. An airline can offer members of the public a seat on an aircraft travelling to a particular destination at a particular time. It is a scheduled service on a particular route available to ‘persons generally’ (CAR 206 (1) (c)).

1.9 A charter operation, on the other hand, involves the hire of an aircraft. The space on the aircraft cannot be made available to ‘persons generally’ (CAR 206 (1) (b)). It is made available to a particular person, namely the person or persons who hire the aircraft. So, in broad terms, the distinction is between obtaining a seat on an aircraft (a Regular Public Transport operation), and hiring the aircraft (a charter operation).

1.10 As the new Civil Aviation Safety Regulations (CASRs) are developed, the current classifications of Regular Public Transport and charter will mostly be subsumed into one classification called air transport.

1.11 The new classification of air transport will align Australia's classification of operations with the International Civil Aviation Organisation (ICAO) classification of operations model with the exception of cargo-only flights conducted wholly within Australia in an aircraft having a maximum take-off weight not exceeding 5,700 kg.

2. Issue

2.1 Australia's aviation safety regulations and standards requirements in relation to AOCs and air transport operations are currently contained in the Civil Aviation Act 1988, Civil Aviation Regulations (CARs) and Civil Aviation Orders (CAOs). Like the current United States Federal Aviation Regulations (FARs), with which there are several layers of legal importance and a large amount of explanatory material and policy directives, the Australian CARs started out as simple common-sense rules. Over time, as a result of many additions and amendments to address a multitude of safety issues, the CARs have become more complicated to use.

2.2 Generally, some of the Australian AOC and air transport regulations are seen by CASA and industry as being overly prescriptive, ambiguous, disjointed and difficult to interpret. Other criticisms have been that they are difficult to comply with and enforce and sometimes reliant on exemptions for their effect.

2.3 CASA, in consultation with industry, has determined that the current regulations relating to air operator certification fall short of satisfying Australia's need for a straightforward set of regulations that are relevant, readily understood and closely related to the way safe air transport operations should be efficiently conducted. The current regulations are difficult to comply with and enforce, with a heavy reliance on exemptions to several regulations.

2.4 The current regulations and supporting material have been progressively altered over a number of years to keep pace with international trends but do not necessarily follow international best practice.

2.5 The current regulations are not harmonised with International Regulations including the Federal Aviation Regulations of the USA (FARs), Joint Aviation Requirements of the European Joint Aviation Authorities (JARs) and the New Zealand Civil Aviation Rules (CARs) which limits CASA's response to incorporate international changes to safety related practices.

2.6 Information necessary for AOC issue and retention is difficult to locate in the current legislation and adds a time and cost burden to industry.

2.7 The current regulations have not kept up with the safety initiatives introduced by the leading aviation nations. Charter operations, in particular, have been broadly criticised in safety investigations as being deficient in various safety matters including training and checking and safety oversight.

Why a single standard for RPT and charter operations is needed?

2.8 In the charter letter entitled ‘*A Measured Approach to Aviation Safety Reform*’, (November 1999), the Honourable John Anderson MP, Deputy Prime Minister and Minister for Transport and Regional Services stated ‘*Fare-paying passengers should be able to fly with any air operator, including charter operators, in the knowledge that the aircraft is maintained and its crew trained to the same standard that CASA requires of any other comparable operator, even if the company only provides aircraft for passenger services occasionally*’.

2.9 The Minister further directed CASA to ‘*minimise the distinction between charter and Regular Public Transport (RPT) operators. Where they exist, the onus must be clearly on operators to ensure that their passengers are informed about them*’.

2.10 The Minister’s charter letter was prompted by an unacceptably high accident rate in the charter sector when compared with RPT operations and the accident rate of leading aviation nations. The accident rates for charter operations can be viewed at www.atsb.gov.au/aviation/stats/index.cfm.

3. Objective

3.1 In order to align Australian legislation with international best practice, the existing regulations require amendments to address the above issues and to enhance the level of safety. The specific objective of this document is to provide for public consultation on proposed regulatory changes, in accordance with statutory requirements.

3.2 The objectives of the proposed CASR Part 119 are to:

- Review the existing Civil Aviation Regulations and Civil Aviation Orders covering AOC issue that regulate the conduct of air transport operations.
- Consolidate the existing relevant legislation contained in the Civil Aviation Regulations and Civil Aviation Orders into one set of regulations.
- Bring the Australian AOC processes and practices, as far as practicable, into alignment with international standards.
- Provide increased guidance and advisory material to the aviation industry.
- Satisfy the criteria established for the development of the CASRs. These criteria require that new legislation should be:
 - clear, concise and unambiguous;
 - focussed on safety, adopting a systems approach where appropriate;
 - consistent with Australia’s international obligations;
 - harmonised with international standards, unless unique Australian circumstances require otherwise;
 - cost effective; and
 - enforceable.

4. Options considered

4.1 The principle options considered during development of this NPRM were:

- **Option 1** – Retain current requirements without change;
- **Option 2** – Adopt equivalent foreign legislation without change; and
- **Option 3** – Retain existing legislation, revised, updated and harmonised with the recent safety regulations and initiatives of major foreign regulators where this adds to safety.

Option 1 – Retain current requirements without change

4.2 This option involves continuing with the current AOC system, which has been identified as being complex and disjointed and which as a result adds a time and cost burden to industry. The current system has a number of positive features; however, without being amended to correct several identified problems (see ‘Discussion of key issues – proposed changes’), it will remain largely unsatisfactory.

4.3 The following table examines this option against the objectives of the proposed regulatory change.

Option 1 – Retain current requirements without change	
Objective	Determination for Option 1
Review the existing Civil Aviation Regulations and Civil Aviation Orders covering AOC issue that regulate the conduct of air transport operations.	To continue the existing disjointed system of CARs and CAOs would be unacceptable to most users of the current system.
Consolidate the existing relevant legislation contained in the Civil Aviation Regulations and Civil Aviation Orders into one set of regulations.	This objective at first appears to meet this option, however many of the regulations are in need of review and modernising with current world’s best practice.
Bring the Australian AOC processes and practices, as far as practicable, into alignment with international standards.	To retain existing regulations and orders as written would not generally align with international standards including ICAO.
Provide increased guidance and advisory material to the aviation industry.	If the current regulations were retained it would be possible to provide increased advisory material.
Satisfy the criteria established for the development of the CASRs: <ul style="list-style-type: none"> • clear, concise and unambiguous; • consistent with Australia’s international obligations; • harmonised with international standards, unless unique Australian circumstances require otherwise; • outcome-based, to the greatest extent practicable; • cost effective; and • enforceable. 	It is generally recognised that Australia, with its current regulations and orders, does not satisfy these criteria.

Option 2 – Adopt equivalent foreign legislation without change

4.4 In this option CASA would examine the AOC legislation of foreign regulators with a view to applying the most suitable to the Australian situation. This option was rejected for three reasons. Firstly, because any foreign legislation would need significant rework to apply to Australian law. Secondly, the only benefit would be the ease of recognition of an Australian AOC by a foreign Regulator, should the operator seek approval for operations in that country and finally, it would introduce a new AOC issue and renewal process, which many operators would find unsatisfactory if it added to the complexity of issue.

4.5 The following table examines this option against the objectives of the proposed regulatory change.

Option 2 – Adopt equivalent foreign legislation without change	
Objective	Determination for Option 2
Review the existing Civil Aviation Regulations and Civil Aviation Orders covering AOC issue that regulate the conduct of air transport operations.	Foreign legislation would need significant rework to apply to Australian law and then to apply the local current procedures would be complex.
Consolidate the existing relevant legislation contained in the Civil Aviation Regulations and Civil Aviation Orders into one set of regulations.	Applying foreign legislation to our already muddled requirements would introduce more problems than it solved.
Bring the Australian AOC processes and practices, as far as practicable, into alignment with international standards.	This option would meet this objective allowing a modernisation of our existing requirements.
Provide increased guidance and advisory material to the aviation industry	Using foreign advisory material would meet this objective provided it improved the understanding.
Satisfy the criteria established for the development of the CASRs: <ul style="list-style-type: none"> • clear, concise and unambiguous; • consistent with Australia’s international obligations; • harmonised with international standards, unless unique Australian circumstances require otherwise; • outcome-based, to the greatest extent practicable; • cost effective; and • enforceable. 	JARs and FARs do satisfy some of these criteria, however not all. A balance has to be found between change, the resultant cost, and the effectiveness.

Option 3 – Retain existing legislation, revised, updated and harmonised with the recent safety regulations and initiatives of major foreign Regulators where this adds to safety

4.6 This is CASA’s preferred option as it has been developed in consultation with the aviation industry. This option will enable Australia to:

- revise the existing regulations and orders covering AOC issue to effectively control the conduct of air transport operations;
- consolidate existing relevant legislation in the Civil Aviation Orders (CAOs) and Civil Aviation Regulations (CARs) into one set of regulations;
- minimise the number of regulations;
- simplify understanding and therefore compliance;
- meet the ICAO conventions and standards;
- as far as possible, align (harmonise) Australian legislation with the latest safety initiatives of major overseas nations;
- reduce the reliance of the legislation on CASA exemptions; and
- provide increased guidance and advisory material to the aviation industry.

4.7 Under the proposals contained in this NPRM, existing CHARTER operators who will subsequently have a CASR Part 119 AOC issued, will, subject to any State route limitations, be able to conduct both scheduled and non-scheduled operations.

4.8 The following table examines this option against the objectives of the proposed regulatory change.

Option 3 – Retain existing legislation, revised, updated and harmonised with the recent safety regulations and initiatives of major foreign Regulators where this adds to safety	
Objective	Determination for Option 3
Review the existing Civil Aviation Regulations and Civil Aviation Orders covering AOC issue that regulate the conduct of air transport operations.	By taking the best of what the current regulations and orders have and combining them with the best of overseas practice we will achieve the best result.
Consolidate the existing relevant legislation contained in the Civil Aviation Regulations and Civil Aviation Orders into one set of regulations.	This would be achieved under this option.
Bring the Australian AOC processes and practices, as far as practicable, into alignment with international standards.	This objective is achievable with this option. ICAO compliance where possible was identified as a desirable outcome.
Provide increased guidance and advisory material to the aviation industry.	This objective would be achieved with this option.

Option 3 – Retain existing legislation, revised, updated and harmonised with the recent safety regulations and initiatives of major foreign Regulators where this adds to safety	
Objective	Determination for Option 3
<p>Satisfy the criteria established for the development of the CASRs:</p> <ul style="list-style-type: none"> • clear, concise and unambiguous; • consistent with Australia’s international obligations; • harmonised with international standards, unless unique Australian circumstances require otherwise; • outcome-based, to the greatest extent practicable; • cost effective; and • enforceable. 	<p>By taking the best of what the current regulations and orders have and combining them with the best of overseas practice we will achieve many of these criteria.</p>

Option 3 – Retain existing legislation, revised, updated and harmonised with the recent safety regulations and initiatives of major foreign Regulators where this adds to safety

Discussion of key issues - proposed changes

4.9 Whilst most of the content of CASR Part 119 reflects current rules that have been carried over, some of the new provisions are significant. These new requirements are summarised in Annex F to this NPRM. The most significant new proposals from a safety perspective are:

- a single standard for both RPT and charter operators;
- the identification of key personnel as defined in the Civil Aviation Act 1988;
- the establishment of a new ‘designated person’ identified as the Safety Manager;
- the Chief Executive Officer (CEO) to be responsible for the safety system and regulatory compliance;
- operators requiring the development and ongoing maintenance of a Safety Management System (SMS);
- operators requiring training and checking procedures, or the establishment of a contract with a flying training organisation approved under CASR Part 142 – Training and Checking Organisations;
- more detailed requirements for operations and maintenance manuals; and
- the operator to be responsible for the airworthiness and maintenance control of aircraft they operate.

4.10 The benefits flowing from these proposals are expected to:

- add to safety by providing clear enforceable rules for AOC issue and retention in a single part of the regulations;

- supplement the requirements of the Act and add a significant level of safety to air transport operations over and above those provided in CASR Part 91 – General Operating and Flight Rules; and
- improve international recognition and acceptance of Australian standards and practices through alignment with overseas standards and practices.

Proposal 1 – A single standard for both regular public transport and charter operators

4.11 Currently, the standards that apply to regular public transport and charter operators differ. Those differences relate primarily to:

- less stringent standards being applied to charter operators than to regular public transport operators e.g. a training and checking organisation is not required;
- two standards existing for the same type of aircraft depending on the aircraft operating activity; and
- compliance requirements for the issue of a regular public transport approval being far more stringent.

4.12 In the Minister’s charter letter, CASA has been asked to minimise, where possible, the distinction between charter and regular public transport operations. The value in achieving this will be:

- an aircraft will have the same level of safety regardless of whether the operation is scheduled or not;
- to address (in part) recommendation 5 from the Seaview Inquiry to amend/replace CAR 1988 206 with respect to commercial operations including RPT operations;
- CASA’s compliance will be easier due to commonality of standards with operators; and
- The application of ICAO standards and recommended practices, as this is a unique Australian requirement to distinguish between regular public transport and charter operations. A combined air transport category will harmonise with international practices.

4.13 **Option 1** would not be acceptable for the following reasons:

- a significantly larger proportion of accidents and incidents are recorded for charter operations than for regular public transport operations;
- previous inquiries and investigations have recommended the distinction be removed; and
- the community expects a high standard from air transport operations and the Minister’s charter letter reflects this view.

4.14 **Option 2** is not acceptable as there is no overseas equivalent of this distinction. The overseas practice is to apply a distinction on the basis of aircraft weight or passenger numbers or a combination of both.

4.15 **Option 3** was chosen as satisfying the dot point requirements in paragraph two of this proposal and minimising the problems associated with the dot points of paragraph one.

Proposal 2 – Identification of key personnel as defined in the Civil Aviation Act 1988

4.16 Currently, a problem exists with the different titles used in the aviation industry identifying key personnel. RPT and charter use different terms for the person responsible for training and checking. The term ‘chief pilot’ does not appear in the Act. Confusion is evident when determining responsibilities, as defined in the Act, relating to key personnel.

4.17 Key personnel means the people (however they are described) that hold or carry out the duties of the following positions in the AOC holder’s organisation:

- The chief executive officer;
- The head of the flying operations part of the organisation;
- The head of the aircraft maintenance part of the organisation;
- The head of the training and checking part of the organisation; and
- Any other person e.g. Safety Manager as prescribed by Part 119.

4.18 The proposed CASR Part 119 attempts to ensure the clarification of responsibilities and accountabilities for these key positions.

4.19 Option 1 was not acceptable as the current titles do not align with the Act and the titles vary between charter and RPT operations.

4.20 Option 2 was not acceptable, as it would have introduced another set of titles providing more confusion.

4.21 The titles proposed in this NPRM are intended to clarify the responsibilities of the key personnel. The operator may continue to use his or her existing titles within the organisation. The proposed changes will only affect the Operations Specifications where the person’s title, identified in the Act, is used to identify the name of the person and the title used by the company.

4.22 A grandfathering provision is included at 119.200 to allow existing key personnel who are currently doing equivalent duties to continue to perform these duties under this Part without being further assessed.

4.23 The new titles will be identified in the Operations Specifications attached to the Certificate, along with the person’s name and position title as identified by the operator. There is no need to change the current titles of these persons within the company if the operator wishes to continue to use them.

Proposal 3 – Establishing a new designated person identified as the Safety Manager

4.24 Currently, a problem exists in relation to the reporting lines between the safety manager and the key persons (identified in proposal 2). Without the safety manager being given a senior status within the organisation it is likely his or her input and effectiveness would be constrained. There is currently no requirement for the safety manager to receive formal training and current practice is for the manager to learn from his or her mistakes.

4.25 Option 1 was not acceptable as the appointment of a Safety Manager to administer the Safety Management System is necessary to ensure that an independent internal senior person was regularly reviewing all of the operator's safety related activities.

4.26 Option 2 was generally acceptable, however position titles and responsibilities vary between leading regulators.

4.27 CASR Part 119 proposes a new requirement for most operators to provide an accident prevention and flight safety program (ICAO Annex 6 Part 1 paragraph 3.6). An important part of that safety management system is the appointment of an appropriately trained Safety Manager, whose position is considered to be 'key personnel' as defined in subsection 28 (3) of the Civil Aviation Act.

4.28 Operators with less than four aircraft that weigh less than 5,700 kg and operate entirely within Australian airspace will not be required to have a safety manager. Although operators will still be encouraged to identify a senior person to monitor safety-related activities.

4.29 It is proposed that the Safety Manager will administer and oversee the organisation's safety management system. Depending on the size of the organisation, the responsibilities of the Safety Manager may require a full time appointment, or they may be added to someone's normal duties. The Safety Manager must be adequately trained and experienced in safety management. The Safety Manager will be responsible for (among other things):

- implementation, maintenance and effectiveness of the safety management system;
- timely advice and assistance on safety matters to managers at all levels;
- a reporting system for hazards;
- internal audits;
- investigating incidents and accidents; and
- distribution of safety information.

4.30 For more information on the training requirements for Safety Managers, please refer to the Advisory Circular AC 119-165(0) *Safety Management Training* in Annex B. For further information on safety management systems, please refer to the Advisory Circular AC 119-270(0) *Safety Management Systems* in Annex B.

Proposal 4 – Making the Chief Executive Officer responsible for the safety system and regulatory compliance

4.31 Currently, problems exist in relation to the responsibility and accountability of the CEO of an RPT or charter operation. For example a Chief Pilot may currently be accountable for the organisation’s safety and regulatory compliance, without the necessary financial support from the CEO. In another example it has been found that the CEO has abrogated his or her responsibility by mistakenly believing that one of the other organisation’s managers was responsible for certain activities.

4.32 Option 1 was not acceptable as experience, both in Australia and overseas, has shown that only the person with the ‘ultimate say’ can affect the safety aspects for an operator.

4.33 Option 2 was generally acceptable, as the leading regulators require a higher level of accountability from the certificate holder.

4.34 CASR Part 119 proposes to make the CEO accountable for all matters relating to safety and compliance. It is proposed that the CEO will be responsible for:

- ensuring that all operations, training and maintenance activities under the operator’s AOC are financed and carried out in accordance with the law;
- establishing and monitoring the effectiveness of the operator’s safety management system, including safety policy, safety objectives and planning; and
- performing safety management reviews.

4.35 The CEO may delegate these duties to the Head of Flying Operations, Head of Training and Checking and the Safety Manager, however the CEO cannot delegate responsibility. The CEO must ensure these responsibilities are enacted by providing training, work instructions, resourcing and oversight to these key persons.

Proposal 5 – Requiring operators to develop and maintain a safety management system

4.36 ICAO Annex 6 Part 1, paragraph 3.6 requires commercial air transport operators to establish an accident prevention and flight safety program. CASA proposes to meet this standard by proposing a new requirement for most operators to provide a safety management, accident prevention and flight safety management system – referred to as a safety management system. A difference will be lodged for small operators to be exempted from this requirement.

4.37 Operators with less than four aircraft that weigh less than 5,700 kg and operate entirely within Australian airspace will not be required to have a safety management system. Although these operators are still encouraged to establish a safety management system to monitor and improve safety related activities.

4.38 A safety management system is essentially a coherent and integrated set of procedures for effectively managing the safety of the organisation. CASR Part 119 will underpin CASA's transition towards an industry surveillance/oversight program that places greater emphasis on the Authority auditing the operator's processes and procedures, rather than on end-product inspections. The inclusion of the requirement for a safety management system is intended to make sure that the responsibility for ensuring the safety of a particular operation rests with the operator concerned.

4.39 Introduction of a safety management system will necessitate the establishment of appropriate organisational procedures and the allocation of resources to manage these systems. Operator accident prevention and flight safety programs are an ICAO requirement and the implementation of such programs is expected to produce positive safety benefits. Experience from other Regulatory Authorities indicates that the introduction of such systems leads to operator efficiencies flowing from the in-house, ongoing, assessment of their operating, maintenance and airworthiness control procedures. Any new procedures will need to be written and incorporated into Operations Manuals.

4.40 The requirement for the safety management system proposed in this NPRM is not new. CASA has previously provided advice to operators by issuing '*An operator's guide to Aviation Safety Management*' in April 1998. The Safety Program for Commercial Operators (SAPCOM) project team, which included representatives from CASA, the insurance industry, the aviation industry, consumers and an observer from the Bureau of Air Safety Investigation (BASI), prepared this guide. This guide is available for your information on the CASA website at <http://www.casa.gov.au/avreg/business/safemang.htm>

4.41 This NPRM proposes to take the safety management advice from the 1998 guide to the next level. By legislating the necessary components for an internationally recognised safety management system and by providing further information contained in AC 119-270(0) *Safety Management Systems*, the aviation industry will benefit from a standardised approach. The introduction of a trained Safety Manager as key personnel will ensure the effectiveness of the system to both the operator and to the industry as a whole.

4.42 The Discussion Paper for CASR Part 119 proposed that operators who have less than 20 employees need only provide a Safety Management System of reduced complexity. Further consideration was given as to the practicality of this divider. This method of identifying small operators was determined to be too difficult to apply. Further, small operators generally have good communication and standardisation practices in place that can diminish as the company expands. The cost versus benefit was also disproportional compared to the larger operators. Therefore it is proposed that operators other than those to which 121A applies who operate, at any one time, less than 4 aircraft entirely within Australian airspace, will not require a safety management system.

4.43 Subpart E of the proposed CASR Part 119 legal draft identifies the necessary components of the safety management system. The proposed legislation contained in Subpart E, along with the supporting information contained in the AC 119-270(0), has been written with the intention that an appropriately trained Safety Manager will apply these requirements and establish a safety management system, tailored for that operator. The wording has been drafted to allow flexibility, so that each system is developed with the intention of being appropriate to that operation.

4.44 Option 1 was unacceptable, as safety management systems will greatly assist the continuous improvement of safety levels within the industry. (See ‘Expected impact’ later in this NPRM.)

4.45 Option 2 was generally acceptable as leading regulators do require safety management systems to be developed and incorporated into air transport procedures.

Proposal 6 – Requiring operators to provide for crew training and checking, or to arrange for this to be conducted by an approved under CASR Part 142 – Training and Checking Organisations

4.46 Crew training and checking is an ICAO obligation under Annex 6 Part 1 Chapter 9, regardless of whether scheduled or non-scheduled air transport operations are involved. CASR Part 119 will also mandate it, as it is with the equivalent FAR and JAR.

4.47 Australia does not currently impose a legislative requirement for a training and checking organisation for charter operators. The standardisation of training and checking requirements such as syllabi, proficiency, qualifications, personnel and facilities will ensure a consistent standard across all operators.

4.48 The proposed CASR Part 119 applies the requirement to provide for crew member training and checking to all air transport AOC holders. This requirement is consistent with the proposed training and checking requirements under CASR Parts 121A, 121B and 133. The frequency of proficiency and competency checks are to be stated in the training and checking program requirements of CASR Parts 121A, 121B and 133, instead of Part 119.

4.49 The proposed CASR Part 119 enables the contracting out of an operator's training and checking program to a CASR Part 142 – Training and Checking Organisations. These organisations may provide flying training for pilot licences and ratings related to the checking and training function. This would also include aircraft type and class ratings and aircraft design feature authorisations.

4.50 However, where contracted out, the CASR Part 142 training organisation providing the training and checking must use the Operations Manual procedures and check lists used by the operator whose crews are being trained and/or checked. If safety equipment training is contracted out, the same types of equipment that the operator uses on his or her aircraft must be used by the training organisation concerned.

4.51 Option 1 was not considered acceptable as accident reports have frequently identified inadequate training and supervision as being contributory factors. CASAs obligations to adopt ICAO standards and recommended practices bring Australia in line with internationally recognised practices.

4.52 Option 2 was generally acceptable with the majority of the current requirements already meeting the foreign equivalent.

Proposal 7 – Introducing more detailed requirements for operations and maintenance manuals

4.53 The structure and specified contents of the Operations Manuals have been incorporated into AC 119-380(0) *Structure and Content of Operations Manual* (see Annex B). They have been made more comprehensive and useful by:

- substantially adopting the JAR-OPS 1 model to encourage standardisation. This model being the most comprehensive, ICAO compliant and appropriate to the Australian aviation environment;
- allowing use of other than printed medium for Operations Manuals;
- requiring operators to ensure that Operations Manual content does not conflict with regulations and procedures of States over-flown (ICAO Document 8335 paragraph 5.3.3(a)); and
- requiring prior notification to CASA of amendments to approved portions. This requirement would supersede CAAP 215. Note, in 119.385(5), that duplication of material carried aboard the aircraft is not required to be included in the Operations Manual, provided it is referenced.

4.54 Additional changes proposed in CASR Part 119 include:

- Maintenance Control Manual requirements to be incorporated.
- Maintenance Control Manual permitted in other than printed medium, with CASA approval, for the Operations Manual.
- The Training and Checking manual to be complementary with CASR Part 142 requirements. Whether training and checking is conducted internally or externally the person must reach the same standard.



- The Operations Manual needs to be in a language that the crew (pilots and cabin crew) and ground support personnel can understand. English is required for Australian operators. Ref. 119.105.
- A new table added to the regulation (119.385-2), which clarifies which Operations Manual contents must be approved by CASA.
- The proposal to introduce a safety management system will necessitate the establishment of appropriate procedures that may be incorporated into the Operations and Maintenance Control Manual.

4.55 Option 1 was not acceptable as deficiencies were identified in the current requirements as they lacked standardisation and consistency between operators. Existing operators will not be required to reorder their manuals.

4.56 Option 2 was not acceptable as the JAA model, whilst used as the basis of the proposed manual structure, was not mandated.

Proposal 8 – Making the operator responsible for the airworthiness and maintenance control of aircraft they operate

4.57 The maintenance and airworthiness requirements of the proposed CASR Part 119 centre on the airworthiness and maintenance control of the aircraft authorised on an AOC, to be operated by the holder of that AOC. The requirements include:

- Having a person approved by CASA as the Head of Aircraft Maintenance Control (HAMC), who is the key person within the operator's organisation responsible for the continuing airworthiness of aircraft authorised by the operator's AOC.
- Operating in accordance with the Maintenance Specific Operation Specifications (MSOS) issued by CASA.
- Having an Aircraft Maintenance Program (AMP) approved by an Authorised Airworthiness Representative (AAR), including a reliability program or life extension program if required, for the operator's aircraft.
- Having a Maintenance Control Manual (MCM) that meets the requirements of CASR Part 119 and is acceptable to CASA.

4.58 Where an aircraft is operated by more than one AOC holder only one of the operators shall be nominated by the aircraft registration holder as the Registered Operator, under CASR Part 47. The Registered Operator's HAMC is responsible for the airworthiness and maintenance control of the aircraft in accordance with the operator's Maintenance Control Manual (MCM) and as required by the aircraft's approved AMP. In the case of a number of operators using one aircraft, the Registered Operator's HAMC may also be used to satisfy the requirement for a HAMC for the other operators.

4.59 The HAMC for operators, other than the registered operator, is a coordination role to ensure the aircraft is appropriately equipped and fit for the proposed flight, authorised by the operator's AOC. This should include a review, as per the operator's MCM, of any Airworthiness Directives or other directions issued by CASA, service information issued by the manufacturer or review of any defects that have been deferred under the aircraft's Minimum Equipment List (MEL) or Configuration Deviation List (CDL).

4.60 The purpose of the above requirements is to align Australian requirements with internationally accepted standards and enhance the controls for continuing airworthiness of aircraft authorised by an operator's AOC.

Head of Aircraft Maintenance Control

4.61 The Head of Aircraft Maintenance (HAM) is a current requirement under Section 28 of the Civil Aviation Act. The requirement for this person will remain, however the Act is being changed to contain the HAMC term to better reflect the responsibilities of this position.

4.62 An operator may change the title HAMC to suit the operator's organisational structure, however the responsibility for the airworthiness control of the operator's aircraft must remain.

Maintenance Specific Operation Specifications

4.63 The current Australian Maintenance Requirements Document (AMRD), applicable to aircraft certificated in the transport category, will be included in the MSOS. The Operation Specifications documents, including the MSOS, will be developed in conjunction with an applicant and issued by CASA for air transport operations under CASR Parts 121A, 121B or 133.

4.64 The purpose of the MSOS is to standardise the conditions that apply to an operator for the control and direction of airworthiness and maintenance matters and include details relating to:

- the Aircraft Maintenance Program;
- any reliability or life extension programs;
- the maintenance contractual arrangements;
- any leased aircraft maintenance programs;
- the parts pooling or borrowing arrangements; and
- any ferry flight authorisation.

Maintenance Control Manual

4.65 The current requirement for an MCM will remain and it is proposed that the minimum requirements for the contents of the MCM will be standardised through the promulgated CASR Part 119.

Aircraft Maintenance Program

4.66 It is proposed that all aircraft operated in air transport operations under CASR Parts 121A, 121B or 133 will be required to have an aircraft maintenance program approved for the aircraft authorised by the operator's AOC. The minimum requirements for the program will be provided in the respective CASR Part 121A, 121B or 133 and must provide for the continuing airworthiness of the operator's aircraft.

5. Impact analysis

5.1 For the purpose of this NPRM the preferred option, *Option 3 – Retain existing legislation, revised, updated and harmonised with the recent safety regulations and initiatives of major foreign Regulators where this adds to safety*, is the only option further analysed.

Persons affected

5.2 The persons who will be affected by this NPRM are:

- air transport operators of aircraft;
- professional flight crew;
- cabin crew members;
- flight engineers; and
- CASA.

5.3 Others likely to be affected to a lesser extent include:

- the travelling public;
- aircraft owners;
- persons involved with the maintenance, and
- the Australian community.

Effect on existing regulations

5.4 The proposed regulations will necessitate consequential amendments to the existing CAR's and savings provisions/repeal of CAOs when the relevant CASR Parts 119, 121A, 121B and 133 are promulgated. The aspects that relate to CASR Part 119 include:

- CAR's 206 (b) and (c), 215, 217 and 223
- CAO's 82 series, which relate to air transport operations.

5.5 The proposed rules are required to be satisfied for the issue and retention of an AOC and must be read along with those air transport regulations that will be presented in CASR Parts 121A, 121B or 133, appropriate to the operation.

5.6 The proposed new regulatory structure will reduce the complexity of the amendment process. The current regulatory structure may require several regulations to be altered when incorporating a single change as the item requiring correction is frequently located in many places.

Expected impact

5.7 While most of the content of CASR Part 119 reflects current rules that have been carried over, some of the new provisions are significant. The most significant new proposals from a safety perspective are:

- The proposed requirement for most operators to instigate a safety management system. These new requirements will instil a safety ethos throughout an operator's organisation, enhance aviation safety management and give effect to the ICAO standard in Annex 6 Part 1 paragraph 3.6 and Annex 6 Part II Section II paragraph 1.6;
- The proposed requirement that all operators must provide a training and checking organisation to conduct the training and checking programs. This function may be contracted out, with CASA approval, however the operator will retain responsibility for ensuring that the contracted organisation carries out specific duties;
- The specification of a more comprehensive Operations Manual content and the clarification of requirements relating to CASA approval and acceptance of the content;
- The application of a single standard for operator certification regardless of whether charter or RPT operations are involved. (The terms charter and RPT will not appear in the CASRs);
- The high/low capacity divider at the 38 person/4,200 kg payload point will be removed. This divider is unique to Australia and was not safety based.
- Clarification of the responsibilities of operators for the airworthiness and maintenance control of aircraft that they use;
- The alignment of the key personnel terminology identified in the Civil Aviation Act with those persons identified in CASR Part 119; and
- The additional requirement for most operators to appoint a Safety Manager as one of the key personnel, responsible for the administration of the safety management system.
- The chief executive officer is responsible for the safety system and regulatory compliance; and
- The operator to be responsible for the airworthiness and maintenance control of aircraft they operate.

5.8 This NPRM is based on the ICAO classification of operations system and reflects conclusions reached at the Air Transport Operations Technical Committee meeting of 28 August 1997.

5.9 Some of the regulations contained in this NPRM incorporate international safety standards that improve on existing regulatory requirements. These standards add value to the overall Australian safety system by incorporating world's best practice principles. CASA considers that the costs are outweighed by the disproportionate increase in safety and by standardising with other regulators. For example, safety management systems controlled and audited by the operator have demonstrated significant improvements in reducing accident and incident rates in countries where these requirements have been mandated.

5.10 Other regulations, resulting from industry comment from DP 0003OS, have been simplified and utilise Advisory Circulars to provide further supportive information. This enables operator compliance within defined regulatory boundaries, yet also allows the operator to establish a method of compliance relevant to their circumstances. This would be seen as cost neutral or a cost reduction. For example, the Operations Manual contents have been moved to AC 119-380(0). This allows an operator to satisfy the regulatory requirements by structuring the manuals in the most appropriate way for their operation, or to structure the manuals in accordance with the AC.

5.11 An identifiable concern raised by several contributors to DP 0003OS was the possible loss of services to remote locations resulting from additional costs associated with these proposed changes. The identified major costs associated with the introduction of this Part have been the subject of a cost/benefit analysis – included at Annex E of this NPRM.

5.12 At the time CASR Part 119 comes into effect, the holder of a current AOC issued under Section 27 of the Act with a prescribed purpose as defined in CAR 206(1)(b) and (c), will be eligible for the issue of a transitional AOC. The holder of a transitional AOC may perform the operations that are authorised under that certificate without complying with CASR Part 119 until the date of expiry of that certificate. It is expected that transitional AOCs will be issued for up to six years. The transitional AOC holder must show compliance with all applicable CASRs prior to that expiry date in order to qualify for a CASR Part 119 AOC.

5.13 The purpose of the following table is to identify the expected benefits and costs to industry related to the introduction of Option 3. An analysis and explanation of the impact of the new provisions is contained at Annex E to this NPRM, which should be read in conjunction with the following table.

Key Issue	Benefits	Costs
Single standard for RPT and charter		
Same operational and maintenance standards applied to aircraft (regardless of type of operation).	Aircraft to have the same level of safety, regardless of whether the operation is scheduled or not. CASA’s compliance will be easier due to commonality of standards with operators.	Charter operators will have additional costs associated with the higher standards proposed. Safety management systems and training and checking requirements are examples.
Passenger safety is treated equally. Public do not have to ask questions as to whether the aircraft is operating to a certain standard.	Fare-paying passenger expectations of safety levels will be the same regardless of the current charter/RPT differences.	Charter operators will have additional costs associated with the higher standards proposed. See the benefit/cost analysis at Annex E
Identification of key personnel		
Clarification of roles, responsibilities and accountabilities.	Responsibilities are made clear to ensure that the appropriately trained and qualified person is responsible for his or her area of expertise. Key personnel still have obligations under the Civil Aviation Act.	Minimal to no cost will be involved. Key personnel may retain their current title within the organisation. Titles within the AOC documentation will identify the key personnel by name and company title.
Key Issue	Benefits	Costs
Establishment of a Safety Manager		
Administration of the safety management system.	A technically competent and appropriately trained person is responsible for the administration of the safety program.	Salary cost and training costs will be required for those operators who do not currently have an appropriately trained safety manager.
Safety Manager can be a part-time role, or shared between smaller organisations.	This will have a significant cost benefit to smaller operators by not requiring a full time Safety Manager on the payroll. The Safety Manager can undertake additional roles within the organisation with smaller organisations. A Safety Manager shared between smaller organisations could identify and rectify similar problems experienced across each organisation.	Shared salary costs and training costs will be required for those operators who do not currently have an appropriately trained safety manager. This will further reduce the direct costs of employing a Safety Manager. Improved safety standards should see savings in reduced incident and accident costs throughout the industry.



Establishment of a Safety Manager		
Maintenance, review and revision of the safety management system.	The Safety Manager will be accountable for the implementation and ongoing maintenance of the safety management system.	The continuously improving safety management system will provide an improving cost effectiveness.
Timely advice and assistance on safety matters to managers.	Safety issues and hazards are encouraged to be reported and can be acted upon by managers in a more timely manner.	Cost benefits should result from improved identification and rectification of potential problems before they happen.
CEO responsible for safety management system and compliance		
CEO can delegate duties but not responsibility.	The responsibility rests with the CEO – ensuring top-down commitment to safety and developing a safety culture.	Some additional costs associated with the CEO's time may result whilst verifying the effectiveness of the other key personnel.
Key Issue	Benefits	Costs
Operators to develop and maintain a safety management system		
Smaller operators to be exempt from the safety management system requirements.	Staff are encouraged to report hazards and safety concerns. Procedures will help to track significant events and detect unexpected increases in safety related events. Hazard reporting process will help to ensure safety issues are identified and acted upon.	Initial set-up and maintenance costs will apply to operators who currently do not have a functional safety management system in place.
Operators to provide for crew training and checking, or to arrange for this to be conducted by an approved CASR Part 142 – Training and Checking Organisation		
Mandatory crew training and checking.	Will harmonise Australia's international obligations with ICAO Annex 6, Part 1, Chapter 9.	Costs will increase for operators who do not currently provide training and checking to crew members.
Standardisation of training and checking requirements such as syllabi, proficiency, qualifications, personnel and facilities.	Will ensure consistency across all operators. Prescribes minimum requirements.	Minimal costs associated with operators who currently have capable training and checking procedures.
Contracting of training and checking to third parties.	Enables smaller operators to utilise other providers, rather than provide the service themselves.	Operators may choose to contract their training and checking to a training and checking organisation therefore reducing their costs.

Key Issue	Benefits	Costs
More detailed requirements for operations and maintenance manuals		
Explanatory material provided	Advisory Circular provided to identify Operations Manual content requirements.	Existing operators do not have to restructure their manuals although there will be a cost to ensure compliance with new requirements proposed.
Non-printed mediums	Electronic operations manuals will have a cost benefit to avoid large printing costs.	For those operators who wish to reduce their printing costs there may be a cost benefit.
The operator responsible for the airworthiness and maintenance control of aircraft they operate		
HAMC	Qualified people identified and tasked with ensuring airworthiness and maintenance control.	Operators under the current CAR 206 (1)(c), i.e. charter operators, who will be authorised under CASR Part 121B, must appoint a person to act as a HAMC. This may be a financial impost for the operators but the cost is outweighed by the disproportionate increase in safety.
Airworthiness and maintenance control	<p>Clarity in the regulations ensures ease of compliance for the industry and ease of understanding for CASA and industry.</p> <p>The provision will not impact significantly on operators authorised under CASR Part 121A. However operators under the current CAR 206(1)(c), i.e. charter operators who will be authorised under CASR Part 121B may have an additional cost impost. However, the costs are outweighed by the disproportionate increase in safety and by standardising with international best practice.</p>	<p>Operators who will be authorised under CASR Part 121A will have little to no financial impost.</p> <p>Operators to be authorised under CASR Part 121B may have an initial financial impost for developing a Maintenance Control Manual. However the cost is outweighed by the disproportionate increase in safety.</p>

Expected impact – Air transport operators of aircraft

5.14 AOC applicants and AOC holders engaged in air transport operations will be the most affected. The benefits to the air transport operator include:

- AOC regulations in a single document, including the benefit of quickly finding what is required without having to search for other documents;
- the use of Advisory Circulars to provide further guidance to assist the operators in having the safest standard of operation; and
- AOC issue and retention procedures will be based on international regulatory standards for easier transition into another country's operating environment should the operator seek operational approvals internationally.

5.15 Existing AOC holders will need to review their documentation and procedures and will be issued with a transitional AOC pending the issue of a new AOC issued under CASR Part 119.

Expected impact – Professional flight crew

5.16 Flight crew will have an increased responsibility to report on safety matters to the safety manager in accordance with the safety management system.

Expected impact – Cabin crew members

5.17 Cabin crew members will have an increased responsibility to report on safety matters to the safety manager in accordance with the safety management system.

Expected impact – CASA

5.18 CASA will benefit by having the regulatory compliance requirements for AOC issue and retention in the one document. Improved wording and consolidation of requirements will promote a higher level of understanding and compliance with the new standards by industry, thereby reducing the need for enforcement action and allowing resources to be allocated to safety promotion and education. Cost savings for CASA should flow from a new regulatory structure that requires operators to audit and monitor their activities through their safety systems. CASA staff involved in issuing and auditing AOCs will need to be trained in the new requirements. Revised work instructions for CASA staff will be required.

Expected impact – Travelling public

5.19 The travelling public will gain by the increased levels of safety. The cost to the travelling public may increase due to the additional costs associated with the new safety system and training and checking requirements. Frequent travellers may notice some changes to procedures.

Expected impact – Australian community

5.20 The Australian community as a whole will benefit from a reduction in the number of incidents and accidents in aviation.

Effect on the environment by implementing this proposal

5.21 The proposed changes to the current legislation will not create any discernible change to, or impact on, the environment.

ICAO compliance

5.22 Most regulations contained in this NPRM adopt the standards and recommended practices of ICAO Annex 6 (Operation of Aircraft). The exception being operators with less than 4 aircraft weighing less than 5,700 kg operating within Australian airspace, who will not be required to have an accident prevention and flight safety program.

6. Consultation

6.1 CASA is committed to working cooperatively with the aviation industry to maintain and enhance aviation safety. The CASA Standards Consultative Committee (SCC) is a joint CASA/Industry forum, set up to involve the aviation industry formally during the development phase of regulatory material. The SCC examines proposed regulatory changes to determine if they are worth pursuing and assists CASA in the allocation of priorities for those projects. Aviation industry experts then work together with CASA staff in sub-ordinate groups (SCC Sub-Committees and Project Teams) on detailed development of regulatory material (both new regulations and amendments).

6.2 The regulatory proposals contained in this NPRM are as a result of CASA/Industry consultation. Regulatory development work was conducted through the publication of Discussion Paper *DP0003OS Air Operator Certification – Commercial Air Transport*.

6.3 CASA received 48 written responses to DP 0003OS. The comments received identified some deficiencies in the proposals that have been corrected. The consolidated summary of responses to the Discussion Paper is included at Annex D of this NPRM.

6.4 Information on CASA's policy framework for the future classification of civil air operations has been published for some time on CASA's website. The framework, and its associated synopsis are intended as a guide to the development of new Civil Aviation Safety Regulations. A copy of the relevant web pages is included at Annex C to this NPRM.

6.5 The Standards Consultative Committee’s Operational Standards Sub-Committee was responsible for reviewing the development of CASR Part 119. The SCC Operational Standards Sub-Committee consists of the following members

Rob Armitage – representing Australian and International Pilots Association
Bruce Austin – representing Australian and International Pilots Association
Sue Brookes – representing Flight Attendants’ Association of Australia
H. Jim Duff – representing Ansett/Air New Zealand
Ron Fisher – representing General Aviation Professional Association
Luke Herden – representing Raytheon Australia
Phil Hurst – representing Aerial Agricultural Association of Australia
Stephen Ingham – representing Guild of Air Pilots and Navigators, Australian Region
Egon Kohlhammer – representing Flight Attendants’ Association of Australia
Peter Laver – representing Australian Defence Force
David McBrien – representing Australian Search and Rescue
Peter Middlebrook – representing Middlebrook Air Services
Paul Middleton – representing Australian Ultralight Federation
John Milton – representing Australian Airports Association
Patrick S Murray – chair of the Standards Consultative Committee
Robert Nelson – representing Australian and International Pilots Association
Alex Passerini – representing Australian and International Pilots Association
Stan Prout – representing Australian and International Pilots Association
Peter Raven – representing Guild of Air Pilots and Navigators, Australian Region
Chris Townsend – representing Helicopter Association of Australia
Murray Warfield – representing QANTAS Airways Limited
Richard Woodward – representing Australian and International Pilots Association
Craig Worth – representing Hang Gliding Federation of Australia

7. Conclusion and recommended option

7.1 The following table shows the comparison of the objectives and an assessment of each option, and clearly shows the benefits of Option 3.

Objective	Option 1	Option 2	Option 3
	Retain current requirements without change	Adopt equivalent foreign legislation	Retain existing legislation, revised, updated and harmonised with the recent safety regulations and initiatives of major foreign Regulators where this adds to safety
Review the existing Civil Aviation Regulations and Civil Aviation Orders covering AOC issue that regulate the conduct of air transport operations.	✘	✘	✔
Consolidate the existing relevant legislation contained in the Civil Aviation Regulations and Civil Aviation Orders into one set of regulations.	✘	✘	✔
Bring the Australian AOC processes and practices, as far as practicable, into alignment with international standards	✘	✔	✔
Provide increased guidance and advisory material to the aviation industry	✘	✔	✔
Satisfy the criteria established for the development of the CASRs: <ul style="list-style-type: none"> • clear, concise and unambiguous; • consistent with Australia’s international obligations; • harmonised with international standards, unless unique Australian circumstances require otherwise; • outcome-based, to the greatest extent practicable; • cost effective; and • enforceable. 	✘	✘	✔

7.2 The proposed CASR Part 119 will provide a regulatory foundation for air operator certification for air transport operations in Australia. The proposed CASR Part 119 will consolidate into one Part of the new CASRs the regulatory requirements for the issue and retention of an AOC.

7.3 The proposed regulatory structure supports a systems approach to regulation by requiring, in the case of most rules, operators to establish procedures to ensure compliance and incorporate those procedures into operations manuals.

7.4 CASR Part 119 will replace all the affected CARs 1988 and will integrate with the rules in the other CASRs, principally CASR Parts are 121A – Air transport operations large aeroplanes, Part 121B – Air transport operations small aeroplanes, and Part 133 – Air transport operations - rotorcraft. Note: CASR Part 133 has a dual function for rotorcraft operations by providing regulations for both air transport and aerial work. CASR Part 119 will provide AOC issue and retention requirements for only the air transport sections of CASR Part 133.

7.5 Supplementary material in the form of Advisory Circulars (ACs) will be provided where considered necessary so as to assist with the standardisation of interpretation and implementation when the rules are introduced.

7.6 Should the proposed CASR Part 119 be implemented, the most significant rule enhancements from a safety perspective will be:

- a single standard for both RPT and charter operators;
- the identification of key personnel as defined in the Civil Aviation Act 1988;
- the establishment of a new ‘designated person’ identified as the Safety Manager;
- the Chief Executive Officer to be responsible for the safety system and regulatory compliance;
- operators requiring the development and ongoing maintenance of a Safety Management System;
- operators requiring training and checking procedures, or the establishment of a contract with a flying training organisation approved under CASR Part 142 – Training and Checking Organisations;
- more detailed requirements for operations and maintenance manuals; and
- the operator to be responsible for the airworthiness and maintenance control of aircraft they operate.

7.7 The benefits flowing from these proposals are expected to:

- add to safety by providing clear enforceable rules for AOC issue and retention in a single part of the Regulations;
- supplement the requirements of the Act and add a significant level of safety to air transport operations over and above those provided in CASR Part 91 – General Operating and Flight Rules; and
- improve international recognition and acceptance of Australian standards and practices through alignment with overseas standards and practices.

8. Implementation and review

8.1 In accordance with the CASA Regulatory Reform Plan, the proposed new CASR Part 119 is expected to be made coincidentally with CASR Part 121A – Air transport operations large aeroplanes, CASR Part 121B – Air transport operations small aeroplanes, and CASR Part 133 – Air transport operations rotorcraft, by the Governor-General during November 2003. CASR Part 119 will not commence before January 2005.

8.2 An implementation/transition plan for CASR Part 119 will begin on rule making, at which time the CASA Aviation Safety Standards Division project will be closed and the implementation requirements will be handed over to CASA's Regulatory Implementation/Entry Control Group. This group is responsible for the implementation aspects of all CASR Parts (such as industry education/awareness programs) on behalf of the Authority.

8.3 The implementation/transition phase provides for Australia wide education and training programs, the development and approval of necessary (operational) manuals, the adjustment of delegations/authorisations, changes to regulatory services fees/charges, development and approval of procedures and the application of the new rules.

8.4 Current rules will apply unless superseded by relevant CASR Parts. Current AOC holders will be issued with a transitional AOC and, with the exception of CASR Parts 119, 121A, 121B and 133, be required to comply with any other applicable CASRs Parts at the time of commencement of those regulations.

8.5 Each operator who holds a current AOC at the time CASR Part 119 commences will be issued with a transitional AOC in accordance with the requirements of CASR 202.410 (included in the CASR Part 119 draft rules attached at Annex A).

8.6 It is proposed that a letter will be sent to all such AOC holders, prior to CASR Part 119 commencing, to explain the implementation/transition phase, which is expected to extend over a period of 6 or 7 years. During this phase all operators will have a minimum of 12 months to prepare for compliance with CASR Part 119 and the applicable associated CASR Parts 121A, 121B or 133.

8.7 The monitoring and review of the new regulations will be conducted on an ongoing basis during the implementation/transition phase. Thereafter, following the commencement of the regulations, monitoring and review will be conducted on an as required basis and (within 5 years) as required by the Government.

8.8 Monitoring and review of the CARs and CAOs will cease once the CASRs commence.

How to submit comments on this NPRM

In order to simplify the collation and summarising of comments, please respond on the Response Sheet provided (see page 37) or a copy of the sheet, with additional comments attached as necessary.

Written comments quoting *NPRM 0201OS* should be forwarded by **31 July 2002** to CASA's Regulatory Documentation Coordinator by one of the following means:

Post (no stamp required)

Civil Aviation Safety Authority
Standards Coordination & Support Branch
Reply Paid 2005
Canberra ACT 2601, Australia

E-mail PART119nprm@casa.gov.au

Fax 1800 653 897 (free call)
international +612 6217 1691



CIVIL AVIATION
SAFETY AUTHORITY
AUSTRALIA

Additional information is available from:

Mick Haxell, CASR Part 119 Project Manager

Post (no stamp required)

Civil Aviation Safety Authority
Operational and Flight Crew Licensing Branch
Reply Paid 2005
Canberra ACT 2601, Australia

E-mail haxell_m@casa.gov.au

Telephone 02 6217 1745 or 131 757 (for the cost of a local call)
international +612 6217 1745

Fax 02 6217 1757
international +612 6217 1757

What CASA does with your comments

At the end of the response period for public comments, all submissions will be analysed, evaluated and considered. Subsequent to the closing date for comments, a Summary of Responses will be prepared, and made publicly available in conjunction with the making of the Final Rule.

CASA is required to register each comment and submission received, but will not individually acknowledge a response unless specifically requested. However, the names of contributors will be published in the subsequent Summary of Responses, except where CASA is specifically requested not to do so.

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NPRM Response Sheet

Air Operator Certification – Air Transport – Proposed CASR Part 119

**Please return your response by 31 July 2002
by post or by e-mail to the addresses provided at page 35 of the NPRM, or by fax to 1800 653 897**

Please indicate your acceptance or otherwise of the proposal presented in this Notice of Proposed Rule Making by ticking [✓] the appropriate box below.

Any additional constructive comments, suggested amendments or alternative action will be welcomed and may be provided on this response sheet or by separate correspondence.

A single standard for both regular public transport and charter operators

- proposal is acceptable without change
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances

Comments: _____

Identification of key personnel as defined in the Civil Aviation Act 1988

- proposal is acceptable without change
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances

Comments: _____

Establishing a new designated person identified as the Safety Manager

- proposal is acceptable without change
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances

Comments: _____



Making the Chief Executive Officer responsible for the safety system and regulatory compliance

- proposal is acceptable without change
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances

Comments: _____

Requiring operators to develop and maintain a safety management system

- proposal is acceptable without change
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances

Comments: _____

Requiring operators to provide for crew training and checking, or to arrange for this to be conducted by an approved under CASR Part 142 – Training and Checking Organisation

- proposal is acceptable without change
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances

Comments: _____

More detailed requirements for operations and maintenance manuals

- proposal is acceptable without change
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances

Comments: _____

The operator responsible for the airworthiness and maintenance control of aircraft they operate

- proposal is acceptable without change
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances

Comments: _____

continue over page if required

Your name: _____ ARN* (if known): _____

Organisation: _____ ARN* (if known): _____

Address: _____

* Aviation Reference Number, usually your CASA-issued licence or certificate number

Do you consent to have your name published as a respondent to this NPRM? YES [] NO []

Signed: Date:

To submit comments on this

Notice of Proposed Rule Making

Air Operator Certification – Air Transport

**Proposed Part 119 of the
Civil Aviation Safety Regulations (CASRs)**

Document NPRM 0201OS

Written comments quoting *NPRM 0201OS* should be forwarded by *31 July 2002* to
CASA's Regulatory Documentation Coordinator by one of the following means:

Post (no stamp required)

Civil Aviation Safety Authority
Standards Coordination & Support Branch
Reply Paid 2005
Canberra ACT 2601, Australia

E-mail PART119nprm@casa.gov.au

Fax 1800 653 897 (free call)
international +612 6217 1691

Additional information is available from:

Mick Haxell, CASR Part 119 Project Manager

Post (no stamp required)

Civil Aviation Safety Authority
Operational and Flight Crew Licensing Branch
Reply Paid 2005
Canberra ACT 2601, Australia

E-mail haxell_m@casa.gov.au

Telephone 02 6217 1745 or 131 757 (for the cost of a local call)
international +612 6217 1745

Fax 02 6217 1757
international +612 6217 1757



Annex A

Proposed Civil Aviation Safety Regulation (CASR) Part 119 – Air Operator Certification

Language, Style and Presentation of Draft Regulations

The draft regulations included in this NPRM were drafted by the Office of Legislative Drafting (OLD) of the Commonwealth Attorney-General's Department. That Office is committed to using plain language and clear presentation in regulations.

The OLD welcomes comment on the language, style or presentation of regulations that its officers draft. If you would like to comment on the language or presentation of the draft, please include those comments with your other comments on the draft. CASA will pass them on to the drafter.



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Part 119 Air operator certification — air transport

Subpart 119.A Applicability

119.000 Make-up of this Part

This Part is made up as follows:

Subpart 119.A Applicability

- 119.000 Make-up of this Part
- 119.005 Applicability
- 119.010 Definitions
- 119.015 Provisions of Part to be conditions of AOC
- 119.020 Air transport operations a prescribed purpose
- 119.025 Exemption of certain operators holding AOC-equivalent documents

Subpart 119.B General

- 119.035 Form of Air Operator's Certificate
- 119.040 Operations specifications to be current and applicable to operations
- 119.045 Dealings with a person whose AOC is suspended, cancelled, varied or pending
- 119.050 AOC holder to satisfy CASA as to matters set out in section 28 of the Act
- 119.055 Operator to provide facilities and equipment
- 119.060 Operator to provide operational documents
- 119.065 Records — crew members and ground support personnel
- 119.070 Approval etc of operator's safety management system and operations manual
- 119.075 Operator to have maintenance control manual accepted by CASA
- 119.080 Operator to have approved aircraft maintenance program (AMP) for aircraft
- 119.085 Operator to have approved training and checking arrangements and manual
- 119.090 Operator to have appropriate personnel etc
- 119.095 Operator's key personnel to be approved or accepted by CASA
- 119.100 Operator to ensure compliance with law of places where operations conducted
- 119.105 Common language
- 119.110 Contracting out of operator's non-maintenance activities
- 119.115 Audit of contractors
- 119.120 Carriage of CASA officers for inspection purposes etc
- 119.125 Carriage of CASA officers on inaugural flights

Subpart 119.C Key personnel

- 119.135 Key personnel positions
- 119.140 Delegation of functions by key personnel
- 119.145 Responsibilities of key personnel
- 119.150 Appointment of chief executive officer

- 119.155 Appointment of head of flying operations or head of training and checking
- 119.160 Appointment of head of aircraft maintenance control
- 119.165 Appointment of safety manager
- 119.170 Appointment likely to have adverse effect on air safety
- 119.175 Temporary appointment to act as head of flying operations or aircraft maintenance control
- 119.180 Tests and interviews
- 119.185 Flying demonstrations — head of training and checking
- 119.190 Duration of approval
- 119.195 Withdrawal or suspension of approval or acceptance of appointment
- 119.200 Key personnel employed before the commencement of this Part
- Subpart 119.D Fatigue management system**
 - 119.205 Operator to have approved fatigue management system
- Subpart 119.E Safety management system**
 - 119.270 Application of Subpart 119.E
 - 119.275 Establishment of safety management system
 - 119.280 Safety policy
 - 119.285 Safety objectives
 - 119.290 Personnel —documentation of roles, responsibilities and authorities
 - 119.295 Management reviews of safety management system
 - 119.300 Safety management system improvement and preventive action
 - 119.305 Error and non-compliance management procedures
 - 119.310 Safety management system training
 - 119.315 Risk management procedures and identification of safety improvements
 - 119.320 Internal communication and consultation procedures
 - 119.325 Document control procedures and document control
 - 119.330 Record control procedures
 - 119.335 Internal audit procedures
 - 119.340 Auditors for internal audits
 - 119.345 Accident and incident recording, reporting and investigation procedures
 - 119.350 Remedial, investigative and corrective action
 - 119.355 Emergency response procedures
- Subpart 119.G Operations manuals and maintenance control manuals**
 - 119.375 Meaning of relevant information
 - 119.380 Operations manual
 - 119.385 Contents of operations manual
 - 119.390 Use of external material in operations manual
 - 119.395 Form of operations manual
 - 119.400 Distribution of operations manual
 - 119.405 Maintenance procedures and maintenance control manual
 - 119.410 Form of maintenance control manual
 - 119.415 Distribution of maintenance control manual
 - 119.420 Amendment of operations manual or maintenance control manual



Subpart 119.H Training and checking

- 119.425 Operator to establish or contract-out training and checking
- 119.430 Training and proficiency checks for crew etc
- 119.435 In-house training and checking organisations
- 119.440 Training and checking manual
- 119.445 Content of training and checking manual
- 119.450 Form of training and checking manual
- 119.455 Distribution of training and checking manual
- 119.460 Amendment of training and checking manual

Subpart 119.M Leased aircraft airworthiness arrangements

119.005 Applicability

- (1) This Part applies to an operator who is an AOC holder, or is an applicant for an AOC, and who is engaged, or intends to engage, in air transport operations:
 - (a) in or outside Australian territory, using Australian registered aeroplanes or rotorcraft; or
 - (b) in Australian territory, using foreign registered aeroplanes or rotorcraft on regulated domestic flights; or
 - (c) if the operator is an Australian operator — in Australian territory, using foreign registered aeroplanes or rotorcraft on flights other than regulated domestic flights; or
 - (d) using an aircraft (being an aircraft to which paragraph (a), (b) or (c) does not apply) in respect of which the operator is required to comply with this Part under an 83 bis agreement.
- (2) Despite subregulation (1), another provision of this Part may:
 - (a) exempt, or provide for the exemption of, an operator from compliance with a provision of this Part; or
 - (b) limit, or provide for the limitation of, the application of this Part to operators in a particular class or in particular circumstances.

Note 1 For provisions relating to foreign operators engaged, or intending to engage, in air transport operations in Australian territory using foreign registered aeroplanes or rotorcraft on flights other than regulated domestic flights, see Part 129.

Note 2 For subregulation (2), an example is regulation 119.025 which provides for the exemption of certain operators holding AOC-equivalent documents.

119.010 Definitions

In this Part:

aircraft class means types of aircraft within the same category that:

- (a) are certificated to be operated by a single pilot; and
- (b) have similar design characteristics; and
- (c) are grouped together into a class.

AOC holder means the holder of an AOC.

CEO, or chief executive officer, for an operator, means a person appointed as a chief executive officer for the operator's organisation in accordance with this Part.



head of aircraft maintenance control, for an operator, means a person appointed as head of aircraft maintenance control for the operator's organisation in accordance with this Part.

head of flying operations, for an operator, means a person appointed as head of flying operations for the operator's organisation in accordance with this Part.

head of training and checking, for an operator, means a person appointed as head of training and checking for the operator's organisation in accordance with this Part.

in-house training and checking organisation, for an operator, means a training and checking organisation established and maintained by the operator as part of the structure of the operator's organisation for the conduct of AOC operations.

key personnel has the meaning given in subsection 28 (3) of the Act.

key personnel position — see regulation 119.135.

main operating base, for an operator, means a base of the operator's aircraft operations where:

- (a) the operator's crew members are ordinarily resident in the vicinity; or
- (b) flight planning is conducted.

maintenance contract, for an operator, means a contract between the operator and a maintenance provider for the carrying out of aircraft maintenance.

safety management system, for an operator, means a safety management system established by the operator under Subpart 119.E.

safety manager, for an operator, means a person appointed as safety manager for the operator's organisation in accordance with this Part.

safety policy, for an operator, means a safety policy established by the operator under Subpart 119.E.

servicing contract, for an operator, means a contract between the operator and a contractor for the carrying out of aircraft servicing.

type-representative aircraft, for an operator, means an aircraft that is representative of the type of aircraft in the operator's fleet used, or to be used, for operations authorised by the operator's AOC.

Note A number of other terms used in this Part are defined in the Dictionary.

Consultation note 1: *A number of terms that are relevant to this Part but are of more general application are defined in the amendments to the Dictionary at the end of this document. See also the consultation note at the end of this document.*

Consultation note 2: *References to provisions of other Parts of these Regulations may need to be revised as drafting of those Parts progresses.*



119.015 Provisions of Part to be conditions of AOC

The provisions of this Part, in so far as they are relevant to the operations of an AOC holder, are conditions of the AOC.

Note 1 Paragraph 28BA (1) (b) of the Act provides that an AOC has effect subject to (among other things) conditions specified in these Regulations.

Note 2 Section 28BA of the Act also provides that while there is a breach of a condition specified in these Regulations the AOC does not authorise any flight or operation to which the condition relates, and further, the AOC or an authorisation contained in the AOC may be suspended or cancelled by CASA.

Note 3 Before issuing an AOC to an operator, CASA must be satisfied that the operator has complied with, or is capable of complying with, the provisions of these Regulations including, in particular, this Part and the provisions of Part 121A, 121B or Part 133 as appropriate to the nature of the operations and the type of aircraft to be operated — see paragraph 28 (1) (a) of the Act.

119.020 Air transport operations a prescribed purpose

For subsection 27 (9) of the Act, air transport operations of a kind mentioned in regulation 119.005 are a prescribed purpose.

119.025 Exemption of certain operators holding AOC-equivalent documents

CASA may exempt a foreign operator to whom paragraph 119.005 (1) (a) or (b) applies from compliance with a provision of this Part in respect of an aircraft only if:

- (a) the country where the aircraft is registered is a Contracting State; and
- (b) the operator is the holder of an air operator's certificate, or a document to substantially the same effect, issued by the authority responsible for regulating civil aviation in that country (a *foreign certificate*) in respect of the aircraft; and
- (c) CASA is satisfied that, under the foreign certificate, the operator is required to comply with an equivalent provision of no less a standard in respect of the safe operation of the aircraft than the provision of this Part from which an exemption is sought.

Note For exemption procedures generally, see Subpart 11.G.

Subpart 119.B General

Note For general provisions relating to AOCs, see Division 2 of Part III of the Act.

119.035 Form of Air Operator's Certificate

- (1) An AOC for an operator comprises:
 - (a) a certificate document; and
 - (b) the operations specifications.
- (2) The certificate document must contain at least the following information:
 - (a) the operator's full name;



- (b) the operator's ABN or, if the operator is a company and does not have an ABN — the operator's ACN;
 - (c) the date of issue and term of the AOC;
 - (d) a description of the types of operations authorised, including a statement as to whether the carriage of passengers is permitted.
- (3) The operations specifications must contain at least the following information, if applicable to the operator:
- (a) the operator's business address;
 - (b) any business name, other than the name stated in the certificate document, under which the operator trades or operates;
 - (c) the operator's main operating bases;
 - (d) if the operator is engaged in operations to which Part 121A applies — the manufacturer, type, registration and serial number of each aircraft authorised for use;
 - (e) if the operator is engaged in operations to which Part 121B or 133 applies — the aircraft type or class approvals;
 - (f) the maximum approved passenger seat configuration for the operator's aircraft;
 - (g) operations in airspace with special requirements, authorised by the operator's AOC (for example, B-RNAV, MNPS, RNP or RVSM);
 - (h) operational approvals authorised by the AOC (for example, ETOPS or AWO);
 - (i) areas of operation or routes;
 - (j) the names and position titles of the persons appointed to the operator's key personnel positions in accordance with these Regulations;
 - (k) the operator's MSOS including such of the following as are appropriate, having regard to the size, nature and scope of operations authorised by the operator's AOC:
 - (i) general provisions;
 - (ii) authorisation to use documents and data to develop an aircraft AMP;
 - (iii) reliability program authorisation;
 - (iv) AMP maintenance interval escalation/de-escalation authorisation;
 - (v) maintenance or servicing contract arrangements authorisations;
 - (vi) leased aircraft AMP authorisation;
 - (vii) parts pooling authorisation;
 - (viii) parts borrowing authorisation;
 - (ix) ferry flight authorisations;
 - (x) aircraft weight and balance control;
 - (xi) any other maintenance-related limitations or authorisations;
 - (l) training devices including STDs;
 - (m) training course approvals;
 - (n) details of any activities contracted out in accordance with regulation 119.110;



- (o) any special authorisations or limitations relating to operations under the AOC.
- (4) The operations specifications of an AOC are taken to be conditions of the AOC for the purposes of subsection 28BB (1) of the Act.

Note As to conditions of the AOC, see the notes to regulation 119.015.

119.040 Operations specifications to be current and applicable to operations

- (1) An AOC holder must not conduct any flights or operations under the operator's AOC except as authorised by the operations specifications of the AOC.
- (2) Except with the permission in writing of CASA, an AOC holder must not conduct any flight or operations under the operator's AOC if:
 - (a) one or more of the particulars of the operations specifications mentioned in regulation 119.035 that are relevant to the flight or operations are no longer current; or
 - (b) under the existing operations specifications the flight or operations would not be in accordance with the authorisation.

119.045 Dealings with a person whose AOC is suspended, cancelled, varied or pending

- (1) An AOC holder must not, without the prior written approval of CASA, enter into an arrangement with a person whose AOC is suspended or cancelled (the *other person*) under which the AOC holder agrees:
 - (a) to use, in any operation authorised by the AOC holder's AOC, any aircraft that the other person was authorised to operate under the AOC that is suspended or cancelled; or
 - (b) to use, in connection with any operation authorised by the AOC holder's AOC, any person employed or engaged by, or otherwise working for, the other person in connection with any operation authorised by the AOC that is suspended or cancelled; or
 - (c) to conduct any operation, or any part of an operation, that the other person intended to conduct under the AOC that is suspended or cancelled.
- (2) An AOC holder must not, without the prior written approval of CASA, enter into an arrangement with a person whose AOC has been varied (the *other person*), under which the AOC holder agrees:
 - (a) to use, in any operation authorised by the AOC holder's AOC, any aircraft that the other person:
 - (i) was, immediately before the variation, authorised to operate under the other person's AOC; but
 - (ii) is no longer authorised to operate under the AOC as varied; or

- (b) to use, in connection with any operation authorised by the AOC holder's AOC, any person employed or engaged by, or otherwise working for, the other person in connection with any operation that the other person:
 - (i) was, immediately before the variation, authorised to conduct under the other person's AOC; but
 - (ii) is no longer authorised to conduct under the AOC as varied; or
 - (c) to conduct any operation, or any part of an operation that the other person:
 - (i) intended to conduct under the other person's AOC as it had effect immediately before the variation; but
 - (ii) is no longer authorised to conduct under the AOC as varied.
- (3) An AOC holder must not, without the prior written approval of CASA, enter into an arrangement with a person whose application for an AOC is still pending (the *other person*) under which the AOC holder agrees:
- (a) to use, in any operation authorised by the AOC holder's AOC, any aircraft proposed to be authorised by the AOC sought; or
 - (b) to use, in connection with any operation authorised by the AOC holder's AOC, any person proposed to be employed or engaged by the other person in connection with any operation proposed to be authorised by the AOC sought; or
 - (c) to conduct any operation, or any part of an operation, proposed to be authorised by the AOC sought.

119.050 AOC holder to satisfy CASA as to matters set out in section 28 of the Act

- (1) An AOC holder must continue to satisfy CASA in relation to the matters set out in section 28 (and, if applicable, section 28A) of the Act.
- (2) The responsibility of an AOC holder under subregulation (1) for a matter is in addition to the AOC holder's responsibility (if any) for the matter under another provision of these Regulations.

Note Section 28 of the Act lists matters relating to an AOC applicant and the applicant's organisation about which CASA must be satisfied before issuing an AOC to the applicant.

119.055 Operator to provide facilities and equipment

- (1) An operator must provide and maintain adequate facilities and equipment to allow operations authorised by the operator's AOC to be carried out safely and in accordance with these Regulations.
- (2) An operator must ensure that facilities and procedures for the protection of the public at each aerodrome normally used by the operator:
 - (a) comply with the requirements of these Regulations; and
 - (b) are appropriate to the operations authorised by the operator's AOC.
- (3) In this regulation:
facilities and equipment includes accommodation, offices and training aids.



119.060 Operator to provide operational documents

- (1) An operator must provide and maintain, at each main operating base of the operator, an up-to-date collection of maps, charts, flight guides and other documents needed for:
 - (a) carriage in flight; or
 - (b) reference purposes; or
 - (c) flight planning purposes.
- (2) For paragraph 28BH (2) (b) of the Act, the reference library to be maintained by an operator must include a copy of each of the following:
 - (a) the Act;
 - (b) the provisions of these Regulations that are relevant to the operations authorised by the operator's AOC;
 - (c) Advisory Circulars (ACs), Aeronautical Information Circulars (AICs), the Manual of Operational Standards (MOSs) and parts of the AIP that are relevant to the operations authorised by the operator's AOC;
 - (d) the operator's operations manual;
 - (e) the operator's maintenance control manual;
 - (f) the aircraft flight manual for each aircraft;
 - (g) if the operations involve the carriage of dangerous goods, the operator's dangerous goods manual, unless the manual forms part of the operations manual;
 - (h) if required by subregulation 119.440 (1), the operator's training and checking manual, unless the manual forms part of the operations manual;
 - (i) the operator's MEL and the CDL for the operator's aircraft;
 - (j) the operator's AMP.
- (3) For section 28BH of the Act, an operator, with the permission in writing of CASA, may keep all or part of the reference library by a means other than on printed paper.

Note For general requirements as to the maintenance of the reference library, see section 28BH of the Act.

119.065 Records — crew members and ground support personnel

- (1) An operator must keep up-to-date records of the recent experience of each of the operator's crew members for all activities and purposes relevant to his or her duties for which these Regulations require a particular level of recent experience.
- (2) An operator must keep up-to-date records of the medical certificates, licences, ratings and authorisations held by each of the operator's flight crew members.
- (3) An operator must keep up-to-date records of the flight times and duty times of each of the operator's crew members.

- (4) An operator must maintain a training file for each of the operator's crew members containing:
- (a) particulars of each ground training course, with a record of the results for each part or subject in the course and of the final assessment of the standard achieved; and
 - (b) particulars of each training course undertaken, with a record of the results for each part of the course, the number of times the crew member undertook each exercise in the course and the results for each test or check in the course; and
 - (c) particulars of each proficiency check undertaken, with a record of the results for each part of the check and the number of times the crew member undertook each exercise in the check; and
 - (d) particulars of any other training undertaken in an aircraft or STD, with a record of the final assessment of the standard achieved; and
 - (e) particulars of any other training and checking undertaken in accordance with each of the following regulations, as appropriate:
 - (i) regulations 121A.450, 121A.945, 121A.955, 121A.965, 121A.968 and 121A.975;
 - (ii) regulations 121B.945, 121B.955, 121B.965, 121B.968 and 121B.975;
 - (iii) regulations 133.945, 133.955, 133.965, 133.968 and 133.975.
- (5) An operator must keep up-to-date records containing particulars of all training, tests, exercises and examinations undertaken by the operator's ground support personnel that are relevant to their duties, and by cabin crew members as required under regulation 121A.1035, 121B.1035 or 133.1035, as appropriate.
- (6) An operator must keep up-to-date records for relevant personnel of the operator relating to any dangerous goods training required to be undertaken by the personnel under Part 92.
- (7) An operator must keep, for at least 3 years:
- (a) copies of all current flight and cabin crew rosters; and
 - (b) copies of airworthiness documentation referred to in the operator's maintenance control manual.

Note Other records and information mentioned in this regulation are to be kept for specified periods — see regulation 121A.1035, 121B.1035 or 133.1035 as appropriate.

119.070 Approval etc of operator's safety management system and operations manual

An operator must not carry out operations under the operator's AOC unless:

- (a) the operator's safety management system (if required under this Part) has been approved by CASA and is in effect for the operator's organisation; and
- (b) the operator's operations manual has been accepted by CASA and is in effect for the operator's organisation; and
- (c) the activities of the operator that are included in the operations manual in accordance with regulation 119.385 and specified in table 119.385-2:
 - (i) have been approved by CASA; and



- (ii) are identified in the operator's operations specifications.

Note 1 As to the requirements of the safety management system, see Subpart 119.E.

Note 2 As to the form and content of the operations manual, see Subpart 119.G.

119.075 Operator to have maintenance control manual accepted by CASA

An operator must not operate, or permit the operation of, any aircraft authorised by the operator's AOC unless the operator has a maintenance control manual that has been accepted by CASA and is in effect for the operator's organisation.

Note As to the form and content of the maintenance control manual, see Subpart 119.G.

119.080 Operator to have approved aircraft maintenance program (AMP) for aircraft

- (1) An operator must not operate, or permit the operation of, an aircraft authorised by the operator's AOC unless the aircraft is maintained in accordance with an approved AMP.
- (2) In subregulation (1):
approved AMP, for an aircraft, means an AMP approved for the aircraft under Part 121A, 121B or 133, as appropriate.

119.085 Operator to have approved training and checking arrangements and manual

- (1) An operator must not carry out operations under the operator's AOC unless the operator has one or more of the following:
 - (a) an in-house training and checking organisation, approved by CASA, to conduct the training and checking of the operator's personnel;
 - (b) a contract, in accordance with regulation 119.110, between an operator and a training and checking organisation certificated under Part 142 for the conduct, by that organisation, of the training and checking of the operator's personnel;
 - (c) a contract, in accordance with regulation 119.110, between the operator and an approved foreign training and checking organisation for the conduct, by that organisation, of the training and checking of the operator's personnel.
- (2) An operator who establishes an in-house training and checking organisation must not carry out operations under the operator's AOC unless a training and checking manual for use by the organisation has been approved by CASA and is in effect for the operator.
- (3) An operator who enters into a contract mentioned in paragraph (1) (b) or (c) with a training and checking organisation must not conduct operations under the operator's AOC unless a training and checking manual provided by the operator or by the organisation has been approved by CASA.

Note For more detailed requirements as to training and checking, including the form and content of the training and checking manual, see Subpart 119.H.

119.090 Operator to have appropriate personnel etc

- (1) An operator must employ a sufficient number of personnel to carry out safely the operations authorised by the operator's AOC.
- (2) The operator must ensure that personnel employed by the operator are suitably qualified and competent to perform their duties.
- (3) The operator must ensure that all personnel in the operator's organisation have clearly defined and documented roles, responsibilities and authorities.
- (4) The operator must provide to the operator's head of aircraft maintenance control the personnel, facilities and data that are necessary for the head of aircraft maintenance control to:
 - (a) implement the operator's maintenance control system; and
 - (b) ensure the airworthiness and maintenance control of aircraft authorised by the operator's AOC.
- (5) Without limiting subregulation (4), the operator must provide to the head of aircraft maintenance control access to the following documents and information for the purpose of controlling the maintenance of aircraft authorised by the operator's AOC:
 - (a) the manufacturer's instructions for continuing airworthiness;
 - (b) the manufacturer's airworthiness limitations;
 - (c) mandatory instructions issued by CASA;
 - (d) the operator's approved AMP for each aircraft;
 - (e) the operator's approved MEL for each aircraft;
 - (f) if applicable, the CDL for each aircraft;
 - (g) any other document reasonably required by the head of aircraft maintenance control to carry out the functions of that position.

119.095 Operator's key personnel to be approved or accepted by CASA

An operator must not carry out operations under the operator's AOC unless, for each key personnel position required in the operator's organisation:

- (a) the operator has appointed a person to the position; and
- (b) the appointment has been approved or accepted by CASA; and
- (c) the approval or acceptance is in force; and
- (d) the functions of the position are being carried out by the person, or by a person to whom the functions have been delegated under regulation 119.140.

Note 1 As to the key personnel positions and requirements for each position, see Subpart 119.C.

Note 2 In some circumstances responsibilities of a key personnel position may be shared, or carried out part-time — see regulation 119.135.

Note 3 The holder of a key personnel position remains responsible for functions of the position even though performance of the functions is delegated to another person — see subregulation 119.140 (2).



119.100 Operator to ensure compliance with law of places where operations conducted

- (1) An operator engaged in operations outside Australian territory must ensure that personnel in the operator's organisation are adequately trained and made aware that they must comply with the relevant aviation laws and procedures of each country or area in which the operations are conducted.
- (2) For subregulation (1), a law or procedure is *relevant* if it is relevant to:
 - (a) the performance of the duties of the operator's personnel; or
 - (b) the operator's aircraft.

119.105 Common language

- (1) An operator must ensure that all crew members in the operator's organisation are able to communicate with each other in the English language.
- (2) An operator must ensure that all ground support personnel and crew members in the operator's organisation are able to read and understand the language in which those parts of the operator's operations manual that are relevant to their duties and responsibilities are written.

119.110 Contracting out of operator's non-maintenance activities

- (1) Subject to this regulation, an operator may contract out any of the following activities of the operator:
 - (a) ground handling;
 - (b) flight support (including performance calculations, flight planning, navigation database and dispatch);
 - (c) training and checking;
 - (d) technical writing support for preparation of the operator's manuals;
 - (e) auditing (if required).

Note For maintenance contract requirements, see Subpart 121A.M, 121B.M or 133.M, as appropriate.

- (2) A contract of a kind mentioned in subregulation (1) must be in writing.
- (3) The contracting out of an activity does not affect the responsibility of the operator or the operator's key personnel for the activity under these Regulations or the operator's AOC.
- (4) Before entering into a contract of a kind mentioned in subregulation (1), the operator must ensure that:
 - (a) the contractor is appropriately licensed or authorised for the activity by the applicable authority; and
 - (b) the contractor has the resources, competence, procedures and management systems necessary to undertake the activity; and
 - (c) the contractor's performance is monitored on a regular basis to ensure that the contractor's organisation and personnel remain proficient at performing the activity; and
 - (d) the contractor uses the operator's approved procedures.

- (5) An operator who enters into a contract of a kind mentioned in subregulation (1) must provide instructions to the contractor to ensure that the contractor is familiar with the operator's procedures.

119.115 Audit of contractors

- (1) An operator who has a safety management system in accordance with regulation 119.275 and who enters into a contract of a kind mentioned in regulation 119.110 must audit the contractor to ensure that the obligations of the contractor under the contract are complied with and are included in the audit schedule required by regulation 119.335.
- (2) The operator and the contractor must regularly review their systems and procedures in order to reduce the likelihood of errors.

119.120 Carriage of CASA officers for inspection purposes etc

- (1) This regulation applies in relation to an officer of CASA who is an authorised officer for the purpose of undertaking, under the Act or these Regulations, audits, examinations, inspections or checks of:
 - (a) the work of an aircraft's crew; or
 - (b) the operation of an aircraft or its equipment; or
 - (c) the operation of the ground organisation provided by the operator of an aircraft.

Note **Authorised officer** is defined in section 3 of the Act as an officer authorised by CASA in writing to act under the provision in which the expression occurs.

- (2) An operator must provide an authorised officer mentioned in subregulation (1) with accommodation on an aircraft:
 - (a) on receipt of 7 days' notice in writing before a flight that the officer intends to travel on that flight; or
 - (b) immediately on receipt of notice that the officer intends to travel on a flight, if:
 - (i) the officer's carriage in the aircraft does not mean the off-loading of a passenger or of cargo being carried in the aircraft on that flight; or
 - (ii) the officer indicates to the operator that the officer considers that travel on that flight is necessary in the circumstances in the interest of safe aircraft operations.
- (3) An authorised officer must provide an explanation in writing to the operator, within 14 days after travel on a flight to which subparagraph (2) (b) (ii) applies, of the circumstances mentioned in that subparagraph.
- (4) The operator or owner, as appropriate, must be paid an amount equivalent to the loss of revenue mentioned in subregulation (5) in the circumstances set out in that subregulation.
- (5) For subregulation (4), the circumstances are that:
 - (a) the carriage of an authorised officer on a flight to which subparagraph (2) (b) (ii) applies results in a loss of revenue to the operator or owner of the aircraft due to the provision of accommodation that otherwise would



- have been used for the carriage of a paying passenger or of cargo for which freight would have been charged; and
- (b) no passenger seat on the flight was unoccupied for other than operational reasons.

119.125 Carriage of CASA officers on inaugural flights

- (1) This regulation applies to an aircraft that is certified:
- (a) to carry more than 30 passengers; or
- (b) for freight operations with a payload capacity of more than 3 410 kg.
- (2) An operator must provide for the carriage of such officers of CASA as CASA may require on each inaugural air transport flight to a destination not previously served by the operator of an aircraft to which this regulation applies.
- (3) However, CASA may permit an operator to substitute a demonstration flight to the destination for an inaugural air transport flight.

Subpart 119.C Key personnel

119.135 Key personnel positions

- (1) Subject to subregulation (3), the *key personnel positions* required for an operator's organisation are the following:
- (a) the CEO, or chief executive officer;
- (b) head of flying operations;
- (c) head of aircraft maintenance control;
- (d) head of training and checking;
- (e) safety manager.
- (2) For paragraph (e) of the definition of *key personnel* in subsection 28 (3) of the Act, the position of safety manager is prescribed.
- Note* In relation to persons employed in key personnel positions before the commencement of this Part who continue to be so employed by the same operator, see regulation 119.200.
- (3) Despite subregulation (1), an operator is not required to have a safety manager if the operator is engaged in air transport operations to which Part 121B or 133 applies, being operations that are undertaken wholly within Australia, and operates, at any time, less than 4 aircraft under the operator's AOC.
- (4) CASA may, in writing, having regard to the size of an operator's organisation or the nature and scope of operations authorised by the operator's AOC, permit the operator to allocate functions of more than one key personnel position to one person.
- (5) However, an operator cannot allocate functions to a person so that the person has, at the same time, the functions of both the CEO and the safety manager in the operator's organisation.
- (6) Subject to subregulation 119.155 (7), CASA may in writing, having regard to the size of an operator's organisation or the nature and scope of operations

authorised by the operator's AOC, permit the operator to appoint a person to a key personnel position on the basis that the functions of that position are part-time.

119.140 Delegation of functions by key personnel

- (1) A person appointed to a key personnel position in an operator's organisation may delegate the performance of a function of that position to another person (including a person appointed to another key personnel position) in the operator's organisation.
- (2) A delegation of a function under subregulation (1) does not affect the responsibility of the delegator for that function.

119.145 Responsibilities of key personnel

Responsibilities of CEO

- (1) An operator's CEO must:
 - (a) ensure that all operations under the operator's AOC, including the safety management system, training and maintenance activities, are financed and carried out to the standard required by CASA under the Act, these Regulations and the operator's AOC; and
 - (b) if the operator is required under this Part to have a safety management system:
 - (i) establish and monitor the effectiveness of the system, including safety policy, safety objectives and planning; and
 - (ii) perform safety management reviews in accordance with regulation 119.295; and
 - (c) ensure that the operator complies with:
 - (i) Australian aviation law, including the Act and these Regulations; and
 - (ii) any applicable foreign aviation law.

Responsibilities of head of flying operations

- (2) An operator's head of flying operations is responsible for the following:
 - (a) monitoring the operator's compliance with the Act, these Regulations and the operator's AOC, and reporting on compliance to the operator's CEO;
 - (b) monitoring the adequacy of the operator's systems and procedures to ensure safe operations under the operator's AOC and reporting on the adequacy of the systems and procedures to the CEO;
 - (c) arranging flight crew rosters;
 - (d) maintaining up-to-date records of all licences, ratings, medical certificates and authorisations held by each flight crew member employed by the operator;
 - (e) maintaining up-to-date records of the route and aerodrome qualifications of each pilot employed as pilot in command by the operator;



- (f) maintaining a system that will ensure compliance with the relevant loading procedures for each type of aircraft used in operations authorised by the operator's AOC and the proper preparation of passenger lists, cargo manifests and any other loading documents required for the purposes of those operations;
- (g) ensuring that the records required by regulation 119.065 are properly collated and kept;
- (h) ensuring that the operator's reference library is properly maintained and kept up-to-date in accordance with the Act, these Regulations and the operator's AOC;
- (i) supervising the revision and distribution of the operator's operations manual;
- (j) setting and monitoring the standard of flight and ground operations carried out under the operator's AOC;
- (k) allocating aircraft for use in particular operations carried out under the operator's AOC;
- (l) maintaining an efficient system for recording duty and flight times for each flight crew member and cabin crew member employed by the operator;
- (m) monitoring the fatigue management system as required in Subpart 119.D for each flight crew member and cabin crew member employed by the operator.

Responsibilities of head of aircraft maintenance control

- (3) The operator's head of aircraft maintenance control is responsible for the following:
 - (a) monitoring the operator's compliance with the Act and these Regulations in relation to the airworthiness and maintenance control of aircraft authorised by the operator's AOC, and reporting on compliance to the operator's CEO;
 - (b) monitoring the effectiveness of the operator's maintenance control system as required by Part 121A, 121B or 133, as appropriate;
 - (c) managing the aircraft maintenance control system and ensuring the continuing airworthiness of aircraft authorised by the operator's AOC;
 - (d) supervising the revision and distribution of the operator's maintenance control manual;
 - (e) implementing MSOS issued to the operator.
- (4) The head of aircraft maintenance control must be authorised by the operator to remove an aircraft from service if the aircraft does not comply with the Act or these Regulations, or could adversely affect the safety of air navigation or any person who is likely to fly in the aircraft.

Responsibilities of head of training and checking

- (5) The operator's head of training and checking is responsible for the following:
 - (a) setting and maintaining standards for the training and checking of crew members;

- (b) managing the operator's in-house training and checking organisation (if any), the operator's training and checking functions and the oversight of any contract in accordance with regulation 119.110 for training and checking, and reporting on the adequacy of that management to the CEO;
- (c) ensuring that competency tests in the execution of emergency procedures, as required by Part 121A, 121B or 133 are conducted;
- (d) supervising the training and checking of flight crew members employed by the operator;
- (e) ensuring that flight crew members employed by the operator undertake the training course at the intervals specified in regulation 92.095.

Note Regulation 92.095 deals with dangerous goods training.

Responsibilities of safety manager

- (6) The operator's safety manager is responsible for:
 - (a) ensuring that the operator's safety management system is implemented and maintained; and
 - (b) reporting to the CEO on the effectiveness of the safety management system.

Additional responsibilities

- (7) A responsibility for a function imposed by this regulation on a person appointed by an operator to a key personnel position is in addition to:
 - (a) a responsibility for that function imposed on the operator by a provision of Subdivision E of Division 2 of Part III of the Act; and
 - (b) a responsibility for that function imposed on the operator or any other person by a provision of these Regulations.

Note for subregulation (7) Several provisions in Subdivision E of Division 2 of Part III of the Act impose overall responsibility on the operator for activities under the operator's AOC. See, for example, section 28BD (AOC holder's duty to comply with civil aviation law) and section 28BE (AOC holder's duty to exercise care and diligence).

119.150 Appointment of chief executive officer

- (1) An operator must not appoint a person as CEO for the operator's organisation unless the appointment is acceptable to CASA.
- (2) The CEO for an operator's organisation must have:
 - (a) an appropriate understanding of the CEO's functions mentioned in subregulation 119.145 (1); and
 - (b) an ability to exercise due care and diligence in carrying out those functions.
- (3) The CEO must demonstrate a commitment:
 - (a) to creating and maintaining awareness of the importance of air safety, and to the establishment and maintenance of a safety management system (if required under this Part); and
 - (b) to ensuring the availability of resources to ensure safe operations under the operator's AOC.



Note CASA is not required to accept an appointment if it would be likely to have an adverse effect on air safety — see regulation 119.170.

119.155 Appointment of head of flying operations or head of training and checking

- (1) An operator must not appoint a person as head of flying operations or head of training and checking for the operator's organisation unless the appointment is approved by CASA.
- (2) To be appointed to the position of head of flying operations for an operator's organisation, a person must, at the time of appointment:
 - (a) subject to subregulation (3), hold all licences, authorisations and ratings necessary to enable the person to perform the functions of the position mentioned in subregulation 119.145 (2); and
 - (b) satisfy the flight time requirements specified in Part 61 for the issue of a flight examiner rating in accordance with that Part, as appropriate to the operations; and
 - (c) have passed an oral examination conducted by CASA on the requirements of the Act and these Regulations that are relevant to the safe conduct of air transport operations; and
 - (d) have passed a flight planning, loading and performance examination conducted by CASA and based on the most complex aircraft used in operations authorised by the operator's AOC; and
 - (e) have been assessed by CASA as suitable to perform the functions of the position, having regard to the size, nature and scope of operations authorised by the operator's AOC, the responsibilities of the position and the relevance to the position of the person's experience; and
 - (f) have at least the total flight time as a pilot on aircraft representative of the operator's fleet type set out, in relation to the fleet type and number of aircraft, in column 4 of table 119.155; and
 - (g) have at least the period of experience as a pilot in air transport operations relevant to the operator's aircraft fleet type set out, in relation to the fleet type and number of aircraft, in column 5 of table 119.155; and
 - (h) have maintained a satisfactory standard in conducting or managing air transport operations.
- (3) The recency requirements of Part 61 do not apply to a licence, authorisation or rating mentioned in paragraph (2) (a).
- (4) To be appointed to the position of head of training and checking for an operator's organisation, a person must:
 - (a) hold a current flight examiner rating issued in accordance with Part 61; and
 - (b) hold all licences, authorisations and other ratings, along with the associated recency requirements of Part 61, that are necessary to enable the person to perform the functions of the position mentioned in subregulation 119.145 (5); and
 - (c) have sufficient competence, experience and qualifications to carry out the functions of the position, having regard to the size, nature and scope of operations authorised by the operator's AOC; and



- (d) have at least the experience in conducting checks on pilots using aircraft representative of the operator's fleet type set out, in relation to the fleet type and number of aircraft, in column 3 of table 119.155; and
 - (e) have at least the total flight time as a pilot on aircraft representative of the operator's fleet type set out, in relation to the fleet type and number of aircraft, in column 4 of table 119.155; and
 - (f) have at least the period of experience as a pilot in air transport operations relevant to the operator's aircraft fleet type set out, in relation to the fleet type and number of aircraft, in column 5 of table 119.155; and
- (5) Despite paragraph (2) (f) or (g) or paragraph (4) (d), (e) or (f), CASA may approve for a person, in relation to an item in table 119.155, a period that is less than the period specified in column 3, 4 or 5 of that item if the person:
- (a) is already employed as the head of flying operations or head of training and checking for an operator obtaining an aircraft of the type specified in that item for the first time; or
 - (b) has previously held the position of head of flying operations or head of training and checking for an operator operating an aircraft of a type specified in column 2 other than the type specified in that item.
- (6) If more than 1 item in table 119.155 applies in relation to an appointment as the head of flying operations or head of training and checking for an operator, the requirements as to flight time or experience in column 3, 4 or 5 of those items that are the higher, or highest, apply.
- (7) If an operator operates more than 1 aircraft at any time, a person appointed as head of flying operations or head of training and checking for the operator's organisation must be employed on a full-time basis by the operator.

Note 1 Subregulation (7) does not prevent a person who is employed full-time by the operator from carrying out the functions of head of flying operations or head of training and checking on a part-time basis if CASA so permits — see subregulation 119.135 (6).

Note 2 CASA is not required to approve an appointment if it would be likely to have an adverse effect on air safety — see regulation 119.170.



Table 119.155 Experience as pilot relevant to operator’s fleet type

Column 1	Column 2	Column 3	Column 4	Column 5
Item	Operator’s fleet type and number of aircraft	Experience conducting checks on pilots using type-representative aircraft*	Total flight time as pilot on type-representative aircraft	Experience as pilot in air transport operations relevant to operator’s fleet type
1	Single-piston-engined aircraft — 1 aircraft	50 hours	300 hours	6 months
2	Single-piston-engined aircraft — more than 1 aircraft	50 hours	500 hours	9 months
3	Single-turbine-engined aircraft, or multi-engined aircraft to which Part 121B or 133 applies — 1 aircraft	100 hours	500 hours	9 months
4	Single-turbine-engined aircraft, or multi-engined aircraft to which Part 121B or 133 applies — more than 1 aircraft	100 hours	1000 hours including 200 hours in command of a type representative aircraft	2 years
5	Multi-piston-engined aircraft to which Part 121A applies — any number of aircraft	200 hours	2000 hours including 400 hours in command of a type representative aircraft	2 years
6	Multi-turbine-engined aircraft to which Part 121A applies — any number of aircraft	200 hours	2000 hours including 1000 hours in command of a type-representative aircraft	2 years

**Note* Applicable to appointment as head of training and checking only — see paragraph 119.155 (4) (d).

119.160 Appointment of head of aircraft maintenance control

- (1) An operator must not appoint a person as head of aircraft maintenance control unless the appointment is approved by CASA.
- (2) To be appointed as head of aircraft maintenance control a person must meet the standards for the position set out in the *Manual of Personnel Standards* as in force at the date of the application.

Note CASA is not required to approve an appointment if it would be likely to have an adverse effect on air safety — see regulation 119.170.

119.165 Appointment of safety manager

- (1) An operator must not appoint a person as a safety manager for the operator's organisation unless the appointment is acceptable to CASA.
- (2) In addition, the safety manager for an operator's organisation must:
 - (a) for air transport operations to which Part 121A applies:
 - (i) have completed a relevant course of training acceptable to CASA;
or
 - (ii) have at least 3 years experience in quality assurance, occupational health and safety or safety management; or
 - (b) for air transport operations to which Part 121B or 133 applies:
 - (i) have completed a relevant course of training acceptable to CASA;
or
 - (ii) have at least 2 years experience in quality assurance, occupational health and safety or safety management.

Note 1 CASA is not required to accept an appointment if it would be likely to have an adverse effect on air safety — see regulation 119.170.

Note 2 For further information relating to the course of training for the safety manager, see Advisory Circular 119-165.

119.170 Appointment likely to have adverse effect on air safety

- (1) Without limiting the matters that CASA may take into account in deciding whether to approve or accept an appointment to a key personnel position, CASA is not required to approve or accept an appointment if approval or acceptance of the appointment would be likely to have an adverse effect on the safety of air navigation.
- (2) In deciding whether approval or acceptance of the appointment of a person would be likely to have an adverse effect on the safety of air navigation, CASA may take into account:
 - (a) the person's record of compliance with regulatory requirements (in Australia or elsewhere) relating to aviation safety and other transport safety; and
 - (b) the person's experience (if any) in aviation; and
 - (c) the person's knowledge of the regulatory requirements applicable to civil aviation in Australia; and



- (d) the person's history, if any, of serious behavioural problems; and
- (e) any conviction of the person (in Australia or elsewhere) for a transport safety offence; and
- (f) any evidence held by CASA that the person has contravened:
 - (i) the Act or these Regulations; or
 - (ii) a law of another country relating to aviation safety; or
 - (iii) another law (of Australia or of another country) relating to transport safety.

Note Section 30A of the Act allows the Court to make an order excluding a person from a particular aviation activity. Such an order may have the effect of precluding the approval or acceptance of an appointment while the order is in force.

119.175 Temporary appointment to act as head of flying operations or head of aircraft maintenance control

- (1) An operator may apply in writing to CASA to approve the appointment of a person by an operator:
 - (a) to act as head of flying operations for the operator's organisation while the head of flying operations is temporarily absent from duty; or
 - (b) to act as head of aircraft maintenance control for the operator's organisation while the head of aircraft maintenance control is temporarily absent from duty.
- (2) To be appointed to act as head of flying operations or head of aircraft maintenance control, a person must meet the requirements of regulation 119.155 or 119.160, as applicable.
- (3) However, for regulation 119.190, an approval must specify the period during which it is to be in force.

119.180 Tests and interviews

- (1) CASA may by written notice given to a person who is the subject of an application by an operator for approval or acceptance of an appointment to a key personnel position, ask the person to:
 - (a) undertake a test or tests of competence; or
 - (b) come to a specified CASA office at a specified reasonable time to be interviewed.
- (2) CASA must give a copy of the notice to the operator.
- (3) CASA must give to the operator a copy of the record of any test (including the testing officer's assessment of the competence of the person tested), or the record of any interview, conducted under subregulation (1).

119.185 Flying demonstrations — head of training and checking

- (1) CASA may, by written notice given to a person who is the subject of an application by an operator for approval of an appointment as head of training and checking, ask the person to undertake a flight with an officer of CASA to demonstrate the person's suitability for the appointment.

- (2) A notice must:
 - (a) set out particulars of the required flight; and
 - (b) identify the officer with whom it is to be undertaken.
- (3) CASA must give a copy of the notice to the operator.

119.190 Duration of approval

- (1) If an approval of an appointment of a person as head of flying operations, head of training and checking or head of aircraft maintenance control specifies the period during which it is to be in force, it stops being in force when:
 - (a) the period ends; or
 - (b) the approval is withdrawn;whichever happens first.
- (2) An approval that does not specify the period during which it is to be in force stops being in force when it is withdrawn.
- (3) An approval is not in force while it is suspended, but, if it is an approval mentioned in subregulation (1), the period of the suspension counts as part of the period specified in the approval.

119.195 Withdrawal or suspension of approval or acceptance of appointment

- (1) CASA may, by notice in writing to a person appointed to a key personnel position for an operator's organisation, withdraw or suspend approval or acceptance of the person's appointment if continuing approval or acceptance of the appointment would be likely to have an adverse effect on the safety of air navigation.
- (2) In deciding whether continuing approval or acceptance of the appointment would be likely to have an adverse effect on the safety of air navigation, CASA may take into account the matters mentioned in subregulation 119.170 (2).
- (3) The notice must set out:
 - (a) the reasons for the withdrawal or suspension; and
 - (b) in the case of a suspension, specify the period of suspension or state when, or in what circumstances, it will end.
- (4) CASA must give a copy of the notice to the operator.
- (5) If CASA suspends the approval or acceptance of an appointment, the person cannot carry out the functions of the position to which the appointment relates while the suspension lasts.
- (6) If CASA withdraws the approval or acceptance of a person's appointment:
 - (a) for the purposes of these Regulations, the appointment is taken to end; and
 - (b) the person cannot carry out the functions of the position.



- (7) Nothing in subregulation (1) is intended to limit or affect any other ground on which CASA may withdraw or suspend the approval or acceptance of the appointment of a person to a key personnel position.

119.200 Key personnel employed before the commencement of this Part

- (1) A person who, immediately before the commencement of this Part, was employed in a key personnel position by an operator who was then the holder of a valid AOC issued under section 27 of the Act for a commercial purpose prescribed in paragraph 206 (1) (b) or (c) of CAR 1988, is, for so long as the person continues to be employed by the operator in that position, or in a position with equivalent duties, taken to have met the requirements under this Part for appointment to the position.
- (2) Nothing in subregulation (1) affects the operation of regulations 119.190 or 119.195.
- (3) In this regulation:
key personnel position means a position mentioned in paragraph (a), (b), (c) or (d) of the definition of *key personnel* in subsection 28 (3) of the Act.

Subpart 119.D Fatigue management system

119.205 Operator to have approved fatigue management system

Consultation note: A separate NPRM will be issued in relation to proposed regulations 119.205 to 119.265.

Subpart 119.E Safety management system

119.270 Application of Subpart 119.E

This Subpart deals with establishing and maintaining a safety management system and applies to an operator who:

- (a) is engaged in air transport operations to which Part 121A applies; or
- (b) is engaged in air transport operations to which Part 121B or 133 applies, being operations that are undertaken wholly within Australia, and operates, at any time, 4 or more aircraft under the operator's AOC; or
- (c) is engaged in air transport operations to which Part 121B or 133 applies, being operations that are not undertaken wholly within Australia.

119.275 Establishment of safety management system

- (1) An operator to whom this Subpart applies must establish and maintain a safety management system for the operator's organisation.
- (2) The safety management system must:
- (a) cover all the operator's activities conducted under the operator's AOC; and
- (b) be approved by CASA.

- (3) The safety management system must:
- (a) provide for an accident prevention and flight safety program; and
 - (b) without limiting paragraph (a), provide for at least the matters set out in regulations 119.280 to 119.355.
- Note:* The requirements of paragraph (3) (a) are based on Annex 6, Part 1, paragraph 3.6 and Annex 6, Part 2, Section 2, paragraph 1.6 to the Chicago Convention.
- (4) The safety management system must:
- (a) be documented in policy, procedure and process form (for example, by flow charts); and
 - (b) be implemented throughout the operator's organisation to meet the operator's safety objectives; and
 - (c) be evaluated for effectiveness in accordance with regulation 119.295.
- (5) Subject to subregulation (6), the safety management system may be documented in any form or format.
- (6) Documentation of the safety management system must:
- (a) comply with procedures for adequate document control mentioned in regulation 119.325; and
 - (b) be consistent with requirements relating to the operator's operations manual and maintenance control manual in Subpart 119.G; and
 - (c) be appropriate to the operator's operational requirements.
- (7) The safety management system must be structured in a manner that is appropriate to the size of the operator's organisation and the nature and scope of operations authorised by the operator's AOC.

Note 1 A description of the documents that make up the safety management system may be documented in the operator's operations manual — see Advisory Circular No. 119-380, section A3.

Note 2 Without limiting the requirements of Commonwealth, State or Territory safety legislation, this Subpart requires a safety management system to be integrated into all operations in accordance with ICAO Standards and Recommended Practices.

Note 3 In relation to safety management systems, see Advisory Circular 119-270.

119.280 Safety policy

An operator must establish and maintain a documented safety policy for the operator's organisation.

119.285 Safety objectives

An operator must establish documented safety objectives for the operator's organisation that are consistent with the operator's safety policy.

119.290 Personnel — documentation of roles, responsibilities and authorities

An operator must provide:

- (a) a definition of the operator's organisational structure by means of an organisation chart or by other appropriate means; and



- (b) a clear documentation of the role, responsibility and authority of each position in the operator's organisation by means of position descriptions.

119.295 Management reviews of safety management system

The CEO of an operator's organisation, together with the operator's other key personnel, must review the safety management system at regular intervals (but not less than once in each year) to evaluate its effectiveness.

119.300 Safety management system improvement and preventive action

- (1) An operator must plan and manage the process necessary for the continuous improvement of the safety management system.
- (2) The continuous improvement process must include the following:
 - (a) safety policy;
 - (b) safety objectives;
 - (c) audit results;
 - (d) analysis of data (including the analysis of quick-access flight data recorder information, where available);
 - (e) remedial actions;
 - (f) investigative actions;
 - (g) corrective actions;
 - (h) preventive actions;
 - (i) management reviews.
- (3) The operator must identify, implement and review preventive actions to eliminate the causes of potential accidents, serious incidents, incidents and reported problems.
- (4) The operator must keep records of preventive actions for at least 3 years.

119.305 Error and non-compliance management procedures

- (1) An operator must have error and non-compliance management procedures to reduce the frequency of errors and instances of non-compliance with the Act or these Regulations by:
 - (a) identifying errors and instances of non-compliance as required by, or resulting from the requirements of, regulations 119.315, 119.320, 119.335 and 119.345; and
 - (b) analysing the reasons for the errors and instances of non-compliance as required by regulations 119.295 and 119.300; and
 - (c) providing training in:
 - (i) safety management systems as required by regulation 119.310; and
 - (ii) human factors as required by Part 121A, 121B or 133, as appropriate.
- (2) For the purposes of subregulation (1), no blame is to be attributed to a person for an error or instance of non-compliance in the absence of proof of the person's negligence, recklessness or malicious intent.

119.310 Safety management system training

An operator must ensure that there are regular, adequately planned and resourced briefings on the operator's safety management system for all personnel of the operator.

119.315 Risk management procedures and identification of safety improvements

- (1) An operator must establish and maintain documented procedures for risk management for the operator's organisation.
- (2) Safety improvement reporting procedures must be structured so that, in addition to a regular appraisal of operations to identify safety improvements, each employee in the operator's organisation has a duty to report, in writing and in an appropriate way, a potential safety risk of which he or she is aware.
- (3) The operator's safety manager must reply in writing to an employee who has made a report under subregulation (2), stating the action (if any) taken in response to the report.
- (4) However, subregulation (3) does not apply if the report was made anonymously or otherwise in confidence.

119.320 Internal communication and consultation procedures

An operator must establish and maintain documented procedures:

- (a) for internal communication about the operator's safety management system between the various levels of the operator's organisation and personnel; and
- (b) for consultation about the safety management system with all affected personnel.

119.325 Document control procedures and document control

- (1) An operator must establish documented procedures for controlling all safety-related documents.
- (2) The document control procedures must ensure that all safety-related documents are:
 - (a) authorised by the operator; and
 - (b) regularly updated; and
 - (c) available for use by personnel to whom they apply.
- (3) In this regulation:

safety-related document, for an operator, means any manual, procedural note or instruction, in any form, that must be kept current to ensure that personnel in the operator's organisation perform functions in a consistently safe manner, and includes any document that is prepared or maintained to comply with the requirements of an operator's safety management system.



119.330 Record control procedures

- (1) An operator must establish and maintain documented record control procedures to ensure that relevant records:
 - (a) are kept for the period for which they are required; and
 - (b) are adequate for the purposes for which they are required.
- (2) In subregulation (1):

relevant records, of an operator, means records that are required to be kept by the operator:

 - (a) under a provision of this Part, or of Part 121A, 121B or 133; or
 - (b) under procedures established by the operator in accordance with a provision mentioned in paragraph (a).

119.335 Internal audit procedures

- (1) An operator must establish and maintain documented procedures for internal audits of any operation carried out under the operator's AOC.
- (2) The internal audit procedures must include a defined audit schedule that covers:
 - (a) the major operations and the requirements of the safety management system within a 12-month time scale; and
 - (b) any other topic within the audit schedule within a 24-month time scale.
- (3) In this regulation:

internal audit, for an operator, means a systematic examination by an internal auditor of the way in which an operation under the operator's AOC is being carried out, including the following:

 - (a) compliance with documented procedures;
 - (b) organisational structure and reporting lines;
 - (c) adequate resourcing;
 - (d) the effectiveness of existing procedures.

119.340 Auditors for internal audits

- (1) An internal auditor for an internal audit to be carried out for an operator must be:
 - (a) an employee of the operator in the operator's organisation who is familiar with the type of operation to be audited; or
 - (b) a person not in the operator's organisation who:
 - (i) is familiar with the type of operation to be audited; and
 - (ii) is engaged as an internal auditor under a contract in accordance with regulation 119.110.
- (2) An internal auditor must not have any day-to-day involvement in an operation that is to be audited by the internal auditor.

119.345 Accident and incident recording, reporting and investigation procedures

- (1) An operator must establish and maintain procedures for the recording, reporting and investigation of accidents, serious incidents and incidents in relation to aircraft, or in association with the operation of aircraft, occurring in the course of operations authorised by the operator's AOC.
- (2) The procedures are to use reported and recorded information to improve the level of flight safety.
- (3) To ensure confidential reporting, the means of identifying records resulting from the procedures mentioned in subregulation (1) may be removed.

Note Detailed requirements for the reporting of accidents and incidents are contained in Part 2A of the *Air Navigation Act 1920*. Recording and reporting processes are described in Advisory Circular 119-380, Part A, section 11.

119.350 Remedial, investigative and corrective action

- (1) An operator must establish and maintain documented remedial, investigative and corrective procedures to instruct on the action to be taken:
 - (a) following any accident, serious incident or incident in relation to an aircraft, or associated with the operation of an aircraft, occurring in the course of operations authorised by the operator's AOC; or
 - (b) on becoming aware (through safety-related customer complaints, internal reporting systems or otherwise) of any problem affecting the safety of the operations.
- (2) An operator must keep records of remedial actions, investigative actions and corrective actions for at least 3 years.

119.355 Emergency response procedures

An operator must establish and maintain documented procedures:

- (a) to identify the potential for accidents, incidents and emergency situations arising out of operations authorised by the operator's AOC; and
- (b) to respond to those accidents, incidents and situations.

Subpart 119.G Operations manuals and maintenance control manuals

119.375 Meaning of *relevant information*

In this Subpart:

relevant information, for a matter mentioned in this Subpart, includes operational policies, procedures and instructions, so far as they are applicable and relevant to the matter.



119.380 Operations manual

- (1) An operator must provide and maintain an operations manual, in accordance with this Subpart, for the use and guidance of the operator's crew members and ground support personnel in the performance of their duties.
- (2) Without limiting subregulation (1), the operator must ensure that the operations manual complies at all times with the requirements of this Subpart.

Note An operator cannot conduct AOC operations unless the operator's operations manual is accepted by CASA and is in effect, and certain activities specified in the manual have been approved — see regulations 119.070 and 119.385.

119.385 Content of operations manual

- (1) An operator's operations manual must contain such information about the activities and other matters specified in column 2 of table 119.385-1 as is relevant to the operator's operations.
- (2) The activities mentioned in subregulation (1) for which CASA approval is required under regulation 119.070 are specified in table 119.385-2.
- (3) The operations manual may contain other information that relates to the operator's crew members and ground support personnel in the performance of their duties.
- (4) The operations manual must contain relevant information about matters that are necessary to ensure the safe conduct of flights by each type of aircraft used by the operator in operations authorised by the operator's AOC.
- (5) However, relevant information about a matter mentioned in subregulation (4) that is set out in another document required by these Regulations to be carried in the aircraft need not be duplicated in the operations manual if the document is given an adequate reference in the operations manual.
- (6) In the case of an aircraft to which Part 121B or 133 applies, a pilot operating handbook may be used as Part B of the operations manual if the handbook covers the matters in Part B, so far as applicable.

Note The matters to be included in Part B of the operations manual are set out in table 119.385-1.

- (7) The operations manual must:
 - (a) accurately reflect information taken from an approved document, including any amendment of the approved document; and
 - (b) contain no information that is contrary to an approved document.

Example for subregulation (7)

Documents from an aircraft manufacturer containing data and operating restrictions relating to an aircraft.

- (8) However, nothing in subregulation (7) prevents an operator from using more restrictive data and procedures or providing further descriptive elaboration when considered necessary.



- (9) The content of the operations manual must not conflict with the law or administrative procedures of any foreign country into or over which aircraft may fly under the operator's AOC.

Note 1 Advisory Circular 119-380 provides further guidance material to assist an operator to prepare an operations manual.

Note 2 As to the operator's duties in relation to amendments of the manual, see regulation 119.420.



Consultation note: Column 3 of table 119.385-1 and columns 3 and 4 of table 119.385-2 are included in this draft for ease of reference but may be removed in the final draft before the regulations are made and will be available in advisory material.

Table 119.385-1 Content of operations manual

Column 1	Column 2	Column 3
Item	Subject matter	Manual Reference
Part A	General/basic	
0	Administration and control of operations manual	0
	• Introduction	0.1
	• System of amendment and revision	0.2
1	Organisation and responsibilities	1
	• Organisational structure	1.1
	• Nominated key personnel	1.2
	• Responsibilities and duties of operations management personnel	1.3
	• A statement defining the authorities, duties and responsibilities of the pilot in command	1.4
	• Duties and responsibilities of crew members other than the pilot in command	1.5
2	Operational control and supervision	2
	• Supervision of the operation by the operator	2.1
	• System of promulgation of additional operational instructions and information	2.2
	• Safety management system	2.3
	• Operational control	2.4
	• Regulatory requirements relating to CASA's powers to inspect documents or the work of the operator's crew members	2.5
3	Safety management system	3
	• The operator's safety management system as required by Subpart 119.E	3.1
4	Crew composition	4
	• Crew composition	4.1
	• Designation of the pilot in command	4.2
	• Flight crew incapacitation	4.3
	• Operation on more than one aircraft type	4.4

Table 119.385-1 Content of operations manual

Column 1	Column 2	Column 3
Item	Subject matter	Manual Reference
5	Qualification requirements	5
	<ul style="list-style-type: none"> • A description of the required licence, rating, qualification, competency, experience, training, checking and recency • Flight crew • Cabin crew members • Training and checking personnel • Ground support personnel • Pilot maintenance as approved by the AMP 	5.1 5.2 5.3 5.4 5.5 5.6
6	Crew health precautions	6
	<ul style="list-style-type: none"> • Crew health precautions 	6.1
7	Fatigue management system	7
	<ul style="list-style-type: none"> • Duty time limitations and rest requirements • Review of fatigue management system 	7.1 7.2
8	Operating procedures	8
	<ul style="list-style-type: none"> • Flight preparation instructions • Minimum flight altitudes • Criteria for determining the useability of aerodromes • Methods for establishing aerodrome operating minima • En-route operating minima for VFR flights or VFR portions of a flight • Presentation and application of aerodrome and en-route operating minima • Interpretation of meteorological information • Determination of the quantities of fuel, oil and anti detonant carried • Weight and centre of gravity • ATS flight plan • Operational flight plan • Operator’s flight and technical log • List of documents, forms and additional information to be carried • Ground handling instructions 	8.1 8.1.1 8.1.2 8.1.3 8.1.4 8.1.5 8.1.6 8.1.7 8.1.8 8.1.9 8.1.10 8.1.11 8.1.12 8.2



Table 119.385-1 Content of operations manual

Column 1	Column 2	Column 3
Item	Subject matter	Manual Reference
	<ul style="list-style-type: none">• Fuelling procedures	8.2.1
	<ul style="list-style-type: none">• Aircraft, passenger and cargo handling procedures related to safety	8.2.2
	<ul style="list-style-type: none">• Procedures for the refusal of embarkation	8.2.3
	<ul style="list-style-type: none">• De-icing and anti-icing on the ground	8.2.4
	<ul style="list-style-type: none">• Flight procedures	8.3
	<ul style="list-style-type: none">• VFR/IFR policy	8.3.1
	<ul style="list-style-type: none">• Navigation procedures	8.3.2
	<ul style="list-style-type: none">• Altimeter setting procedures	8.3.3
	<ul style="list-style-type: none">• Altitude alerting system procedures	8.3.4
	<ul style="list-style-type: none">• Ground proximity warning system procedures	8.3.5
	<ul style="list-style-type: none">• Policy and procedures for the use of TCAS II/ACAS, including in RVSM airspace if the operator uses such airspace	8.3.6
	<ul style="list-style-type: none">• Policy and procedures for in-flight fuel management	8.3.7
	<ul style="list-style-type: none">• Adverse and potentially hazardous atmospheric conditions	8.3.8
	<ul style="list-style-type: none">• Wake turbulence	8.3.9
	<ul style="list-style-type: none">• Crew members at their stations	8.3.10
	<ul style="list-style-type: none">• Use of safety belts by crew and passengers	8.3.11
	<ul style="list-style-type: none">• Admission to flight deck	8.3.12
	<ul style="list-style-type: none">• Use of vacant crew seats	8.3.13
	<ul style="list-style-type: none">• Incapacitation of crew members	8.3.14
	<ul style="list-style-type: none">• Cabin safety requirements	8.3.15
	<ul style="list-style-type: none">• Carriage of persons with reduced mobility	8.3.16
	<ul style="list-style-type: none">• Passenger seating	8.3.17
	<ul style="list-style-type: none">• Passenger briefing procedures	8.3.18
	<ul style="list-style-type: none">• Procedures for aircraft operated whenever required cosmic or solar radiation detection equipment is carried	8.3.19
	<ul style="list-style-type: none">• AWO	8.4
	<ul style="list-style-type: none">• ETOPS	8.5
	<ul style="list-style-type: none">• Use of the minimum equipment and configuration deviation list(s)	8.6

Table 119.385-1 Content of operations manual

Column 1	Column 2	Column 3
Item	Subject matter	Manual Reference
	<ul style="list-style-type: none"> • Non revenue flights 	8.7
	<ul style="list-style-type: none"> • Oxygen requirements 	8.8
	<ul style="list-style-type: none"> • An explanation of the conditions under which oxygen must be provided and used 	8.8.1
	<ul style="list-style-type: none"> • The oxygen requirements specified for the following: <ul style="list-style-type: none"> (a) flight crew; (b) cabin crew members; (c) passengers 	8.8.2
9	Dangerous goods and weapons	9
	<ul style="list-style-type: none"> • Information, instructions and general guidance on the transport of dangerous goods 	9.1
	<ul style="list-style-type: none"> • The conditions under which weapons, munitions of war and sporting weapons may be carried 	9.2
10	Security	10
	<ul style="list-style-type: none"> • Security instructions and guidance 	10.1
	<ul style="list-style-type: none"> • A description of preventive security measures and training 	10.2
	<i>Note</i> Parts of the security instructions and guidance may be kept confidential.	
11	Handling of accidents and incidents	11
	<ul style="list-style-type: none"> • Procedures (in accordance with the requirements of the <i>Air Navigation Act 1920</i> and these Regulations) for the handling, notifying and reporting of accidents and incidents 	11.1
12	Rules of the air	12
	<ul style="list-style-type: none"> • Rules of the air 	12.1
Part B Aircraft operating matters — type-related		
Taking account of the differences between aircraft types, and variants of types, under the following section headings		
0	General information and units of measurement	0
	<ul style="list-style-type: none"> • General information including units of measurement 	0.1
1	Limitations	1
	<ul style="list-style-type: none"> • A description of the certified limitations and the applicable operational limitations 	1.1



Table 119.385-1 Content of operations manual

Column 1	Column 2	Column 3
Item	Subject matter	Manual Reference
2	Normal procedures	2
	<ul style="list-style-type: none">• The normal procedures and duties assigned to the crew	2.1
3	Abnormal and emergency procedures	3
	<ul style="list-style-type: none">• The abnormal and emergency procedures and duties assigned to the crew	3.1
4	Performance	4
	<ul style="list-style-type: none">• Performance data in readily useable form• Supplementary data covering flights in icing conditions.• Other data acceptable to CASA• Precautions relating to performance calculations made by FMC or similar equipment• Additional performance data	4.1 4.1.1 4.1.2 4.1.3 4.2
5	Flight planning	5
	<ul style="list-style-type: none">• Data and instructions necessary for pre-flight and in-flight planning including factors such as speed schedules and power settings• The method for calculating fuel needed for the various stages of flight	5.1 5.2
6	Weight and balance	6
	<ul style="list-style-type: none">• Instructions and data for the calculation of the weight and balance	6.1
7	Loading	7
	<ul style="list-style-type: none">• Procedures and provisions for loading and securing the load in the aircraft• Load rejection policy	7.1 7.2
8	Configuration deviation list	8
	<ul style="list-style-type: none">• The CDL	8.1
9	Minimum equipment list	9
	<ul style="list-style-type: none">• The MEL	9.1
10	Survival and emergency equipment including oxygen	10
	<ul style="list-style-type: none">• The survival equipment, including serviceability and accessibility• Oxygen requirements and related matters	10.1 10.2

Table 119.385-1 Content of operations manual

Column 1	Column 2	Column 3
Item	Subject matter	Manual Reference
11	Emergency evacuation procedures	11
	<ul style="list-style-type: none"> • Instructions for preparation for emergency evacuation including crew co-ordination and emergency station assignment • Emergency evacuation procedures 	11.1 11.2
12	Aircraft systems	12
	<ul style="list-style-type: none"> • A description of the aircraft systems, related controls and indications and operating instructions 	12.1
Part C	Route and aerodrome instructions and information	
1	Instructions and information relating to communications and navigation including minimum flight levels and altitudes for each route to be flown	1.1
Part D	Training and checking	
1	Syllabuses and programs	1
2	Training syllabuses and checking programs including the following:	2
	(a) for flight crew	2.1
	(b) for cabin crew	2.2
	(c) for ground support personnel and crew members assigned to operational duties in connection with the preparation or conduct of a flight	2.3
3	Procedures	3
	<ul style="list-style-type: none"> • Procedures for training and checking • Procedures to be applied in the event that personnel do not achieve or maintain the required standards • Procedures to ensure that abnormal or emergency situations are not simulated during air transportation flights 	3.1 3.2 3.3
4	Document storage	4
	<ul style="list-style-type: none"> • Description of documents to be stored and storage periods 	4.1
5	Training and checking manual	5
	<ul style="list-style-type: none"> • Training and checking manual 	5.1



Table 119.385-1 Content of operations manual

Column 1	Column 2	Column 3
Item	Subject matter	Manual Reference
6	Other matters <ul style="list-style-type: none">• Those matters specified in regulation 119.445 and not mentioned in items 1 to 4 of Part D of this table if the operator elects to incorporate the training and checking manual into the operations manual	6 6.1
Part E	Special procedures associated with aerial work operations	
1	<ul style="list-style-type: none">• Procedures specific to the safe conduct of any aerial work operations authorised by the operator's AOC <p><i>Note</i> The content of Part E of the operations manual must be compatible with Part 133, 136, 137 or 138, as applicable — see the appropriate Part.</p>	1.1

Table 119.385-2 Activities for which CASA approval is required

Column 1 Item	Column 2 Activities that require CASA approval	Column 3 Manual reference, Part and section	Column 4 CAR 1998 reference
1	Operational control	A 2.4	121.195, 133.195
2	Procedures for flight crew to operate on more than 1 type or variant	A 5.2	121.980, 133.980
3	Method of determination of minimum flight altitudes	A 8.1.1	121.250, 133.250 133.430
4	(a) Standard weight values other than those specified in Subpart 121A.J or 121B.J, as applicable (b) Omission of data from documentation	A 8.1.8	121.620 (16) Appendix 1, 121.625 (2), 133.625 (as required by 91.525)
5	Operator's flight and technical log	A 8.1.11	121.915, 133.915
6	MNPS	A 8.3.2	121.243
7	RNAV (RNP)	A 8.3.2	121.243
8	RVSM	A 8.3.2	121.241, 91.485
9	AWO Cat II/III Operations	A 8.4	121.440
10	ETOPS approval	A 8.5	121.246
11	Use of MEL	A 8.6	121.030(2), 133.030.A
12	Maximum approved passenger seat configuration	B 1.1	121.002, 133.002
13	Alternate method for verifying approach weight	B 2.1	121.510(3)
14	Steep approach procedures and short landing operations- Performance Class B	B 4.1	121.515(2) & (3) 121B.550
15	Fuel policy	B5.2	121.255 & 133.255



Table 119.385-2 Activities for which CASA approval is required

Column 1	Column 2	Column 3	Column 4
Item	Activities that require CASA approval	Manual reference, Part and section	CAR 1998 reference
16	Use of on-board weight and balance systems	B 6.1	Appendix 1 to 121A.625 (9)
17	MEL	B 9.1	121.030 (1), 133.030.A
18	Low visibility training syllabus, flight crew	D 2.1	121.450
19	Initial CRM training, flight crew	D 2.1	133.943.D, 121.943
20	Conversion training and checking	D 2.1	133.945.A.3, 121.945
21	Pilot qualification to operate in either pilot's seat	D 2.1	133.968.A.2, 121.968
22	Recurrent training program flight crew	D 2.1	121.965 (1) (b)
23	Advanced qualification program	D 2.1	121.978
24	Initial training, crew members including CRM training	D 2.1, D 2.2	121.1005, 133.1010
25	Conversion training, cabin crew members	D 2.2	121.1010
26	Recurrent training program, crew members	D 2.1, D 2.2	133.1015.B, 121.1015
27	Refresher training program, cabin crew members	D 2.2	121.1020
28	Ground support personnel and crew members — dangerous goods	D 2.3	92.110
29	Training and checking manual	D 5.1	119.085

119.390 Use of external material in operations manual

- (1) Subject to subregulation (2), an operator may include, as part of the operations manual, documentation from a source other than the operator.

Example for subregulation (1)

Relevant documentation may include parts of an aircraft flight manual or aircraft operations manual produced by the aircraft manufacturer, or relevant route guide material produced by a professional company specialising in such material.

- (2) An operator (the *first operator*) must not include as part of the operations manual the whole or part of another operator's manual unless that manual or part is accepted by CASA and is incorporated in the first operator's operations manual.
- (3) Documentation mentioned in subregulation (1) must:
 - (a) be applicable and appropriate to the matter to which it purports to relate; and
 - (b) be up-to-date.
- (4) If the documentation is not incorporated directly into the manual, the manual must contain a statement clearly identifying the documentation and the purpose and effect of including the documentation as part of the manual.

119.395 Form of operations manual

- (1) The contents of the operator's operations manual must be presented in a form in which they can be used without difficulty by any person required to use the manual.
- (2) An operator may, if CASA so permits in writing, present all or part of the manual by a means other than on printed paper.
- (3) Any part of the manual that is presented by a means other than on printed paper must be presented in a manner that is reliable, readily accessible and useable by any person required to use it.
- (4) The manual need not be structured in accordance with table 119.385-1.

Note Refer to Advisory Circular 119-380 for further information if the manual is not to be structured in accordance with table 119.385-1.

119.400 Distribution of operations manual

- (1) An operator must provide to each of the operator's crew members and ground support personnel a copy of the operator's operations manual, or a copy of those parts of the manual that relate to their respective duties.
- (2) The operator must provide a copy of the operations manual, or a copy of relevant parts of the manual, to:
 - (a) such other of the operator's personnel as the operator considers necessary; and
 - (b) such other persons associated with the operator's operations as CASA may, in writing, direct.



- (3) The operator must make a copy of the operations manual readily accessible to all personnel:
 - (a) whose duties are specified in the manual; and
 - (b) who have not been provided with a copy of the manual, or with a copy of those parts of the manual that relate to their duties, under subregulation (1) or (2).
- (4) The operator must provide a copy of the operations manual to CASA.

119.405 Maintenance procedures and maintenance control manual

- (1) An operator's organisation must establish and maintain adequate procedures and systems to provide for the control of maintenance and continuing airworthiness of aircraft authorised by the operator's AOC.
- (2) Without limiting subregulation (1), the operator must provide and maintain, in accordance with this Subpart, a maintenance control manual, for use by the operator, the operator's contracted maintenance providers and the operator's maintenance control personnel.
- (3) The operator must ensure that the maintenance control manual complies at all times with the requirements of this Subpart.
- (4) The operator's maintenance control manual must contain the relevant information that is necessary to ensure adequate control of the maintenance of each aircraft authorised by the operator's AOC.
- (5) The manual must include information on such of the matters mentioned in table 119.405 as are relevant to the operator's AOC.

Note An operator cannot conduct AOC operations unless the operator's maintenance control manual is accepted by CASA and is in effect — see regulation 119.075.

Table 119.405 Content of maintenance control manual

Item	Matters to be included
	Administration:
1	Operator's name, ARN and ABN or ACN
2	A description of the aircraft type, registration mark and serial number of each aircraft to which the manual applies
3	A distribution list of all manual holders
4	Instructions for maintaining the revision status of the manual
5	Instructions for distribution of manual amendments to holders of the manual
6	Description of the operator's organisation, including the maintenance control structure
7	Names and responsibilities of the persons appointed as the head of aircraft maintenance control and the maintenance controller(s)
8	Instructions for implementation of MSOS issued to the operator
9	Identification of the AMP for each aircraft authorised by the operator's AOC
10	A description of the administrative arrangements between the operator and the contracted maintenance organisation for: <ul style="list-style-type: none"> (a) line maintenance; (b) base maintenance; (c) aeronautical product maintenance
11	A description of the administrative arrangements between the operator and the contracted servicing organisations
	Procedures for:
12	Ensuring that maintenance is carried out in accordance with each aircraft's maintenance program and as required by these Regulations
13	Ensuring that each aircraft is maintained in a serviceable and airworthy condition
14	Ensuring operational and emergency equipment necessary for the intended flight is serviceable
15	Ensuring that the certificate of airworthiness for each aircraft remains valid
16	Signing a maintenance release after maintenance has been carried out
17	Assessing and reporting service difficulty reports (SDRs)
18	Conveying SDRs to the type certificate holder and to CASA
19	Assessing instructions for continuing airworthiness from the organisation responsible for the type design and ensuring that: <ul style="list-style-type: none"> (a) the assessment is recorded; and; (b) any resulting actions considered necessary as a result of the assessment are carried out



Table 119.405 Content of maintenance control manual

Item	Matters to be included
20	Implementing any mandatory instructions issued by CASA
21	Maintaining a system of analysis and continued monitoring of the performance and efficiency of the AMP, and procedures to correct any deficiency in the program
22	Internal evaluation of the effectiveness of the operator's maintenance control system
23	An annual review of all maintenance records for aircraft authorised by the operator's AOC in accordance with Subpart 121A.M or 121B.M, as applicable
24	Identification, completion and retention of each aircraft's maintenance records, including: <ul style="list-style-type: none">(a) the total time in service (hours, calendar time and cycles, as appropriate) of the aircraft and all life-limited components;(b) the current status of compliance with all mandatory continuing airworthiness information;(c) appropriate details of modifications and repairs to the aircraft or its major components;(d) the total time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aircraft or its components subject to mandatory overhaul life;(e) the current aircraft status of compliance with the maintenance program;(f) the detailed maintenance records to show that all requirements for the signing of the return to service have been met
25	Ensuring that unserviceabilities affecting the airworthiness of each aircraft are recorded and rectified
26	Ensuring the management of deferred defects
27	The use of the aircraft flight and technical log, and application of aircraft MELs and CDLs
28	Application for special flight permits or experimental flights
29	Training and recurrent training of personnel authorised by the operator to perform maintenance on the operator's aircraft
30	Control and use of spare parts including parts pooling or borrowing arrangements
31	Control of leased aircraft and aeronautical products
32	Control of reliability programs and reporting to CASA
33	Maintaining aircraft weight and balance records
34	Control of aircraft weight and balance

119.410 Form of maintenance control manual

- (1) The operator's maintenance control manual must be presented in a form in which the contents of the manual can be used without difficulty by any person required to use the manual.
- (2) An operator may, if CASA so permits in writing, present all or part of the manual by a means other than on printed paper.
- (3) Any part of the manual that is presented by a means other than on printed paper must be no less accessible, useable or reliable than the manual on printed paper.

119.415 Distribution of maintenance control manual

- (1) An operator must:
 - (a) provide to each of the operator's maintenance personnel and contracted maintenance providers a copy of those parts of the operator's maintenance control manual that are relevant to the duties of the personnel or maintenance providers; and
 - (b) provide a copy of the manual to CASA.
- (2) An operator may provide a copy of the manual to any other person associated with the maintenance of the operator's aircraft and equipment.

119.420 Amendment of operations manual or maintenance control manual

- (1) An operator must amend the operator's operations manual or maintenance control manual whenever it is necessary to do so:
 - (a) because of changes in the operator's operations, aircraft or equipment; or
 - (b) as a result of operational experience; or
 - (c) when an aircraft manufacturer requires changes to be made; or
 - (d) because of changes to legislation; or
 - (e) because of a change in key personnel; or
 - (f) for any other relevant reason.
- (2) CASA may in writing direct an operator to amend the operator's operations manual or maintenance control manual by:
 - (a) including the relevant information specified in the direction; or
 - (b) amending the relevant information contained in the manual in the manner specified in the direction; or
 - (c) amending the MSOS issued to the operator.
- (3) An operator who is given a direction under subregulation (2) must comply with the direction as soon as practicable and must not, without reasonable excuse, contravene it.
- (4) An operator who is notified of CASA's refusal to accept the operator's operations manual or maintenance control manual may amend and resubmit the manual for acceptance.



- (5) An operator must submit to CASA a copy of any proposed amendment of the manual relating to an activity requiring CASA approval before the amendment becomes effective for the operator's organisation.
- (6) However, an operator may bring into effect an amendment of the operations manual before the amendment is approved by CASA if:
 - (a) in the interests of the safety of operations authorised by the operator's AOC, the amendment is urgently required; and
 - (b) the operator has submitted a copy of the amendment to CASA under subregulation (5).
- (7) An operator must ensure that:
 - (a) all amendments of the operator's operations manual and maintenance control manual are incorporated in all copies of the respective manuals kept in the operator's organisation; and
 - (b) copies of relevant amendments are provided to CASA and to each person to whom a copy of the manual, or a relevant part of the manual, has been provided under regulation 119.400 or 119.415.

Subpart 119.H Training and checking

119.425 Operator to establish or contract out training and checking

- (1) An operator must ensure that:
 - (a) the training and checking required under Part 61, 121A, 121B or 133, as appropriate, being training and checking conducted under the operator's AOC for air transport operations, is undertaken by a training and checking organisation mentioned in subregulation 119.085 (1); and
 - (b) each of the relevant personnel are certified as having satisfactorily completed all necessary training and checking programs; and
 - (c) the operator's operations manual, procedures and checklists are used for the training and checking; and
 - (d) the same types of safety equipment as are used in aircraft operated by the operator are used for safety equipment training.

Note The training and checking organisation may be an in-house training and checking organisation or a contracted training and checking organisation — see regulation 119.085.
- (2) If an operator contracts out part or all of the training and checking mentioned in subregulation (1) to a training and checking organisation, the operator's operations manual:
 - (a) must contain the operator's procedures for ensuring that the operator's responsibilities under this regulation and regulation 119.430 are carried out; and
 - (b) need not include information relating to training and checking that is contracted out.
- (3) However, if information relating to training and checking that is contracted out is not included in the operator's operations manual:

- (a) references must be included in the operations manual in place of that information stating where the information can be found in the training and checking organisation's training and checking manual; and
- (b) the operator must hold an up-to-date copy of that training and checking manual.

119.430 Training and proficiency checks for crew etc

- (1) An operator must ensure that a person does not act as a crew member on an air transport operation conducted by the operator unless the person has satisfactorily completed all training and proficiency checks that are:
 - (a) appropriate to the person's duties; and
 - (b) required under Part 61, Part 121A, 121B or 133, as appropriate.
- (2) An operator must ensure that a person does not act as an examiner for the operator's organisation unless the person has satisfactorily completed all training that:
 - (a) is necessary to perform the functions of an examiner; and
 - (b) is necessary to perform the functions required by the operator.
- (3) For the avoidance of doubt, a test or proficiency check of a person that is conducted by that person is not a valid test or proficiency check for the purposes of these Regulations.

119.435 In-house training and checking organisations

- (1) An operator's in-house training and checking organisation must:
 - (a) form part of the structure of the operator's organisation for conducting operations authorised by the operator's AOC; and
 - (b) have sufficient examiners and other suitably qualified and competent personnel in the organisation to ensure that its training and checking functions can be carried out effectively to the standard required under these Regulations; and
 - (c) have facilities, equipment and training aids that are adequate to enable the organisation to carry out its training and checking functions effectively.
- (2) If the operator introduces a new aircraft type for the operator's operations, the initial training and checking of crew members for the aircraft type must be conducted by persons acceptable to CASA.

119.440 Training and checking manual

- (1) An operator who establishes and maintains an in-house training and checking organisation must provide and maintain, in accordance with this Subpart, a training and checking manual for use by the operator's training and checking personnel.
- (2) Without limiting subregulation (1), an operator must ensure that the training and checking manual complies at all times with the provisions of this Subpart.

Note 1 An operator to whom this regulation applies cannot conduct AOC operations unless the operator's training and checking manual is approved by CASA and is in effect — see regulation 119.085.



Note 2 Approval of the operator's training and checking manual is required before an in-house training and checking organisation can be approved. Normally the applications for approval of the manual and organisation will be made at the same time.

Note 3 The training and checking manual may be included in Part D of the operator's operations manual or may be a separate document — see Advisory Circular 119-380.

119.445 Content of training and checking manual

- (1) A training and checking manual must contain at least the following:
 - (a) an outline of the training and checking organisation's structure and a statement of its functions and responsibilities;
 - (b) particulars of the functions and duties of all employees who supervise or carry out training and checking functions in the organisation;
 - (c) particulars of the experience and qualifications required by the operator for each of the operator's employees having training and checking duties, including any special limitations;
 - (d) particulars of the courses, syllabuses and standards to be achieved for each flight or STD training program (including any related ground training) used in the organisation;
 - (e) particulars required by the organisation of the command responsibility by the training or check captains during training and flight proficiency checks;
 - (f) particulars of any special procedures and conditions that are to be used or observed in carrying out practice and simulated emergency and abnormal flight operations;
 - (g) particulars of any other procedures and conditions that are to be used or observed in carrying out flying training operations;
 - (h) instructions about the carrying out of training sequences and flight proficiency checks in STDs;
 - (i) instructions about the use of any training checklists required by the organisation;
 - (j) the minimum crew numbers and qualifications required by the organisation, or under these Regulations, in carrying out particular types of training or flight proficiency checks and the flight time limitations that apply under these Regulations for pilots engaged in flight training or checking duties;
 - (k) particulars of administrative procedures followed by the organisation, with examples of all documents associated with each training program and flight proficiency check;
 - (l) particulars of the security arrangements used by the organisation for its examination materials;
 - (m) particulars of the procedure to be followed if a person fails to achieve a satisfactory standard in a training program or flight proficiency check.
 - (n) any other information required to be contained in the manual under Part 121A, 121B or 133, as appropriate.
- (2) The training and checking manual may contain additional material for information and guidance.

119.450 Form of training and checking manual

- (1) An operator's training and checking manual must be presented in a form in which it can be used without difficulty by any person required to use the manual.
- (2) An operator may, if CASA so permits in writing, present all or part of the manual by a means other than on printed paper.
- (3) Any part of the manual that is presented by a means other than on printed paper must be no less accessible, useable or reliable than the manual on printed paper.

119.455 Distribution of training and checking manual

- (1) An operator must provide a copy of the operator's training and checking manual to the following:
 - (a) CASA;
 - (b) each of the operator's personnel who has training or checking duties;
 - (c) such other people associated with the operator's operations (if any) as CASA directs.
- (2) An operator must provide relevant parts of the training and checking manual to personnel being trained or checked.

119.460 Amendment of training and checking manual

- (1) An operator must not amend the operator's training and checking manual unless the amendment has been approved by CASA.
- (2) Subregulation (1) does not apply to an amendment that:
 - (a) is only editorial; or
 - (b) does not significantly affect the contents of the manual mentioned in regulation 119.445.
- (3) An operator must amend the operator's training and checking manual whenever it is necessary to do so:
 - (a) because of changes in the operator's operations, aircraft or equipment; or
 - (b) as a result of operational or training experience; or
 - (c) for any other reason in the interests of safety or clarity.
- (4) CASA may in writing direct an operator to amend the manual by:
 - (a) including the information, procedures or instructions specified in the direction; or
 - (b) amending the information, procedures or instructions contained in the manual in the manner specified in the direction.
- (5) An operator who is given a direction under subregulation (4) must comply with the direction as soon as practicable and must not, without reasonable excuse, contravene it.



- (6) An operator who is notified of CASA’s refusal to approve an amendment of the training and checking manual may further amend and resubmit the manual for approval.
- (7) An operator must ensure that all amendments of the training and checking manual are incorporated in each copy of the manual kept in the operator’s organisation and in any copy provided to a person in accordance with regulation 119.455.

Subpart 119.M Leased aircraft airworthiness arrangements

Consultation note: A separate NPRM will be issued in relation to proposed regulations under this Subpart.

Amendment to Part 201 – Miscellaneous:

Paragraph 201.4 (a)

after
cancelling,
insert
withdrawing,

Paragraphs 201.4 (a) and (b)

after
approval,
insert
acceptance,

Amendment to Part 202 – Transitional:

Subpart 202.DL Transitional provisions for Part 119 (Air operator certification — air transport)

202.410 Transitional AOCs (air transport)

- (1) In this regulation:
 - commencement day* means [to be advised]
 - transitional AOC (air transport)* means an AOC that:
 - (a) is issued under section 27 of the Act to a person who, immediately before the commencement day, was the holder of an AOC (the *former AOC*) issued under that section for a commercial purpose prescribed in paragraph 206 (1) (b) or (c) of CAR 1988; and
 - (b) authorises the continuance, while the AOC remains in force, of operations that were authorised under the former AOC; and

-
- (c) specifies the conditions (including the operations specifications) that were, immediately before the commencement day, specified as conditions of the former AOC.
- (2) Subject to subregulations (4), (5) and (6), the holder of a transitional AOC (air transport) must continue to comply with the standards and requirements prescribed in the following instruments that, immediately before the commencement day, were in force and applicable to the former AOC:
- (a) the CAR 1988; and
 - (b) the Civil Aviation Orders; and
 - (c) any orders, notices, requirements or other publications issued by CASA; and
 - (d) safety operational specifications issued in accordance with Civil Aviation Order 82.0.4.
- (3) For the avoidance of doubt, subregulation (2) applies despite the repeal of the CAR 1988 and the revocation or expiry of any of the other instruments mentioned in that subregulation.
- (4) Subject to subregulation (5), the holder of a transitional AOC (air transport) must comply with the applicable standards and requirements of CAR 1998, except the requirements of Parts 119, 121A, 121B and 133.
- (5) If the standards or requirements of CAR 1988 or another instrument mentioned in subregulation (2) are more stringent than the applicable standards or requirements of CAR 1998 in relation to a matter, then the standards or requirements of CAR 1988 or that instrument apply in relation to the matter.
- (6) The holder of a transitional AOC (air transport) must comply with:
- (a) the conditions specified in the AOC on the commencement day, as amended or varied under section 28BB or 28BC of the Act; and
 - (a) any further conditions imposed on the AOC under section 28BB or 28BC of the Act.
- Note* Sections 28BB and 28BC of the Act relate to the powers of CASA to impose conditions or further conditions on an AOC, and to vary those conditions.
- (7) For the purposes of subregulation (2), the holder of a transitional AOC (air transport) may have the requirements of regulation 217 of CAR 1988 relating to training and checking carried out by:
- (a) the holder of a training and checking organisation certificate issued under Part 142, if the certificate authorises the holder to carry out those requirements; or
 - (b) a training and checking organisation approved under regulation 217 of CAR 1988.
- (8) The holder of a transitional AOC (air transport) must implement an approved transition implementation and staff training plan in accordance with subregulation (9).
- (9) For subregulation (8), the plan must provide for:



- (a) implementation of the applicable standards and requirements of CAR 1998, except Parts 119, 121A, 121B and 133, on the commencement day; and
- (b) implementation of Part 119, and of Part 121A, 121B or 133 as appropriate to the holder's operations, at the time when an AOC to which Part 119 applies is to be issued to the operator in place of the transitional AOC (air transport).

Proposed Amendment to:

Dictionary, Part 1

insert the following definitions in the appropriate positions (determined on a letter-by letter basis)

accepted means accepted by CASA.

aircraft class rating means a rating that authorises a person to pilot all aircraft types within a particular aircraft class.

aircraft type means all aircraft of the same basic design and including all modifications to the design except modifications that result in a change in handling or flight characteristics.

aircraft type rating means a rating that authorises a person to pilot an aircraft type that is not included in an aircraft class.

AMP, or aircraft maintenance program, for an aircraft, means a program that describes, for the aircraft:

- (a) the specific scheduled maintenance tasks and their frequency of completion; and
 - (b) related procedures (for example, a reliability program);
- that are necessary for the safe operation of the aircraft.

ATS means the Air Traffic Service.

AWO means all-weather operations.

CDL, or configuration deviation list, for an aircraft type, means a list established by the organisation responsible for the aircraft-type design with the approval of the State of design that:

- (a) identifies any external parts of an aircraft type that may be missing at the commencement of a flight; and
- (b) contains, where necessary, any information on associated operating limitations and performance correction.

CRM means crew resource management.

dangerous goods manual, for an operator, means a manual kept by the operator in accordance with Part 92.

examiner means a flight examiner or flight engineer examiner.

flight engineer examiner means a flight engineer who holds a current flight engineer examiner rating issued in accordance with Part 63.

flight examiner means a pilot who holds a current flight examiner rating issued in accordance with Part 61.

FMC means a flight management computer (that is, a device to provide performance and flight guidance information to a pilot and an autopilot).

foreign operator means an operator who is not an Australian operator.

ground support personnel, for an operator, means persons employed or contracted by the operator to carry out duties associated with flight planning, aircraft fuelling, dispatching, load planning, supervision of aircraft loading, aircraft performance calculations or the updating of computerised aircraft navigational data bases and maintenance.

maintenance, in relation to an aircraft, means tasks required to ensure the continuing airworthiness of the aircraft, including any one or more of the following:

- (a) overhaul;
- (b) repair;
- (c) inspection;
- (d) replacement;
- (e) modification;
- (f) defect rectification.

maintenance control manual means a maintenance control manual mentioned in regulation 119.405.

Manual of Personnel Standards means the manual of that name published by CASA, as in force from time to time.

maximum approved passenger seat configuration, for an aircraft, means the maximum passenger seat capacity of the aircraft, excluding pilot seats or flight deck seats and cabin crew seats as applicable:

- (a) used by the operator; and
- (b) approved by CASA; and
- (c) specified in the operator's operations manual and operations specifications.

Note The maximum approved passenger seat configuration is limited by the aircraft's maximum certificated passenger seat capacity as specified in the aircraft's flight manual.

MEL, or minimum equipment list, for an aircraft, means a list that provides for the operation of the aircraft, subject to specific conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.

MMEL, or master minimum equipment list, means a list established for a particular aircraft type by the organisation responsible for the type design, with the approval of the State of design, containing items, 1 or more of which is permitted to be unserviceable at the commencement of a flight, and which may (or may not) be associated with special operating limitations or procedures.

MSOS, or maintenance-specific operations specifications, for an operator, means operations specifications, prepared in conjunction with the operator and issued by CASA, that provide detailed maintenance-related authorisations and limitations for the operator, being authorisations and limitations that are not mentioned in these Regulations.

operations manual means an operations manual mentioned in regulation 119.380.

operations specifications, for an operator, means the operations specifications of the operator's AOC.

passenger means a person on board an aircraft who is not a crew member.



STD means a synthetic training device, that is:

- (a) a flight simulator; or
- (b) a flight training device; or
- (c) a flight and navigation procedures trainer; or
- (d) a basic instrument training device.

training and checking manual means a training and checking manual mentioned in regulation 119.440.

Consultation note: *A number of terms used in this Part, but of more general application, have been defined elsewhere for inclusion in the Dictionary. Among the terms defined for the purposes of Part 91 (General operating and flight rules) are:*

air transport means the transport of passengers or cargo for remuneration or hire, excluding the following:

- (a) the carriage of passengers, in accordance with subregulation 91.1045 (7), by an aircraft certified in the limited category;
- (b) the carriage of passengers for the purpose of engaging in parachuting operations;
- (c) the carriage of passengers in accordance with Part 115 [passenger operations for hire or reward in gliders and balloons];
- (d) the carriage of passengers as permitted under Part 136 [aerial work operations];
- (e) a cargo-only flight conducted wholly within Australia in an aircraft having an MTOW not exceeding 5 700 kg.)

Australian operator means an operator whose principal place of business, or whose place of permanent residence, is in Australia.

operator means a person, organisation or enterprise responsible for making available an aircraft for an operation to the aircraft's pilot in command.



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Advisory Circular

AC 119-165(0)

APRIL 2002

SAFETY MANAGEMENT TRAINING

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1. REFERENCES

- | | |
|---|--|
| 1 | • CASR 119.165 |
| 1 | • CASR 119 Subpart E |
| 1 | • AC 119-270 Safety Management Systems |

2. PURPOSE

3 This Advisory Circular (AC) provides
3 guidance to assist in the establishment of
4 course criteria for the training of Safety
4 Managers as required by CASR 119.165
5 (2) to enable the Safety Manager to
5 implement and maintain the Safety
6 Management System.

3. STATUS OF THIS AC

6 This is the first AC to be written on this
7 topic.

Advisory Circulars are intended to provide recommendations and guidance to illustrate a means but not necessarily the only means of complying with the Regulations, or to explain certain regulatory requirements by providing interpretative and explanatory material.

Where an AC is referred to in a 'Note' below the regulation, the AC remains as guidance material.

ACs should always be read in conjunction with the referenced regulations

4 INTRODUCTION

4.1 This document sets out the criteria for a training course for Safety Managers. These are individuals who are, or will be, responsible for the implementation and maintenance of an AOC's Safety Management System ("SMS"), within the meaning of CASR Part 119.

4.2 With any new process or system it is essential that the management representative responsible for the activity be appropriately trained to implement and continuously improve the system. Only with qualified management experience driving the process will a capable system evolve.

4.3 The suggested course criteria contained in this AC is intended to provide the training organisation with the core training components necessary to establish a course of safety management training. The person who successfully completes this training will be expected to have the skills necessary to implement and maintain a safety management system as required by CASR Part 119.

4.4 This suggested criteria should not be seen as limiting further expansion of the training course beyond these minimum recommended components.

5 OVERVIEW

5.1 A training course for Safety Managers ("the Course") should teach the Safety Manager how to design, implement and maintain a SMS. The Course should address the four general requirements of SMSs, which are as follows:

5.1.1 Senior management commitment to SMS

Chief Executives Officers or managers should demonstrate commitment by:

- Specifying the company's SMS standards;
- Allocating adequate resources to the SMS;
- Ensuring the standards are known and accepted by all staff; and
- Ensuring there is a system in place so that deviations from the standards are recognised and reported.

5.1.2 Reporting and notification system

An efficient and effective hazard and occurrence reporting and notification system is needed. This means:

- Hazards and occurrences are reported in a timely manner;
- All staff are encouraged to report hazards, occurrences and safety concerns;
- Procedures are in place to track significant events, and detect unexplained increases in safety related events; and
- There are processes to regularly review the effectiveness of the company reporting and notification system.

5.1.3 Evaluation and follow-up action

Once an occurrence or hazard is identified, action to defend the operation from the associated risk involved must be taken. This can be done in three ways:

- Eliminate the hazard completely—this is the most effective defence, but is sometimes not practical;
- Change operational procedures to minimise the hazard; and
- Warn people about the hazard—by itself, this is the least effective action.

5.1.4 Maintenance of standards

To maintain standards, staff support is needed. This requires:

- That selected staff are involved in developing the standards;
- Responsibilities being clearly defined; and
- All staff consistently achieve the standards.

6 COURSE CONTENT

The Course should address the following twelve features of an SMS. Each feature should be taught as a separate unit of study with reference to the overview above. However, it is important that the Safety Manager learns how each unit works in conjunction with every other unit. Problem based learning is encouraged. The units, together with their purpose, learning outcomes and assessment methods are as follows:

UNIT ONE – SENIOR MANAGEMENT COMMITMENT:

Unit Rationale:

The purpose of this unit is to educate the student on the importance of top management commitment to, providing initiative to, and application of an SMS and how to achieve these management objectives.

Learning Outcomes:

The Safety Manager will learn to:

- Assist senior management to demonstrate commitment to the SMS to employees by a variety of techniques including leading by example; and
- Inform and update senior managers' knowledge of an organisation's SMS.

Assessment Methods:

The student should be assessed by:

- Problem based questions;
- Demonstration of techniques for communicating with senior management; and
- Practical exercises.

UNIT TWO – RESPONSIBILITY FOR THE SMS

Unit Rationale:

It is important that Safety Managers are aware of their organisational role and how they should interact with the other people and groups within the organisation. This includes understanding how to simultaneously perform the functions of a Safety Manager alongside other responsibilities when required (especially useful for a small GA operator where the Safety Manager may also be, for example the head of flying operations). Safety Managers who understand their own responsibilities may then implement a system in which everyone in the organisation can perform their role in the SMS.

Learning Outcomes:

The Safety Manager will learn to:

- Determine an organisation's structure efficiently and accurately including lines of communication and authority within an organisation; and
- Design systems for the maintenance and revision of the SMS, within a wide range of organisational structures, including inputs, outputs and feedback from all staff.

Assessment Methods:

The student should be assessed by:

- Problem based questions;
- Observations; and
- Demonstration of the ability to formally report on an organisation's management structure (flow charts etc).

UNIT THREE – ESTABLISHMENT OF A SAFETY ACTION GROUP

Unit Rationale:

It is important for an organisation to have a Safety Action Group that is an integral and essential part of management at every level. It is important that the Safety Manager understands that a Safety Action Group is not a 'paper tiger'.

Learning Outcomes:

The Safety Manager will learn to:

- The links between a SMS, the role of the Safety Action Group and an organisation's safety culture (including the effects of a poorly functioning safety action group) and be able to determine if the organisation's structure is such that a formalised Safety Action Group is appropriate.
- Identify those in an organisation who should constitute a Safety Action Group from time to time.
- Develop systems to implement a Safety Action Group's decisions and monitor that implementation.
- Be aware of methods to encourage the flow of information to the Safety Action Group including the implications of blame free reporting of unsafe behaviour (covered in more detail in Unit 5).

Assessment Methods:

The student should be assessed by:

- Preparing sample documentation for reporting etc;
- Designing systems to support safety action groups;
- Questioning;
- Observations; and
- Practical exercises.

UNIT FOUR – HAZARD IDENTIFICATION AND RISK MANAGEMENT*Unit Rationale:*

Hazard Identification and Risk management are crucial to understanding the practical threats to safety in an organisation. It is essential that these two processes are part of an organisation's SMS so that the maximum increases in safety can be achieved.

Learning Outcomes:

The Safety Manager will learn to:

- Determine “safety hazard” and “safety risk”;
- Identify hazards and risks using a variety of tested methods;
- Identify who to include in discussion groups who work to identify, prioritise and manage hazards and be aware of methods to assist these groups in their decision making processes;
- Enlist the assistance of any employee or manager to assist in mitigating a particular hazard – remembering that safety improvement is the obligation of all members of an organisation; and
- Demonstrate the ability to develop and utilise an effective Risk Management Tool.

Assessment Methods:

The student should be assessed by:

- Problem based questions;
- A report on a method for hazard identification and hazard management that identifies the method's strengths and weaknesses;
- Observation; and
- Practical exercises.

UNIT FIVE – ONGOING OCCURRENCE AND HAZARD REPORTING SYSTEM

Unit Rationale:

It is important to maximise the quality and flow of safety hazard information. An important strategy, though one which is often difficult to implement, is to deal with reports of unsafe behaviours in a way which does not discourage further reporting.

Learning Outcomes:

The Safety Manager will learn to:

- Take advantage of existing reporting systems and develop further improvements to suit new situations, as appropriate;
- Determine what needs to be reported and by whom;
- Establish systems to ensure that reports are disseminated and acted upon;
- Avoid “shooting the messenger” to promote future reporting; and
- Develop and implement Data Management and Analysis processes.

Assessment Methods:

The student should be assessed by:

- Problem based written questions;
- Observation; and
- Practical exercises.

UNIT SIX – ESTABLISHING AND MAINTAINING A POSITIVE SAFETY CULTURE

Unit Rationale:

It is important that a Safety Manager understands what a safety culture is and the various approaches to establishing a safety culture. In particular, the student should understand how an SMS can alter an organisation’s safety culture.

Learning Outcomes:

The Safety Manager will learn to:

- Establish communication systems and understand communication techniques;
- Discuss with staff the nature of a positive safety culture and its theoretical foundations;
- Apply methods for assessing safety culture and appreciate their limitations;
- Know how to promote a positive safety culture within the context of every aspect of a SMS;
- Manage expectations, given the often gradual nature of cultural change; and
- When responding to system reports, distinguish between an employee who may have been a victim of organisational deficiencies or improper management

pressures from an employee who conducted themselves negligently or unsafely of their own volition and to respond appropriately.

Assessment Methods:

The student should be assessed by:

- Problem based questions on methods of cultural change;
- Questioning; and
- Practical exercises

UNIT SEVEN – SAFETY INDUCTION AND RECURRENT TRAINING

Unit Rationale:

It is crucial to promote the application of SMSs and for every employee to be involved.

Learning Outcomes:

The Safety Manager will learn to:

- Record and review the current level of training, achievements and acceptance of SMSs by every employee;
- Realise that the form and content of safety training will have an impact on safety culture;
- Train all employees to work on managing their own safety as active SMS members; and
- Recognise and use informal opportunities to instruct employees and management on safety.

Assessment Methods:

- Problem based questions;
- Observations; and
- Demonstration of technique.

UNIT EIGHT – SAFETY AUDIT/ASSESSMENT

Unit Rationale:

Safety assessments are an important part of an SMS. It is important for Safety Managers to remain conscious of the overall objectives of an audit so that they are focussed on safety improvement and not punishment. Further, audits represent an opportunity to demonstrate management commitment to the SMS. Within the context of an SMS, for example, an auditor should wear all appropriate personal protective equipment. A Safety Manager must be aware of these issues.

Learning Outcomes:

The Safety Manager will learn to:

- Plan an audit, prepare an audit checklist, conduct, report and evaluate the audit;
- Conduct audits in a way that is non-punitive and identifies successes as well as deficiencies;

- Realise the potential, which audits have, to impact upon safety culture and to complement all of the processes of the SMS; and
- Manage the SMS administrative processes and apply audit data to improve safety within the SMS.

Assessment Methods:

Students should:

- Demonstrate safety audit skills;
- Conduct a practical exercise; and
- Solve problems arising out of sample safety audit data.

UNIT NINE – OCCURRENCE REPORTING AND EVALUATION (INCLUDES QUALITY, AUDIT, COMPLIANCE, HAZARDS)

Unit Rationale:

It is important for every organisation to comply with relevant legislation and regulations on reporting. At the same time, reporting and evaluation outcomes can assist the organisation to properly manage and learn from occurrences, incidents and accidents.

Learning Outcomes:

The Safety Manager will learn to:

- Interpret and comply with laws that apply to reporting of occurrences, incidents and accidents; and
- Analyse occurrence, incident and accident reports to improve organisational safety.

Assessment Methods:

- Problem based questions; and
- Demonstration of reporting and evaluation techniques.

UNIT TEN – SMS REVIEW AND EVALUATION

Unit Rationale:

It is essential to continually review and evaluate an SMS for the purpose of sustaining and improving it. It is important that the Safety Manager works on helping all members of an organisation to maintain interest in and commitment to the SMS.

Learning Outcomes:

The Safety Manager will learn to:

- To critically evaluate SMSs to determine its effectiveness;
- Seek out constructive criticism internally or from external sources as required; and
- Promote the SMS using appropriate techniques and to analyse the impact of these techniques on the safety culture. (for example, rewards for a reduction in incidents may simply stifle reporting).

Assessment Methods:

- Critical evaluation of sample SMS scenarios and development of solutions; and
- Problem based questions.

UNIT ELEVEN – EMERGENCY RESPONSE PLAN*Unit Rationale:*

It is important that all employees know their role in an emergency. Safety Managers should have the skills to develop an emergency response plan.

Learning Outcomes:

The Safety Manager will learn to:

- develop a plan and support it with appropriate education, signs and appropriate contacts with emergency services;
- Recognise the psychological impact of disasters on employees, their families and the public, and know what to do; and
- Be aware of how to deal with the media

Assessment Methods:

- Develop a component of an emergency response plan;
- Problem based questions; and
- Practical exercises

UNIT TWELVE – DOCUMENTATION*Unit Rationale:*

Documentation is good evidence of safety practices and it is an excellent source of data for reviews and comparisons with past performance. The SMS must be relevant to all employees and management, and therefore the SMS documentation must be clearly expressed and readily accessible.

Learning Outcomes:

The Safety Manager will learn to:

- Prepare, update and maintain SMS documentation;
- Record and retain (in a way which renders them useful) all safety related reports and management actions; and
- Establish database systems or direct and advise experts to establish them.

Assessment Methods:

- Problem based questions;
- Observations; and
- Preparation of sample documentation.

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Advisory Circular

AC 119-270(0)

APRIL 2002

SAFETY MANAGEMENT SYSTEMS

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Advisory Circulars are intended to provide recommendations and guidance to illustrate a means but not necessarily the only means of complying with the Regulations, or to explain certain regulatory requirements by providing interpretative and explanatory material.

Where an AC is referred to in a 'Note' below the regulation, the AC remains as guidance material.

ACs should always be read in conjunction with the referenced regulations.

1. REFERENCES

- Guidance material for the establishment of a safety management system can be found in ICAO Document 9422 — AN/923, *Accident Prevention Manual* and ICAO Document 9376 — AN/914 *Preparation of an Operations Manual*.
- An operator's guide to building a safety program located at the CASA web site at: <http://www.casa.gov.au/avreg/business/safemang.htm>
- CAA(UK) CAP 712 safety management systems for commercial air transport operations located at the UK CAA web site at: http://www.srg.caa.co.uk/publications/cap712_sms_for_commercial_air_transport_operations.pdf
- Transport Canada TP 13739 safety management systems located at the Transport Canada web site at: http://www.tc.gc.ca/aviation/syssafe/tp13739/pdf/sms_e.pdf

2. PURPOSE

2.1 This Advisory Circular (AC) provides general principles and practical guidance in complying with the requirements for a Safety Management System as required by Subpart E of CASR Part 119. This AC should be read in conjunction with Subpart E. Readers who are unfamiliar with safety management system concepts should first read *An operator's guide to building a safety program* as referenced in **1.** above."

2.2 This AC builds on earlier work by CASA in the management of safety by offering practical guidance material for air transport operations to assist with the development of effective systems for managing safety.

3. STATUS OF THIS AC

This is the first Australian AC produced on this subject.

4. DEFINITIONS

Safety Management is defined as the systematic management of the risks associated with flight operations and related ground operations to achieve high levels of safety performance.

A *Safety Management System* is an explicit element of the corporate management responsibility that sets out an operator's safety policy and defines how it intends to manage safety as an integral part of its overall business.

5. INTRODUCTION

5.1 CASR Regulation 119.275 requires an operator to whom subpart E of Part 119 applies to have a safety management system which includes provision for a safety management, accident prevention and flight safety management system. This requirement is based on the ICAO recommended practice (Annex 6 Parts I and II) for operators to have such a system in place. ICAO Document 9422 — AN/923, *Accident Prevention Manual* gives appropriate guidance material and describes a safety management system.

5.2 Benefits of a safety management system

To improve on existing levels of aviation safety in the light of the continuing growth of the industry, additional measures are needed. One such measure is to require operators to introduce their own Safety Management System (CASR Part 119 subpart E). Such a system is as important to business survival as a financial management system and the implementation of a Safety Management System should lead to achievement of one of civil aviation's key business goals: enhanced safety performance aiming at best practice and moving beyond mere compliance with regulatory requirements.

5.3 What is a safety management system?

5.3.1 A Safety Management System can be compared with a financial management system as a method of systematically managing a vital business function. It is instructive to look briefly at this aspect.

5.3.2 The features of a financial management system are well recognised. Financial targets are set, budgets are prepared, levels of authority are established and so on. The formalities associated with a financial management system include 'checks and balances'. The whole system includes a monitoring element so that corrections can be made if performance falls short of set targets.

5.3.3 The outputs from a financial management system are usually felt across the company. Risks are still taken but the finance procedures should ensure that there are no 'business surprises'. If there are, it can be disastrous for a small company. For the larger company, unwelcome media attention usually follows an unexpected loss.

5.3.4 An aircraft accident is also 'an unexpected loss' and not one that any company in the civil aviation industry wishes to suffer. It should be apparent that the management of safety must attract at least the same focus as that of finance. The adoption of an effective Safety Management System (SMS) will provide this.

5.3.5 A developed SMS provides a transparent, recorded system to manage safety and deserves at least the same degree of care that would be applied to a financial management system.

5.3.6 A similar argument applies to a comparison with Quality Management, which should interface with Safety Management as part of the organisation/s core management system.

6. GENERAL

6.1 The Fundamental Requirement of Safety Management

Success in a company's safety performance will be greatly strengthened by the existence of a positive safety culture. Safety culture in an organisation can be described as the way in which it conducts its business and particularly in the way it manages safety. It emanates from the communicated principles of top management and results in all staff exhibiting a safety ethos which transcends departmental boundaries. It can be measured by informal or formal staff surveys, or by observations conducted in safety-related work areas. Safety must be actively managed from the very top of a company. Safety management must be seen as an integral strategic aspect of business management, recognising the high priority attached by the company to safety. To that end, a demonstrable Board-level commitment to an effective formal Safety Management System must exist.

Equally, every level of management must be given a safety accountability. The contribution of the staff at and below supervisor level must be emphasised.

6.2 Understanding and Implementing a Safety Management System

6.2.1 Four points must be made at the outset, to indicate that implementation of a SMS involves evolution rather than revolution.

- Companies establishing a SMS need to take a pragmatic approach, building where possible on existing procedures and practices (particularly Quality Management). SMS identifies and prioritises the use of resources to manage risk and it should lead to gains in efficiency.
- Adoption of 'best practice' standards must be the goal.
- A fully-fledged SMS is a formalised, company-wide system. Established at the corporate level, the SMS then devolves out into the individual departments of the company. Flight Operations, Engineering and Maintenance, Ground Operations and all other departments whose activities contribute to the operator's safety performance will have their own processes and procedures under the umbrella of the corporate SMS.
- Where safety sensitive functions of the operator are outsourced (e.g. maintenance, ground handling), contractual agreements should identify the need for equivalent, auditable SMS in the supplier.

6.2.2 Many existing procedures and practices are reactive, i.e. they are put in place following a safety event. SMS is both proactive and reactive, giving a means to anticipate and prevent or reduce the effect of risks. This is the essential benefit of Safety working in partnership with Quality Management.

6.2.3 Successful development of SMS in a company follows an initial approach to the task; preparation for and implementation of SMS and, finally, the assurance of continued success of the system.

6.2.4 Unless 'starting from scratch', it is not necessary to adhere to any particular sequence of actions. Many, perhaps all, operators will find that their existing processes and procedures can be linked into the framework of a formal SMS.

7. SAFETY MANAGEMENT SYSTEM

7.1 A safety management system is a customised and structured method used by the operator to manage the safety of operations and personnel in an active and integrated manner.

7.2 This management system incorporates all of the operator's activities undertaken in the organisation.

7.3 The Safety Management System requirements have been established so that the system is documented and implemented by operators to be compatible with quality assurance and total quality management systems. Operators are encouraged to structure their documented processes to achieve a fully integrated management system.

8. SAFETY POLICY

8.1 The safety policy should include a statement in writing, signed by the operator's CEO, that the CEO is committed to:

- (a) achieving and maintaining the operator's safety objectives mentioned in regulation 119.285; and
- (b) giving emphasis to the importance of a positive safety culture in the operator's organisation; and
- (c) managing fatigue through the operator's fatigue management system.

8.2 The safety policy should:

- (a) be appropriate for the needs of the organisation; and
- (b) provide for a commitment to compliance with the Act, CASR and the operator's AOC; and
- (c) provide for a commitment to the establishment and review of the operator's safety objectives; and
- (d) be communicated throughout the organisation; and
- (e) be regularly reviewed to ensure that it remains appropriate for the organisation.

9. SAFETY OBJECTIVES

9.1 The safety objectives should state an intended safety outcome. The safety objectives may comprise both long-term objectives and short-to-medium term objectives.

The safety objectives should:

- (a) be specific, measurable, achievable and realistic; and
- (b) have a specified and timely timeframe within which they are to be achieved.

9.2 The operator should have documented safety plans to achieve each specified safety objective.

10. PERSONNEL – DOCUMENTATION OF ROLES, RESPONSIBILITIES AND AUTHORITIES

Personnel should be grouped into tasks. Position descriptions should relate to activities performed. Each person employed should have a clear direction from management as to how to conduct all the activities they are required to perform. Reporting lines should provide for each of the operator's personnel, within their task groupings, to identify their responsibilities and accountabilities for all safety related activities.

11. MANAGEMENT REVIEWS OF SAFETY MANAGEMENT SYSTEM

11.1 A reference to the operator's key personnel includes a reference to any person to whom a function of a key personnel position in the operator's organisation has been delegated.

11.2 The review should be carried out at least annually, through a combination of an annual strategic review, and more frequent tactical reviews, of the performance of the safety management system.

11.3 An annual strategic review should focus on the performance and continuing suitability of:

- (a) the safety management system; and
- (b) the safety policy; and
- (c) the safety objectives;

in response to statistics prepared by the operator's safety manager on the performance of the safety management system and to reports to the CEO by other key personnel in accordance with regulation 119.145.

Note: Under regulation 119.145 key personnel are required to report to the CEO on systems or functions for which they are responsible.

11.4 A tactical review should focus on the following:

- (a) ongoing progress of accident, serious incident and incident investigations, and subsequent actions;
- (b) corrective and preventive actions in progress;
- (c) risk management procedures including safety improvement reporting actions as required by 119.315;
- (d) results of emergency planning exercises and subsequent actions; and
- (e) internal audit and external audit results.

11.5 Each review should:

- (a) be an integral part of the operator's management meeting schedule; and
- (b) follow appropriate meeting protocols, including the taking of minutes, a review of previous minutes and action items and the recording and assigning of action items.

12. SAFETY MANAGEMENT SYSTEM IMPROVEMENT AND PREVENTIVE ACTION

12.1 The operator should establish and maintain procedures for analysing data from internal and external sources using appropriate statistical techniques.

12.2 The operator when establishing procedures for preventive action as required by subregulation 119.300 (3) should include requirements for:

- (a) identifying potential accidents, serious incidents, incidents or reported problems and their causes;
- (b) implementation of preventive action needed;
- (c) recording results of action taken;
- (d) reviewing preventive action taken.

See item 22.1 (d) in this AC for definition of preventive action.

13. SAFETY PRACTISES

The outcome from the application of Safety Practises will be the development of a positive safety culture.

13.1 BENEFITS OF A SAFETY CULTURE

In addition to a moral and legal obligation to provide employees with a safe work environment many benefits will flow from a positive safety culture. These include but are not limited to:

13.1.1 Trust

A positive safety culture will generate trust on the part of employees, contractors and other airlines and has the potential to generate additional business opportunities.

13.1.2 Improved and realistic audits

Rather than being an imposition and potential threat, a positive safety culture will welcome audits as an important source of external information and or confirmation of how well the organisation is doing.

13.2 WHAT IS CULTURE:

13.2.1 Culture is a term that can be applied to nations, organisations, sections and even small work groups. This means that at any given time your work behaviour is being influenced by several overlapping cultures. This raises the question: Exactly what is culture? There are various definitions but for our purposes culture can be thought of as having three components. They are:

- (1) What is important (to us);
- (2) What we believe; and
- (3) The way we do things around here.

13.2.2 In order to understand “What is important” in an organisation, you must begin by looking at its Policy Statements. However these are indications of intention and do not necessarily reflect current organizational practices. You must go further and consider your organisation’s actual reward and punishment practices. In many respects these practices, both formal and informal, are what define your culture: Those things that are important are rewarded; those things that are not important are ignored; and those things that are not wanted may be punished.

13.2.3 By themselves, rewards and punishments do not define a culture. How we react to rewards and punishments and take them into account as we go about flying or maintaining our aircraft depends to a large extent on what we believe. To borrow an old phrase, “*If we believe something to be true, we will behave as though it is true*”. This means that regardless of what an organisation’s stated policies might be, employees will act on their beliefs. For example, if someone believes that if they make and then report an error they will suffer an unpleasant consequence. They are therefore unlikely to make the report. At this point it is very important to mention that beliefs can be tenacious and very resistant to change, even in some cases where there is overwhelming evidence for the need to change.

13.2.4 Finally all work organisations have informal or “understood” rules and procedures about how things actually get done. This is known as peer group influence and it can be very powerful. For example a research project looking at the tendency for a pilot to violate

SOPs found that an adverse peer comment was often enough to stop the violation from occurring. To follow on from the error-reporting theme it may be that in your organisational errors may be seen as a signs of weakness or lack of diligence (possibly reflecting “can do” or “Macho” attitudes). The result can be that errors are not reported to supervisors or management”. That is, the “understood” rule might be “around here we work from memory”, etc.

13.3 CULTURE AND BEHAVIOUR

13.3.1 Many things influence how we perform on the job. These include knowledge, skills, abilities, training, practice, availability and appropriateness of tools and procedures, etc. The list is almost endless. It is apparent therefore that culture does not determine behaviour. Rather culture shapes and predisposes behaviour. As Professor Patrick Hudson suggested during his participation with CASA in a series of Forums on Safety Management, a positive culture is the added extra in the creation and maintenance of high performing and safe organisations.

13.3.2 It is apparent from the foregoing that a positive safety culture must include a clear policy statement to the effect that safety is important and that this statement must be backed up by development and support of social and technical practices that encourage positive safety behaviour. Also included must be a belief shared by all employees that they will not experience negative consequences if they behave in a manner consistent with a positive safety outcome. Finally behaviour in a manner consistent with a positive safety outcome must become the norm for all your employees as must the willingness to speak up if an unsafe (or less than safe) practice or behaviour is observed.

13.4 CHARACTERISTICS OF A SAFETY CULTURE

The goal of a positive safety culture is to encourage, promote, and support safe behaviour. A Safety Culture must include the following characteristics:

13.4.1 Just

- (1) How individuals are treated following the investigation of a mistake or event is at the very foundation of a safety culture. One of the most challenging tasks here will be to remove the idea that blame is useful. Accomplishing this will be difficult as blaming individuals for mistakes and events is a strongly ingrained part of our national and aviation culture. This in no way suggests however that you should adopt a “No Blame” policy—punishment and sanctions do have their place. What is required is that there be a clear distinction between what is acceptable behaviour and what is not, and that following a negligent action or deliberate non-compliance, people are treated accordingly.
- (2) For these distinctions to be accepted they must be developed by all those involved. They must not be simply imposed from the top.
- (3) It should be noted that behaviour unrelated to safety, can also influence the safety culture. Actions which are perceived or believed to be unfair, for example, can create a negative reaction to all other actions by the organisation. Therefore the concept of “just” must be applied to any or all mistakes or events whether they have safety implications or not.

13.4.2 Reporting

Your employees must be willing to report their own errors and near misses. To encourage this reporting, your systems need to be easy to use and employees must be convinced that incidents are worth reporting. Good reporting will only happen in a “just” culture.

13.4.3 Informed

Your managers must know what is really going on. Once reported, there must be agreed ways to analyse mistakes and events to reveal underlying systemic and/or individual issues. The key here is that “you cannot manage what you do not measure”.

13.4.4 Wary

- (1) You can anticipate and plan for most threats and hazards. However most accidents do not happen because people plan poorly or decide to gamble and lose, they happen because they did not believe that the accident was even possible.
- (2) Everyone in your organisation must be on the lookout for the “impossible” accident. There needs to be a chronic unease when you can’t seem to see anything wrong.

13.4.5 Flexible

Your organisation and employees must be flexible. This means that they must be prepared to shift away from the “status quo” or the traditional way of doing things. Policies, procedures and programs must be defined by what is safe and sensible. This will require that all employees have sense of ownership of the goals, a fundamental knowledge of risk assessment and the authority to act within their competence. Above all, the aim here is be flexible enough to avoid following procedures all the way to an accident.

13.4.6 Learning

Your organisation and its employees must learn from their experiences. That is, they must learn from the outcomes of mistakes and events and reports on unsafe or inadvisable practices. This will require some experimentation with revised procedures and the willingness to try again if the revisions don’t work first time.

13.5 CREATING A SAFETY CULTURE

Safety Culture is an integral part of a Safety Management system and it cannot be developed in isolation. Concurrently with the development of a Safety Management System, attention must be paid to each of the six characteristics of a safety culture. However you must start somewhere. As the concept of a “just” culture is a core characteristic of a safety culture, it might be useful to start with an analysis of the practices within the organisation and the development of error and violation management strategies. With this as a starting point it will rapidly become apparent how the other characteristics will develop.

13.6 STAGES OF A DEVELOPING A SAFETY CULTURE

13.6.1 Safety cultures can be placed on a continuum from *pathological*, or caring less about safety than about not being caught, through *calculative*, that is, mechanically following all the necessary steps, to *generative*, in which safe behaviour is fully integrated into everything the organisation does. (see Figure 1). Regardless where an organisation

starts it will progress through each stage in order. It is not possible to jump or circumvent a stage.

13.6.2 At the *pathological* stage, an organisation is not even interested in safety and has to reach the first level of acquiring a value system that includes safety as a necessary element.

13.6.3 The *reactive* stage is one in which safety issues begin to acquire importance, often driven by both internal and external factors as a result of having many incidents. At this first stage of development safety values are beginning to be acquired but the beliefs, methods and working practices are still quite basic. At this stage, top management believes accidents to be caused by stupidity and inattention and even wilfulness on the part of their employees. Many messages may flow from on high but the majority still reflect the organisation's primary aims, often with '*and be safe*' tacked on at the end.

13.6.4 The next stage, *calculative*, involves the recognition that safety needs to be taken seriously. The term *calculative* is used to stress that safety is calculated; quantitative risk assessment techniques and overt cost-benefit analyses are used to justify safety and to measure the effectiveness of proposed measures. Such techniques are typical problem-solving methods. Often simple calculations suggest that failing to be safe, or at least having incidents, costs money. Furthermore organisations that are seen from outside as being uncaring about safety may have image problems that knock on to the bottom line. Despite this stance and despite what can become an impressive safety record, safety is still an add-on, certainly when seen from outside. This is the level of mechanical application of a management system. A true safety culture is one that transcends the *calculative* levels.

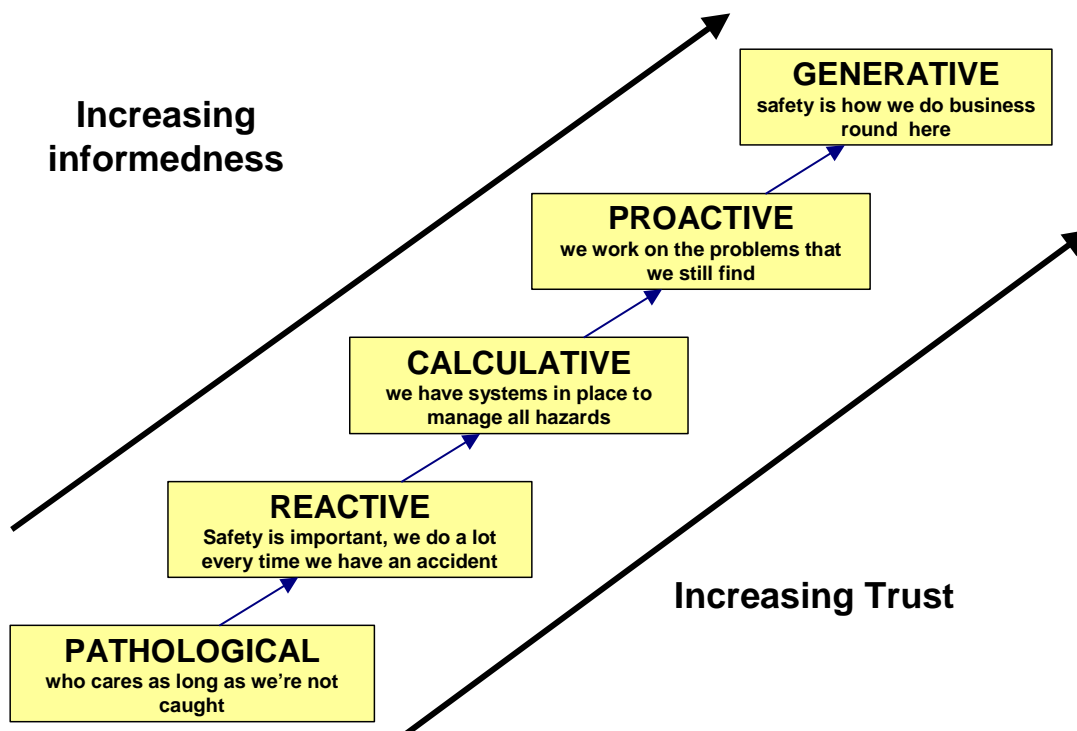
13.6.5 A Safety Culture can only be considered to have developed in the later *proactive* or *generative* stages of this evolutionary line. The foundation can now be laid for acquiring the belief that safety is worthwhile in its own right. By constructing deliberate procedures an organisation can force itself into taking safety seriously but the values are not yet fully internalised. The methods are still new and individual beliefs generally lag behind corporate intentions.

13.6.6 This demonstrates a significant characteristic of a true safety culture, that the value system associated with safety and safe working has to be fully internalised as beliefs, almost to the point of invisibility and that the entire suite of approaches the organisation uses, are safety-based. What this also stresses is that the notion of a safety culture can only arise in an organisational context within which the necessary technical steps and procedures are already in place and in operation.

13.7 MAINTAINING A SAFETY CULTURE

13.7.1 How do you maintain your effort and prevent regression or backsliding? Paradoxically, the biggest threat to a developing safety culture is success. There is a strong feeling that because mistakes or events have started to decrease that the "war" has been won and "peace" (safety) has broken out so we can now get back our "real" business. Nothing could be further from the truth. One of the best ways to continue the struggle is to stay wary and worried. Look at your hazard identification program or look around you. If you aren't having mistakes or events, someone else is. Borrow theirs and treat them as your own.

The Evolution of Safety Culture



14. SAFETY MANAGEMENT SYSTEM TRAINING

14.1 The briefings should include the following matters:

- the basic principles of the safety management system and the way in which the system will function in the organisation;
- the importance of complying with the operator's safety policy and with the requirements of procedures that form part of the operator's safety management system;
- the roles and responsibilities of personnel in achieving compliance with the safety policy and procedures.

14.2 The operator should ensure that new personnel are trained in the operation of the safety management system during their initial training program.

15. RISK MANAGEMENT PROCEDURES AND IDENTIFICATION OF SAFETY IMPROVEMENTS

15.1 Risk management procedures

Risk management procedures should involve the following:

- risk identification;
- risk analysis;

- (c) risk assessment;
- (d) risk management;
- (f) reporting procedures.

15.2 Risk identification

15.2.1 Risk identification should involve a systematic process of regular meetings where organisational risks are identified, managed and introduced in a manner that does not compromise the safety of aircraft operations.

15.2.2 Organisational risks are to be determined individually by identifying the types and extent of any:

- (a) changes to operations authorised by the operator's AOC or to the operator's organisation; or
- (b) new internal or external influences.

15.3 Risk analysis

Risk analysis should involve a determination of the severity of the consequences of each identified risk and the likelihood of its occurrence.

15.4 Risk assessment

Risk assessment should:

- (a) involve determining the priority of an identified risk; and
- (b) include an assessment of the defences which exist to protect against the risk and the adequacy of those defences.

15.5 Risk management

15.5.1 Risk management should involve the establishment of appropriate procedures to eliminate or minimise a risk.

15.5.2 Risk minimisation should involve:

- (a) providing and implementing solutions; and
- (b) the development of procedures; and
- (c) personnel training.

15.6 Reporting procedures

15.6.1 Procedures for the identification, reporting, analysis and management of identified safety improvements should be documented and implemented as part of the risk management procedures.

15.6.2 Depending on the size and complexity of the operator's organisation and the nature of the potential risk, an appropriate way of reporting may be 1 or more of the following:

- (a) to the safety manager directly
- (b) through a safety committee
- (c) through a confidential reporting or suggestion-box scheme.

16. INTERNAL COMMUNICATION AND CONSULTATION PROCEDURES

16.1 The internal communication and consultation procedures should be appropriate to the size and complexity of operations authorised by the operator's AOC and the operator's organisation.

16.2 An operator should establish and maintain information management procedures to ensure that all personnel have access to the sources of relevant information to enable them to carry out tasks effectively.

information management procedures includes, but is not limited to, the distribution of safety-related literature, magazines, periodicals, textbooks, posters, video's, CD's, DVD's and web based information.

17. DOCUMENT CONTROL PROCEDURES AND DOCUMENT CONTROL

17.1 Document control procedures should:

- (a) include methods for identifying the current issue of any safety-related document so that the currency of the document set to which it belongs can be determined; and
- (b) ensure that changes to any safety-related document are clearly identified within the document and are communicated to all personnel to whom the document applies.

17.2 A safety-related document may be in any form (including electronic form) or format.

17.3 A safety-related document should:

- (a) be readily accessible to all personnel who need to use it; and
- (b) present information, procedures or instructions in a way that can be clearly understood and followed by those personnel.

17.4 A safety-related document that is not authorised, or is obsolete, should be:

- (a) clearly marked as not authorised, or as obsolete; or
- (b) removed from the workplace to prevent its use.

17.5 If a safety-related document is updated, an archive copy of any superseded document should be stored, for at least 3 years, in order to maintain a historical record of updates.

18. RECORD CONTROL PROCEDURES

18.1 An operator should establish and maintain documented record control procedures to ensure that records form a resource for statistical analysis and preventive action.

18.2 The records may be stored in any form (including electronic form).

18.3 The records should be:

- (a) adequately filed and labelled; and
- (b) stored in a way that prevents loss or deterioration; and
- (c) readily accessible to an authorised officer.

18.4 The procedures should specify:

- (a) the period for which the records are required to be kept; and
- (b) the means of their disposal.

19. INTERNAL AUDIT

19.1 An internal audit should include at least the following processes:

- (a) a defined scope of the audit;
- (b) planning and preparation;
- (c) gathering and recording evidence; and
- (d) analysis of the evidence.

19.2 The operator should consider the following methods for inclusion in an internal audit:

- (a) a review of existing procedures relating to the operation being audited;
- (b) interviews or discussions with personnel;
- (c) the witnessing of the activities involved in the operation being audited; and
- (d) the examination of an adequate sample of records.

19.3 An internal audit may be undertaken by 1 or more internal auditors.

19.4 In determining the frequency of internal audit of an operation the internal audit procedures should take into account:

- (a) the importance of the operation to be audited; and
- (b) the frequency of significant changes to the organisation, management, operation, relevant technology or regulatory requirements.

19.5 The internal audit procedures should provide for unscheduled audits to be carried out when trends that indicate potential problems are identified.

19.6 An operator may increase the frequency of audits under the internal audit procedures but should not decrease the frequency without the written permission of CASA.

19.7 If an internal audit shows that procedures relating to the audited operation can be improved, the operator should take steps to improve those procedures.

20. AUDITORS FOR INTERNAL AUDITS

20.1 An internal auditor may be employed or engaged by an operator on a full-time or part-time basis.

20.2 An internal auditor should have appropriate responsibility and authority to do the following:

- (a) carry out internal audits;
- (b) initiate and recommend solutions to concerns and findings through the operator's safety manager;
- (c) verify the implementation of solutions within specified timeframes; and
- (d) report directly to the safety manager.

An internal auditor should have the relevant operational and maintenance experience to carry out an internal audit of an operation that is to be audited.

21. ACCIDENT AND INCIDENT RECORDING, REPORTING AND INVESTIGATION SCHEME

21.1 The detailed objectives of the reporting scheme are:

- (a) to enable an assessment of the safety implications of each accident, serious incident or incident to be made, taking into account any previous similar occurrence, so that any necessary action can be taken; and
- (b) to ensure that information gained through the investigation of accidents, serious incidents and incidents is disseminated so that other operators and their personnel, and other interested organisations, may improve the safety aspects of their operations.

21.2 The procedures established for the reporting scheme should be accessible to all personnel.

22. REMEDIAL, INVESTIGATIVE AND CORRECTIVE ACTION

22.1 The procedures should deal with the following:

- (a) **remedial action.** Action required to be taken, in response to an audit finding, to remedy the immediate situation so that operations are brought within safe parameters, to enable the operations to continue until such time as corrective action(s) can be initiated.
- (b) **investigative action.** Action required to be taken to investigate the accident, incident or problem and to determine the root cause;
- (c) **corrective action.** Action required to address the root cause so as to ensure that the accident, serious incident, incident or problem does not recur;
- (d) **Preventive Action.** The action, resulting from internal processes to analyse data (from internal and external sources), to eliminate the causes of potential problems.

22.2 The operator should establish and maintain monitoring procedures to review corrective action and ensure that it is effective.

23. EMERGENCY RESPONSE PROCEDURES

The operator's CEO, together with the operator's other key personnel, should:

- (a) review the emergency response procedures on a regular basis and particularly after the occurrence of an accident, incident or emergency situation; and
- (b) periodically test the procedures where practicable.

24. DOCUMENTATION OF PROCESSES AND CHANGE MANAGEMENT

24.1 The operator should ensure that all activities undertaken as part of a process are undertaken under controlled conditions and produce safe outcomes.

Note: Elements of a process are usually documented as part of the operator's operations manual or maintenance control manual.

24.2 The operator should establish and maintain procedures to ensure that the development process in designing and introducing any new service is adequately planned.

24.3 The operator should ensure that operational and safety requirements (including regulatory requirements) for a new service are defined and documented.

24.4 The operator should ensure that:

- (a) the results of the development process for a new service are reviewed at appropriate stages; and
- (b) the results of the review are recorded.

new service, for an operator, includes the introduction by the operator of:

- (a) a new route; or
- (b) a type of aircraft on an existing route that is not already used on that route.

25. HANDLING AND STORAGE PROCEDURES

25.1 An operator should establish and maintain procedures for the handling, loading and storage of cargo and materials (including materials for the operator's own use) that may affect the safety of operations authorised by the operator's AOC.

Note For specific requirements relating to dangerous goods, see Part 92.

25.2 Handling and storage of hazardous substances and dangerous goods should be conducted in accordance with Commonwealth, State or Territory legislation.

25.3 Part 139 requires that Certified Aerodrome Operators include in their operating manual procedures for handling hazardous substances at that aerodrome. AOC holders located at a Certified Aerodrome should develop their procedures in conjunction with the Certified Aerodrome Operator.

25.4 Procedures should ensure the correct and ready identification, storage, packaging, labelling and marking of dangerous goods from their receipt into an operator's supply system until their final disposition. It should be noted that maintenance materials such as paint and adhesives, and replacement and spare aircraft components, which are dangerous goods, must be transported by air in accordance with *Part 92*. *Part 92* also contains training requirements for employees involved in the handling of dangerous goods consigned and transported by air.

26. MEASURING EQUIPMENT AND MEASURING EQUIPMENT CALIBRATION

26.1 An operator should:

- (a) identify any measuring equipment that is used to ensure that safe operations authorised by the operator's AOC are maintained; and
- (b) ensure that the equipment can achieve the measurement accuracy required by these regulations.

Example: Weighing equipment for load control

26.2 The operator should ensure that a list of calibrated measuring equipment is kept and that the equipment is calibrated at regular intervals as required by relevant national standards.

26.3 The state of calibration of the equipment should be readily determined from labels attached to the equipment, or from readily accessible records.

26.4 The operator should document calibration methods and maintain records of calibration.

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Advisory Circular

AC 119-380(0)

APRIL 2002

STRUCTURE AND CONTENT OF OPERATIONS MANUAL

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1. REFERENCES

- CASR 119.070
- CASR 119 Subpart G
- Table 119.385-1 Contents of operations manual
- Table 119.385-2 Content of operations manual for which CASA approval is required

2. PURPOSE

This Advisory Circular (AC) provides guidance to assist in the sequencing of material in an operations manual for an applicant seeking the issue of an Air Operator's Certificate (AOC). The contents of an operations manual are specified in Table 119.385-1 to CASR Part 119.

3. STATUS OF THIS AC

This is the first AC to be written on this topic.

Advisory Circulars are intended to provide recommendations and guidance to illustrate a means but not necessarily the only means of complying with the Regulations, or to explain certain regulatory requirements by providing interpretative and explanatory material.

Where an AC is referred to in a 'Note' below the regulation, the AC remains as guidance material.

ACs should always be read in conjunction with the referenced regulations

4 INTRODUCTION

4.1 An operations manual is provided by an operator for the use and guidance of the operation's personnel of the operator. It should contain such information, procedures and instructions with respect to the flight operation of all aircraft types operated by the operator as are necessary to ensure the safe conduct of flight operations.

4.2 Any applicant for an Air Operator's Certificate (AOC) should be aware that the primary purpose of the operations manual is to fulfil a requirement to provide written instructions and guidance to his operation's personnel in the form of information, processes, procedures and instructions that are essential for a safe and efficient operation. Its secondary purpose is to provide CASA with information to determine if the operator meets regulatory compliance for the issue of an AOC.

4.3 The degree and scope of instruction that an operator chooses to give to his staff will depend on the number of aircraft, size, complexity and disposition of his organisation. It is unlikely that any two operations manuals would cover a common subject in the same way or in the same detail.

4.4 This AC intends to provide a list of subjects, which if given proper consideration, will ensure that the manual takes account of those matters that are relevant to the conduct of safe operations. Adherence to the contents of this guide will also fulfil an operator's statutory obligations in respect to CASR 119.070.

4.5 This AC shows one possible structure for an operations manual. This standardised structure has many advantages. These include ease of compilation, speed of CASA assessment that translates into cost savings during the AOC issue process, efficiency of use by staff and ease of amendment, update and extension.

4.6 While there is no prohibition on an operator utilising a manual produced by an independent contractor, it is difficult to achieve the necessary relevance in a manual produced in this way unless the writer has a close association with the intended operation. It is therefore usually in the operator's best interest to have their Head of Flying Operations deal directly with CASA. Where the operator chooses to use an independent contractor, negotiations should preferably occur only with the Head of Flying Operations being present. It is CASA's experience that communication through a third party without the operator's Head of Flying Operations being present, often results in misunderstandings. Furthermore the operator's lack of direct involvement frequently leads to an inadequate awareness of what is exactly required by the text of his or her own manual. This lack of awareness is clearly not acceptable to CASA.

4.7 Where the operator uses an independent contractor to negotiate directly with CASA it should be understood that only the operator is responsible for the quality and acceptability of the operations manual, not the independent contractor.

4.8 An applicant for an AOC should first read the requirements for an operations manual contained in subpart G of Part 119.

4.9 Should the applicant decide not to structure the operations manual in accordance with this AC, a matrix, identifying where the applicable requirements of Table 119.385-1 are located in the draft manual, should be provided to CASA to assist in assessing the manual.

4.10 While reference to CASA or Airservices documentation in the manual may be appropriate, official text should not be reproduced unless it is not readily available to personnel. If paraphrasing is used, care should be taken that it does not corrupt the original intent. Except when used as part of an overall explanation, recourse to statements such as “See Regulation 121A.450” should be avoided, as they contribute nothing to the education and guidance of the reader.

4.11 When the manual presumes to give a direction for an action to be carried out, then the person or appointment required to carry out the action should be named. It may also be relevant to state how the action is to be carried out. If it is intended that discretion be permitted then it may be important to give guidance on just what discretion is allowed, and how it should be applied. Appendices may be used to great advantage to illustrate what is to be checked and how a record is to be kept.

4.12 All subjects identified in Table 119.385-1 must be addressed. Where the subject is not to be addressed, as it is not relevant to company operations, it should be followed by the word “Reserved “ or “Not applicable”. In this way the standardised and sequential numbering will be preserved and a subject may be addressed at a later date if required.

4.13 The manual is divided into five parts, not all of which will be required by all operators. Where a complete part is not required it should be marked “Reserved” in the list of parts.

4.14 Special attention should be applied to those items identified in Table 119.385-2, as these items must be approved by CASA.

4.15 A manual that is no longer relevant because it fails to take account of changing circumstances will lose credibility. 119.420 requires an operator to revise his manual from time to time. 119.420(7) requires that amendments be properly incorporated in the manual and all holders of the manual receive such amendments. In order to maintain the integrity of the manual and to cope with amendments made from time to time, the manual should contain a list of effective pages and amendment pages which indicate that they are amendments together with the date and number of the amendment.

4.16 An operator may provide an individual copy of the manual to each person required to comply with the manual, or a copy of those parts of the manual that relate to their duties as required by 119.400. A manual shall be made available by locating it in a central location, for example the operations room. Each manual should be able to be recognised by reference to a discrete copy number.

5 STRUCTURE

- (1) Each operator should ensure that the contents of the Operations Manual are in accordance with the Table 119.385-1 and are relevant to the area and type of operation.
- (2) Each operator must ensure that the detailed structure of the Operations Manual is acceptable to the Authority.
- (3) An operator may structure the Operations Manual as follows:

Part A General/Basic

This part should comprise all non type-related operational policies, instructions and procedures needed for a safe operation.

Part B Aircraft Operating Matters — Type-Related

This part should comprise all type-related instructions and procedures needed for a safe operation. It should take account any differences between types, variants or individual aircraft used by the operator.

Part C Route and Aerodrome Instructions and Information

This part should comprise all instructions and information needed for the area of operation, including any aerodrome information required by 121A.221/ 121B.221.

Part D Training and Checking

- (1) This part should comprise all training instructions for personnel required for a safe operation.
- (2) Where the operator contracts the conduct of some or all of the personnel training and checking required under Parts 121A, 121B or 133 to a Training and Checking Organisation, this part of the Operations Manual should contain the operator's procedures for ensuring that his or her responsibilities under regulations 119.425 119.430 are met.
- (3) Information otherwise required to be incorporated in Part D of the Operations Manual is not required to be so incorporated with respect to training and checking which is not conducted by the operator. However, where it is not so incorporated, the training and checking organisation's training and checking manual references should be included in its place stating where the information will be found. The operator must hold an up to date copy of that manual. The operator is still responsible for the training and checking conducted under contract and that the manual and procedures are pertinent to their operations conducted under the AOC. See subregulation 119.110 (3).
- (4) With respect to training and checking which is conducted by the operator, the content requirements of Part D should be satisfied in full; however, repetition in Part D of material contained in the operator's training and checking manual (where this is separate to Part D) is not required.

Part E Special Procedures Associated with Aerial Work Operations

[only used under Part 119 where an operator conducts both air transport operations and aerial work operations]

6. CONTENTS OF OPERATIONS MANUAL

The content of the Operations Manual must be acceptable to the Authority. The content requiring Authority approval is tabulated in 119.385-2 and should be subject to special attention.

An operator may structure the Operations Manual to contain the following:

A. GENERAL/BASIC

0 ADMINISTRATION AND CONTROL OF OPERATIONS MANUAL

0.1 Introduction

- (a) A statement that the manual complies with all applicable regulations and with the terms and conditions of the applicable Air Operator Certificate.
- (b) A statement that the manual contains operational instructions that are to be complied with by the relevant personnel.
- (c) A list and brief description of the various parts, their contents, applicability and use.
- (d) Explanations and definitions of terms and words needed for the use of the manual.

0.2 System of amendment and revision

- (a) Details of the person(s) responsible for the issuance and insertion of amendments and revisions.
- (b) A record of amendments and revisions with insertion dates and effective dates.
- (c) A statement that handwritten amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety.
- (d) A description of the system for the annotation of pages and their effective dates.
- (e) A unique manual control number for each copy of the manual, and a list of effective pages.
- (f) Annotation of changes (on text pages and, as far as practicable, on charts and diagrams).
- (g) Temporary revisions.
- (h) A description of the distribution system for the manuals, amendments and revisions.

1 ORGANISATION AND RESPONSIBILITIES

1.1 Organisational structure.

A description of the organisational structure including the general company organisation chart and operations department organisation chart. The organisation chart should depict the relationship between the Operations Department and the other Departments of the company. In particular, the subordination and reporting lines of all Divisions, Departments etc, which pertain to the safety of flight operations, should be shown.

1.2 Nominated Key Personnel

The name of each person nominated as being responsible for flight operations, ground operations, the maintenance system, crew training and safety systems as prescribed in the regulations. A description of their function and responsibilities shall be included.

1.3 Responsibilities and duties of operations management personnel.

A description of the duties, responsibilities and authority of operations management personnel pertaining to the safety of flight operations and compliance with the applicable regulations.

1.4 A statement defining the authority, duties and responsibilities of the pilot in command.

1.5 Duties and responsibilities of crew members other than the pilot in command.

2 OPERATIONAL CONTROL AND SUPERVISION

2.1 Supervision of the operation by the operator

A description of the system for supervision of the operation by the operator (CASR 121A/B.195). This shall show how the safety of flight operations and the qualifications of personnel are supervised. In particular, the procedures related to the following items shall be described:

- (a) Licence and qualification validity;
- (b) Competence of ground support personnel and crew members; and
- (c) Control, analysis and storage of records, flight documents, additional information and data.

2.2 System of promulgation of additional operational instructions and information

A description of any system for promulgating information which may be of an operational nature but is supplementary to that in the Operations Manual. The applicability of this information and the responsibilities for its promulgation should be included.

5.5 Safety management system

A description of the main aspects of the safety management system and the responsibilities of personnel to report under the system.

2.4 Operational control

A description of the procedures and responsibilities necessary to exercise operational control with respect to flight safety.

2.5 Regulatory requirements relating to CASA's powers to inspect documents or the work of the operator's crew members

A description of the powers of the Authority.

3 SAFETY MANAGEMENT SYSTEM (PART 119 - SUBPART E)

3.1 The operator's safety management system as required by Subpart 119.E

4 CREW COMPOSITION

4.1 Crew Composition

An explanation of the method for determining crew compositions taking account of the following:

- (a) The type of aircraft being used;
- (b) The area and type of operation being undertaken;
- (c) The phase of the flight;
- (d) The minimum crew requirement and flight duty period planned;

- (e) Experience (total and on type), recency and qualification of the crew members; and
- (f) The designation of the pilot in command and, if necessitated by the duration of the flight, the procedures for the relief of the pilot in command or other members of the flight crew. (See Appendix 1 to 121A.940.)
- (g) The designation of the senior cabin crew member and, if necessitated by the duration of the flight, the procedures for the relief of the senior cabin crew member and any other member of the cabin crew.

4.2 Designation of the pilot in command

The rules applicable to the designation of the pilot in command.

4.3 Flight crew incapacitation

Instructions on the succession of command in the event of flight crew incapacitation.

4.4 Operation on more than one aircraft type

A statement indicating which aircraft are considered as one type for the purpose of:

- (a) Flight crew scheduling; and
- (b) Cabin crew member scheduling.

5 QUALIFICATION REQUIREMENTS

5.1 A description of the required licence, rating(s), qualification, competency, (e.g. for routes and aerodromes), experience, training, checking and recency

For all crew members and ground support personnel to conduct their duties. Consideration shall be given to the aircraft type, kind of operation and composition of the crew.

5.2 Flight crew

- (a) Pilot in command.
- (b) Pilot relieving the pilot in command.
- (c) Co-pilot.
- (d) Pilot under supervision.
- (e) Flight engineer/System panel operator.
- (f) Operation on more than one type or variant.

5.3 Cabin crew members

- (a) Senior cabin crew member.
- (b) Cabin crew member:
 - (i) Required cabin crew member.
 - (ii) Additional cabin crew member and cabin crew member during familiarisation flights.
- (c) Operation on more than one type or variant.

5.4 Training and checking personnel

- (a) For flight crew.
- (b) For cabin crew members.

5.5 Ground support personnel

5.6 Pilot maintenance as approved by the AMP

6 CREW HEALTH PRECAUTIONS

6.1 Crew health precautions

The relevant regulations and guidance to crew members concerning health including:

- (a) Alcohol including alcoholic beverage;
- (b) Narcotics;
- (c) Drugs;
- (d) Sleeping tablets;
- (e) Pharmaceutical preparations;
- (f) Immunisation;
- (g) Deep diving;
- (h) Blood donation;
- (i) Meal precautions prior to and during flight;
- (j) Sleep and rest; and
- (k) Surgical operations.

7 FATIGUE MANAGEMENT SYSTEM

7.1 Duty time limitations and rest requirements

The fatigue management scheme developed by the operator in accordance with Subpart 119.D.

7.2 Review of fatigue management system

Review of fatigue management system where limitations have been exceeded or rest periods reduced.

8 OPERATING PROCEDURES

8.1 Flight preparation instructions

As applicable to the operation:

8.1.1 Minimum flight altitudes

A description of the method of determination and application of minimum altitudes including:

- (a) A procedure to establish the minimum altitudes/flight levels for VFR flights;
and
- (b) A procedure to establish the minimum altitudes/flight levels for IFR flights.

8.1.2 Criteria for determining the useability of aerodromes

8.1.3 Methods for establishing aerodrome operating minima

The method for establishing aerodrome operating minima for IFR flights in accordance with *Parts 121A/B and 133 Subpart E*. Reference should be made to procedures for the determination of the visibility and/or runway visual range and for the applicability of the actual visibility observed by the pilots, the reported visibility and the reported runway visual range.

8.1.4 En-route operating minima for VFR Flights or VFR portions of a flight

8.1.5 Presentation and application of aerodrome and en-route operating minima

8.1.6 Interpretation of meteorological information

Explanatory material on the decoding of MET forecasts and MET reports relevant to the area of operations, including the interpretation of conditional expressions.

8.1.7 Determination of the quantities of fuel, oil and anti-detonant carried

The methods by which the quantities of fuel, oil and anti-detonant or equivalent to be carried are determined and subsequently monitored in flight. This section shall also include instructions on the measurement and distribution of the fluid carried on board. Such instructions shall take account of all circumstances likely to be encountered on the flight, including the possibility of in-flight replanning and of failure of one or more of the aircraft's power plants. The system for maintaining fuel and oil records shall also be described [Note: fuel and oil records are required to be kept in Section 3 of the aircraft's Technical Log (CASR 121A/B.915), and records of fuel checks conducted during flight are required by 121A/B.375 Appendix 1].

8.1.8 Weight and centre of gravity

The general principles of weight and centre of gravity including:

- (a) Definitions;
- (b) Methods, procedures and responsibilities for preparation and acceptance of weight and centre of gravity calculations;
- (c) The policy for using standard and/or actual weights;
- (d) The method for determining the applicable passenger, baggage and cargo weight;
- (e) The applicable passenger and baggage weights for various types of operations and aircraft type;
- (f) General instruction and information necessary for verification of the various types of weight and balance documentation in use;
- (g) Last Minute Changes procedures;
- (h) Specific gravity of fuel, oil and any water methanol; and
- (i) Seating policy/procedures.

8.1.9 ATS flight plan

Procedures and responsibilities for the preparation and submission of the air traffic services flight plan. Factors to be considered include the means of submission for both individual and repetitive flight plans.

8.1.10 Operational flight plan

Procedures and responsibilities for the preparation and acceptance of the operational flight plan. The use of the operational flight plan shall be described including samples of the operational flight plan formats in use.

8.1.11 Operator's flight and technical log

The responsibilities and the use of the operator's Flight and Technical Log shall be described, including samples of the format used.

8.1.12 List of documents, forms and additional information to be carried

8.2 Ground handling instructions

8.2.1 Fuelling procedures

A description of fuelling procedures, including:

- (a) Safety precautions during refuelling and defuelling including when an APU is in operation or when a turbine engine is running and the prop-brakes are on;
- (b) Refuelling and defuelling when passengers are embarking, on board or disembarking, including procedures established in accordance with 91.475 - see also 8.2.2(m); and
- (c) Hot refuelling procedures and precautions in accordance with 121A/B.305, 91.371 and 91.372.
- (d) Precautions to be taken to avoid mixing fuels.

8.2.2 Aircraft, passenger and cargo handling procedures related to safety, including procedures established in accordance with 133.222 and 121A/B.270

A description of the handling procedures to be used when allocating seats and embarking and disembarking passengers and when loading and unloading the aircraft. Further procedures, aimed at achieving safety whilst the aircraft is on the ramp, shall also be given. Handling procedures shall include:

- (a) Children/infants, sick passengers, Persons with Reduced Mobility [91.435, 91.455, 121A/B/133.260] and passengers rejected for carriage;
- (b) Transportation of inadmissible passengers, deportees or persons in custody [121A/B/133.265];
- (c) Permissible size and weight of hand baggage;
- (d) Loading and securing of items in the aircraft;
- (e) Special loads and classification of load compartments;
- (f) Positioning of ground equipment;
- (g) Operation of aircraft doors;
- (h) Safety on the ramp, including fire prevention, blast and suction areas;
- (i) Start-up, ramp departure and arrival procedures;

- (j) Servicing of aircraft;
- (k) Documents and forms for aircraft handling; and
- (l) Procedures during transits with passengers on board when the aircraft is not being refuelled.

8.2.3 Procedures for the refusal of embarkation

Procedures to ensure that persons who appear to be intoxicated or who demonstrate by manner or physical indications that they are under the influence of drugs, are refused embarkation. This does not apply to medical patients under proper care.

8.2.4 De-icing and anti-icing on the ground

A description of the de-icing and anti-icing policy and procedures for aircraft on the ground. These shall include descriptions of the types and effects of icing and other contaminants on aircraft whilst stationary, during ground movements and during take-off. In addition, a description of the fluid types used shall be given including:

- (a) Proprietary or commercial names;
- (b) Characteristics;
- (c) Effects on aircraft performance;
- (d) Hold-over times; and
- (e) Precautions during usage.

8.3 Flight procedures

8.3.1 VFR/IFR policy

A description of the policy for allowing flights to be made under VFR, or of requiring flights to be made under IFR, or of changing from one to the other.

8.3.2 Navigation procedures

A description of all navigation procedures relevant to the type(s) and area(s) of operation. Consideration shall be given to:

- (a) Standard navigational procedures including policy for carrying out independent cross-checks of keyboard entries where these affect the flight path to be followed by the aircraft;
- (b) MNPS and POLAR navigation and navigation in other designated areas;
- (c) RNAV and navigation in RNP airspace;
- (d) In-flight replanning;
- (e) Procedures in the event of system degradation; and
- (f) RVSM.

8.3.3 Altimeter setting procedures

8.3.4 Altitude alerting system procedures

8.3.5 Ground proximity warning system procedures

8.3.6 Policy and procedures for the use of TCAS II/ACAS, including in RVSM airspace if the operator uses such airspace

8.3.7 Policy and procedures for in-flight fuel management

8.3.8 Adverse and potentially hazardous atmospheric conditions

Procedures for operating in, and/or avoiding, adverse and potentially hazardous atmospheric conditions including:

- (a) Thunderstorms;
- (b) Icing conditions;
- (c) Turbulence;
- (d) Windshear;
- (e) Jetstream;
- (f) Volcanic ash clouds;
- (g) Heavy precipitation;
- (h) Sand storms;
- (i) Mountain waves; and
- (j) Significant temperature inversions.
- (k) Reduced visibility operations

8.3.9 Wake turbulence

Wake turbulence separation criteria, taking into account aircraft types, wind conditions and runway location.

8.3.10 Crew members at their stations

The requirements for crew members to occupy their assigned stations or seats during the different phases of flight or whenever deemed necessary in the interest of safety.

8.3.11 Use of safety belts by crew and passengers

The requirements for crew members and passengers to use safety belts and/or harnesses during the different phases of flight or whenever deemed necessary in the interest of safety.

8.3.12 Admission to Flight Deck

The conditions for the admission to the flight deck of persons other than the flight crew. The policy regarding the admission of authorised officers of the Authority shall also be included.

8.3.13 Use of vacant crew seats

The conditions and procedures for the use of vacant crew seats where their use may affect the operational or evacuation requirements.

8.3.14 Incapacitation of crew members

Procedures to be followed in the event of incapacitation of crew members in flight. Examples of the types of incapacitation and the means for recognising them shall be included.

8.3.15 Cabin safety requirements

Procedures covering:

- (a) Cabin preparation for flight, in-flight requirements and preparation for landing including procedures for securing the cabin and galleys;
- (b) Cabin preparation in emergencies;
- (c) Procedures for dealing with unruly passengers;
- (d) Procedures to ensure that passengers are seated where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the aircraft;
- (e) Procedures to be followed during passenger embarkation and disembarkation;
- (f) Procedures when refuelling/defuelling with passengers embarking, on board or disembarking;
- (g) Smoking on board;
- (h) Procedures to be followed when an engine remains operating during a transit stop where the operator and regulations allow this practice.

8.3.16 Carriage of persons with reduced mobility [121A/B/133.260]

8.3.17 Passenger seating [121A/B.280, 133.075]

8.3.18 Passenger briefing procedures

The contents, means and timing of passenger briefing in accordance with 121A/B.285, 91.430.

8.3.19 Procedures for aircraft operated whenever required cosmic or solar radiation detection equipment is carried.

Procedures for the use of cosmic or solar radiation detection equipment and for recording its readings including actions to be taken in the event that limit values specified in the Operations Manual are exceeded. In addition, the procedures, including ATS procedures, to be followed in the event that a decision to descend or re-route is taken. However, limit values should be published in the Operations Manual only after the results of scientific research are available and internationally accepted. [121A.390]

8.4 AWO.

A description of the operational procedures associated with All Weather Operations. (See also 121A/B Subparts D & E).

8.5 ETOPS.

A description of the ETOPS operational procedures. (121A.245 and .246).

8.6 Use of the Minimum Equipment and Configuration Deviation List(s)

8.7 Non revenue flights

Procedures and limitations for:

- (a) Training flights;
- (b) Aircraft test flights;
- (c) Delivery flights;

- (d) Ferry flights;
- (e) Flights under special flight permits
- (f) Demonstration flights; and
- (g) Positioning flights, including the kind of persons who may be carried on such flights.

8.8 Oxygen requirements

8.8.1 An explanation of the conditions under which oxygen must be provided and used

8.8.2 The oxygen requirements specified for:

- (a) Flight crew;
- (b) Cabin crew members; and
- (c) Passengers.

9 DANGEROUS GOODS AND WEAPONS

9.1 Information, instructions and general guidance on the transport of dangerous goods including:

- (a) The operator's policy on the transport of dangerous goods;
- (b) Guidance on the requirements for acceptance, labelling, handling, stowage methods and locations, and segregation of dangerous goods;
- (c) Procedures for responding to emergency situations involving dangerous goods;
- (d) Duties of all personnel involved as per *Part 92*; and
- (e) Instructions on the carriage of the operator's employees.

9.2 The conditions under which weapons, munitions of war and sporting weapons may be carried.

10 SECURITY

10.1 Security instructions and guidance of a non-confidential nature which shall include the authority and responsibilities of ground support personnel and crew members. Policies and procedures for handling and reporting crime on board such as unlawful interference, sabotage, bomb threats, hijacking and air rage shall also be included.

10.2 A description of preventive security measures and training.

Note: Parts of the security instructions and guidance may be kept confidential.

11 HANDLING OF ACCIDENTS AND INCIDENTS

Procedures for the handling, notifying and reporting of accidents and incidents. This section shall include:

- (a) Definitions of accidents and incidents and the relevant responsibilities of all persons involved;
- (b) The descriptions of which company departments, Authorities or other institutions have to be notified by which means and in which sequence in case of an accident;

- (c) Special notification requirements in the event of an accident or incident when dangerous goods are being carried;
- (d) A description of the requirements to report specific incidents and accidents;
- (e) The forms used for reporting and the procedure for submitting them to the Authority/ATSB shall also be included; and
- (f) If the operator develops additional safety related reporting procedures for its own internal use, a description of the applicability and related forms to be used.

Note: These procedures shall accord with the requirements of the ANA

12 RULES OF THE AIR

Rules of the Air including:

- (a) Visual and instrument flight rules;
- (b) Territorial application of the Rules of the Air;
- (c) Communication procedures including COM-failure procedures;
- (d) Information and instructions relating to the interception of civil aircraft;
- (e) The circumstances in which a radio listening watch is to be maintained;
- (f) Signals;
- (g) Time system used in operation;
- (h) ATC clearances, adherence to flight plan and position reports;
- (i) Visual signals used to warn an unauthorised aircraft flying in or about to enter a restricted, prohibited or danger area;
- (j) Procedures for pilots observing an accident or receiving a distress transmission;
- (k) The ground/air visual codes for use by survivors, description and use of signal aids; and
- (l) Distress and urgency signals.

B. AIRCRAFT OPERATING MATTERS – TYPE-RELATED

Taking account of the differences between types, and variants of types, under the following headings:

0 GENERAL INFORMATION AND UNITS OF MEASUREMENT

- 0.1 **General Information** (e.g. aircraft dimensions), **including** a description of the **units of measurement** used for the operation of the aircraft type concerned and conversion tables.

1 LIMITATIONS

- 1.1 **A description of the certified limitations and the applicable operational limitations** including:

- (a) Certification status (eg. JAR/FAR–23, JAR/FAR–25, ICAO Annex 16 etc);
- (b) Maximum approved passenger seat configuration for each aircraft type including a pictorial presentation;

- (c) Types of operation that are approved (e.g. VFR/IFR, CAT II/III, RNP Type, flights in known icing conditions etc.);
- (d) Crew composition;
- (e) Weight and centre of gravity;
- (f) Speed limitations;
- (g) Flight envelope(s);
- (h) Wind limits including operations on contaminated runways;
- (i) Performance limitations for applicable configurations;
- (j) Runway slope;
- (k) Limitations on wet or contaminated runways;
- (l) Airframe contamination; and
- (m) System limitations.

2 NORMAL PROCEDURES

2.1 The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties shall be included:

- (a) Pre-flight;
- (b) Pre-departure;
- (c) Altimeter setting and checking;
- (d) Taxi, take-off and climb;
- (e) Noise abatement;
- (f) Cruise and descent;
- (g) Approach, landing preparation and briefing;
- (h) VFR approach;
- (i) Instrument approach;
- (j) Visual approach and circling;
- (k) Missed approach;
- (l) Normal Landing;
- (m) Post Landing; and
- (n) Operation on wet and contaminated runways.

3 ABNORMAL AND EMERGENCY PROCEDURES

3.1 The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary co-ordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties shall be included:

- (a) Crew incapacitation;
- (b) Fire and smoke drills;
- (c) Unpressurised and partially pressurised flight;
- (d) Exceeding structural limits such as overweight landing;

- (e) Exceeding cosmic radiation limits;
- (f) Lightning strikes;
- (g) Distress communications and alerting ATC to emergencies;
- (h) Engine failure;
- (i) System failures;
- (j) Guidance for diversion in case of serious technical failure;
- (k) Ground proximity warning;
- (l) TCAS advisories;
- (m) Windshear; and
- (n) Emergency landing/ditching.

4 PERFORMANCE

4.1 Performance data in readily useable form

Performance material which provides the necessary data for compliance with the performance requirements prescribed in CASR 121A/B/133 Subparts F, G, H and I, as appropriate, should be included to allow the determination of:

- (a) Take-off climb limits – weight, altitude and temperature (including reduced power when used);
- (b) Take-off field length - dry, wet or contaminated;
- (c) Net flight path data for obstacle clearance calculation or, where applicable, take-off flight path;
- (d) The gradient losses for banked climbouts;
- (e) En-route climb limits;
- (f) Approach climb limits;
- (g) Landing climb limits;
- (h) Landing field length (dry, wet, contaminated) including the effects of an in-flight failure of a system or device, if it affects the landing distance;
- (i) Brake energy limits; and
- (j) Speeds applicable for the various flight stages (also considering wet or contaminated runways).

4.1.1. Supplementary data covering flights in icing conditions

Any certificated performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative, shall be included.

4.1.2. Other data acceptable to CASA

If performance Data, as required for the appropriate performance class, is not available in the approved AFM, then other data acceptable to the Authority shall be included. Alternatively, the Operations Manual may contain cross-reference to the approved Data contained in the AFM where such Data is not likely to be used often or in an emergency.

4.1.3 Precautions, relating to performance calculations made by FMC or similar equipment on board the aircraft are used by the flight crew.

4.2 Additional Performance Data

Additional performance data where applicable including:

- (a) All engine climb gradients;
- (b) Drift-down data;
- (c) Effect of de-icing/anti-icing fluids;
- (d) Flight with landing gear down;
- (e) For aeroplanes with 3 or more engines, one engine inoperative ferry flights; and
- (f) Flights conducted under the provisions of the CDL.

5 FLIGHT PLANNING

5.1 Data and instructions necessary for pre-flight and in-flight planning including factors such as speed schedules and power settings. Where applicable, procedures for engine(s)-out operations, ETOPS (particularly the one-engine-inoperative cruise speed and maximum distance to an adequate aerodrome determined in accordance with 121A.245) and flights to isolated aerodromes should be included.

5.2 The method for calculating fuel needed for the various stages of flight, in accordance with 121A/B/133.255.

6 WEIGHT AND BALANCE

6.1 Instructions and data for the calculation of the weight and balance including:

- (a) Calculation system (e.g. Index system);
- (b) Information and instructions for completion of weight and balance documentation, including manual and computer generated types;
- (c) Limiting weights and centre of gravity for the types, variants or individual aircraft used by the operator; and
- (d) Dry operating weight and corresponding centre of gravity or index.

7 LOADING

7.1 Procedures and provisions for loading and securing the load in the aircraft

7.2 Load rejection policy, providing policy and procedures for the pilot in command to offload passengers or cargo when any performance limit would otherwise be exceeded.

8 CONFIGURATION DEVIATION LIST

8.1 The Configuration Deviation List (CDL), if provided by the manufacturer, taking account of the aircraft types and variants operated including procedures to be followed when an aircraft is being despatched under the terms of its CDL.

9 MINIMUM EQUIPMENT LIST

9.1 The Minimum Equipment List (MEL) taking account of the aircraft types and variants operated and the type(s)/area(s) of operation. The MEL shall include the navigational equipment and take into account the required navigation performance

for the route and area of operation. Operators should give consideration to using the ATA number system when allocating chapters and numbers for aircraft systems.

10 SURVIVAL AND EMERGENCY EQUIPMENT INCLUDING OXYGEN

10.1 The survival equipment, including serviceability and accessibility

A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated check list(s) shall also be included.

10.2 Oxygen requirements and related matters

The procedure for determining the amount of oxygen required and the quantity that is available, and the information required under [91.635]. The flight profile, number of occupants and possible cabin decompression shall be considered. The information provided shall be in a form in which it can be used without difficulty.

11 EMERGENCY EVACUATION PROCEDURES

11.1 Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment

11.2 Emergency evacuation procedures

A description of the duties of all members of the crew for the rapid evacuation of an aircraft and the handling of the passengers in the event of a forced landing, ditching or other emergency.

12 AIRCRAFT SYSTEMS

12.1 A description of the aircraft systems, related controls and indications and operating instructions

Operators should give consideration to using the ATA number system when allocating chapters and numbers for aircraft systems.

C. ROUTE AND AERODROME INSTRUCTIONS AND INFORMATION

1.1 Instructions and information relating to communications and navigation including minimum flight levels and altitudes for each route to be flown, including:

- (a) Minimum flight level/altitude;
- (b) Operating minima for departure, destination and alternate aerodromes;
- (c) Communication facilities and navigation aids;
- (d) Runway data and aerodrome facilities;
- (e) Approach, missed approach and departure procedures including noise abatement procedures;
- (f) COM-failure procedures;
- (g) Search and rescue facilities in the area over which the aircraft is to be flown;

- (h) A description of the aeronautical charts that shall be carried on board in relation to the type of flight and the route to be flown, including the method to check their validity;
- (i) Availability of aeronautical information;
- (j) En-route COM/NAV procedures;
- (k) Aerodrome categorisation for flight crew competence qualification (121A/B.975);
- (l) Special aerodrome limitations (performance limitations and operating procedures etc.)
- (m) Any additional information required under 121A/B.221.

D. TRAINING AND CHECKING

[Note: see entries at Part D, at the beginning of this Advisory Circular]

1 SYLLABUSES AND PROGRAMS

Training syllabi and checking programs for all ground support personnel and crew members assigned to operational duties in connection with the preparation and/or conduct of a flight.

2 TRAINING SYLLABUSES AND CHECKING PROGRAMS:

2.1 For flight crew

All relevant items prescribed in Subparts E and N of Parts 121A and 121B or Subparts N of Part 133, and training required for the purposes of regulation 121A.246 (ETOPS)

2.2 For cabin crew

All relevant items prescribed in 121A/B/133 Subpart O

2.3 For ground support personnel and crew members assigned to operational duties in connection with the preparation or conduct of a flight:

- (a) All relevant items prescribed in *Part 92* relating to the transport of dangerous goods by air; and
- (b) All relevant items prescribed in 121A, 121B or 133 that are relevant to their duties.

3 PROCEDURES

3.1 Procedures for training and checking

3.2 Procedures to be applied in the event that personnel do not achieve or maintain the required standards

3.3 Procedures to ensure that abnormal or emergency situations requiring the application of part or all of abnormal or emergency procedures and simulation of IMC by artificial means, are not simulated during commercial air transportation flights.

4 DOCUMENT STORAGE

4.1 Description of documentation to be stored and storage periods

5 TRAINING AND CHECKING MANUAL

5.1 Training and checking manual

Those matters listed at 119.445(1) and not mentioned in paragraphs 1 - 4 above if the operator has elected, under 119.440 Note 3, to include them in the Operations Manual.

6 OTHER MATTERS

6.1 Those matters specified in regulation 119.445 and not mentioned in items 1 to 4 of Part D of this table if the operator elects to incorporate the training and checking manual into the operations manual

E. SPECIAL PROCEDURES ASSOCIATED WITH AERIAL WORK OPERATIONS

1.1 Procedures specific to the safe conduct of any aerial work operations authorised by the operator's AOC

The content of this part of the Operations Manual should be compatible with CASR Part 133, 136, 137 or 138, as applicable.

7 ACTIVITIES FOR WHICH CASA APPROVAL IS REQUIRED

Item	Activities that require CASA approval	Manual reference, Part and section	CAR 1998 reference
1	Operational control	A 2.4	121.195, 133.195
2	Procedures for flight crew to operate on more than 1 type or variant	A 5.2	121.980, 133.980
3	Method of determination of minimum flight altitudes	A 8.1.1	121.250, 133.250 133.430
4	(a) Standard weight values other than those specified in Subpart 121.J	A 8.1.8	121.620 (16)
	(b) Omission of data from documentation		Appendix 1, 121.625 (2), 133.625 (as required by 91.525)
5	Operator's flight and technical log	A 8.1.11	121.915, 133.915
6	MNPS	A 8.3.2	121.243
7	RNAV (RNP)	A 8.3.2	121.243
8	RVSM	A 8.3.2	121.241, 91.485
9	AWO Cat II/III Operations	A 8.4	121.440

7 ACTIVITIES FOR WHICH CASA APPROVAL IS REQUIRED

Item	Activities that require CASA approval	Manual reference, Part and section	CAR 1998 reference
10	ETOPS approval	A 8.5	121.246
11	Use of MEL	A 8.6	121.030(2), 133.030.A
12	Maximum approved passenger seat configuration	B 1.1	121.002, 133.002
13	Alternate method for verifying approach weight	B 2.1	121.510(3)
14	Steep approach procedures and short landing operations - Performance Class B	B 4.1	121.515(2) & (3) & 121B.550
15	Fuel Policy	B5.2	121.255 & 133.255
16	Use of on-board weight and balance systems	B 6.1	Appendix 1 to 121A.625 (9)
17	MEL	B 9.1	121.030 (1), 133.030.A
18	Low visibility training syllabus, flight crew	D 2.1	121.450
19	Initial CRM training, flight crew	D 2.1	133.943.D, 121.943
20	Conversion training and checking	D 2.1	133.945.A.3, 121.945
21	Pilot qualification to operate in either pilot's seat	D 2.1	133.968.A.2, 121.968
22	Recurrent training program flight crew	D 2.1	121.965 (1) (b)
23	Advanced qualification program	D 2.1	121.978
24	Initial training, crew members including CRM training	D 2.1, D 2.2	121.1005, 133.1010
25	Conversion training, cabin crew members	D 2.2	121.1010
26	Recurrent training program, crew members	D 2.1, D 2.2	133.1015.B, 121.1015
27	Refresher training program, cabin crew members	D 2.2	121.1020
28	Ground support personnel and crew members — dangerous goods	D 2.3	92.110

7 ACTIVITIES FOR WHICH CASA APPROVAL IS REQUIRED

Item	Activities that require CASA approval	Manual reference, Part and section	CAR 1998 reference
29	Training and checking manual	D 5.1	119.085

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Annex C

CASA's Policy Framework on the Future Classifications of Civil Air Operations in Australia

CASA Policy framework

Word 2000 users can click on the underlined text below to reach the document via their web browser (if connected to the World Wide Web).

<http://www.casa.gov.au/avreg/newrules/misc/classops.htm>

Synopsis

Word 2000 users can click on the underlined text below to reach the document via their web browser (if connected to the World Wide Web).

<http://www.casa.gov.au/avreg/newrules/misc/classopsynop.htm>

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Annex D

Summary of Responses to Discussion Paper - DP 0003OS – Proposed Regulations Relating to Air Operator Certification

Proposed Civil Aviation Safety Regulation (CASR) Part 119

Introduction

In June 1996, CASA initiated the Regulatory Framework Program which has as its objective, the complete review and revision of Australia's aviation safety regulations. The new regulations are to be known as the Civil Aviation Safety Regulations (CASRs). Over time, the CASRs will replace all existing Civil Aviation Regulations (CARs).

As part of this process, in May 2000 CASA published Discussion Paper DP 0003OS, which provided lay drafts of a proposed CASR Part 119 Air Operator Certification – Commercial Air Transport. The period for public comment on the proposals contained in DP 0003OS closed on 11 August 2000. However, comments were received until the end of August 2000, and all have been considered against the draft rules.

CASA received 48 responses to DP 0003OS. The comments received have enabled some deficiencies in the proposals to be identified and corrected.

Some of the respondents made sweeping condemnation of the proposal to remove the distinction between RPT and Charter. Some correspondents made a strong call for further simplification and others provided valuable constructive criticism. Overall, the support inherent in comments received indicates that the proposed draft regulations would be acceptable to industry, with the further improvements.

This Summary of Responses (SOR) presents CASA's evaluation and the consequent disposition of the regulations, for each of the comments, or grouped comments where more than one respondent made similar comment.

In reviewing the comments received, the evaluations have made within the policy that Australian aviation regulations should comply with the standards of the International Civil Aviation Organisation, and harmonise with the standards, practices and procedures adopted by regulatory authorities of leading aviation countries.

As a result of a number of the comments received, the proposed regulatory material has been amended to include the changes arising from those public responses which have been accepted by CASA. These are presented a final rules in the Annexes to this document.

The making and issue of the final rules as presented herein will be subject to acceptance by the Government, parliamentary approval, and the making of the regulations by the Governor-General.



Analysis of Comments Received

1. Background

1.1 CASA published DP 0003OS in May 2000 for aviation industry and public comment. The DP presented the outcome of the Project Team and CASA work on the preparation of the regulatory provisions relating to obtaining and retaining an Air Operator Certificate (AOC) to conduct Air Transport operations. CASR Part 119 will control the issue of AOCs for aeroplanes and rotorcraft as required by CASR Parts 121A, 121B and the applicable Air Transport portion of 133.

1.2 The consideration and incorporation of responses to the DP is seen by CASA as crucial to the development of this Notice of Proposed Rule Making (NPRM).

1.3 All comments received were evaluated and most have resulted in changes to the NPRM either directly or from further consideration being given to identified problems within the current legislation. Many comments focused on a number of common concerns.

1.4 There were eight respondents who found the proposals acceptable without change and eight who found the proposals not acceptable under any circumstances. The remainder of responses being either acceptable with proposed improvements or not acceptable but would be with proposed improvements.

1.5 Generally respondents were somewhat confused by the structure and terminologies used in the DP as well as the relationship with the other related CASR Parts. The NPRM has gone to some length to improve on the structure of the document and to align terminology with the Civil Aviation Act.

1.6 No penalty units are provided, as non-compliances with this Part result in either the AOC not being issued or the AOC being suspended, cancelled or varied until the appropriate action is taken.

2. Purpose

2.1 The purpose of this SOR is to provide a consolidation of comments received as part of the consultative process, as well as to provide CASA's response to those comments. Due to the number and complexity of the responses received, it would not be practical to comment on each remark. However, a detailed analysis was conducted for each response. This SOR aims to highlight the major concerns raised by respondents and to give CASA's response to them.

3. Analysis

3.1 CASA received 48 responses containing 131 pages of submissions, many of which addressed a few selected issues, while others ranged over the whole DP with substantive and comprehensive submissions. A list of those respondents who have consented to their names being published is attached at the end of this document.

The disposition of responses is as follows:

Acceptable without change	16.6%
Acceptable but would be improved if (given) changes were made	41.7%
Not acceptable but would be acceptable if (given) changes were made	25.0%
Not acceptable under any circumstances	16.6%

3.2 Some respondents identified problems and inadequacies outside the scope of DP 0003OS. As there are several CASR Parts currently under development, those contributions have been passed to the relevant rules development project managers.

3.3 Many responses provided improved wording to enhance the intent of the Regulations, and where possible these have been incorporated. As many of the responses were of this nature, it would be exhaustive to comment in the SOR to each of them. As the respondents review the NPRM they should be able to identify their contribution to the amended text.



Industry Comments and Issues Related to the Proposed Legislation

General Comments

Some comments of a general nature were received, most notable being the desire for the RPT/Charter split to be retained.

CASA Response

CASA has a Ministerial charter letter stating that the distinction between RPT and Charter operations should be minimised. DPs for Parts 121A and 121B have also been written with this charter letter applied.

Disposition

No changes are proposed to these regulations arising from the above comments.

General Comments

Generally respondents were somewhat confused by the structure and terminologies used in the DP as well as the relationship of Part 119 to the other related Parts.

CASA Response

The NPRM has improved on the structure of the document and to align terminology with the Civil Aviation Act. Titles of Key Personnel, for example, now apply to all applicants. Also, the other related Parts are now released as DPs therefore providing all the necessary information for the AOC applicant.

Disposition

The Part has been reordered with commonality of terminology applied to all applicants.

General Comments

Not enough consultation is being conducted.

CASA Response

The DP is the start of the consultation. Consultation still to come includes: SCC Operational Standards Subcommittee consultation, Industry briefings and when legally drafted, further consultation at the NPRM stage.

Disposition

No changes are proposed to these regulations arising from the above comments.

General Comments

No examples of safety benefits were given and it is flawed to see benefits coming from auditing an operators processes and procedures.

CASA Response

The DP's purpose is to propose change and ask for comment. Having Safety Systems within an operator's organisation and a responsible person to manage them coupled with the Regulator auditing the processes has shown internationally to have safety benefits.

Disposition

Safety System requirements have been further reviewed and tailored for the size and scope of the operation. A cost/benefit analysis is included with the NPRM.

General Comments

The DP is biased towards systems approach and international obligations and not towards clear, concise, unambiguous and cost effective.

CASA Response

DP's are generally more verbose than the final legislation due to explanatory components. The Systems approach is an internationally recognised method of improving safety standards.

Disposition

Comments are requested on the content and benefits included in the NPRM.

Comment 1 – Summary of differences

(Paragraph 2.9.1) One respondent states the requirement for training equipment to be the same as the equipment being trained on is too restrictive. Another respondent commends CASA for applying this requirement and adds it is long overdue.

CASA Response

The DP uses the wording "same types of equipment". CASA believes this is the appropriate wording allowing interpretation by CASA's Aviation Safety Compliance Division relevant to the circumstances.

Disposition

The NPRM uses the wording "same types of safety equipment".



Comment 2 – Summary of differences

(Paragraph 2.10) Several respondents stated that the Operations Manual requirements are too excessive.

CASA Response

CASA believes that the content, applicable to the applicant's organisation, is appropriate. However the structure is too prescriptive and disadvantages the established operator with an already extensive and capable set of manuals.

Disposition

The Acceptable Means of Compliance (AMC) requirements in the DP have been incorporated into a table and an Advisory Circular (AC) containing both the structure and contents is to be issued.

Comment 3 – Summary of differences

(Paragraph 2.18) Several respondents stated the requirement to have a set of weighing scales at each airport or to carry a set on the aircraft was too prohibitive and unworkable.

CASA Response

Agreed.

Disposition

The requirement for weighing scales has been removed from Part 119.

Comment 4 – Summary of differences

(Paragraphs 2.25 & 2.27) One respondent stated that the requirements for Chief Pilot and Head of Training and Checking were too subjective and subject to misinterpretation.

CASA Response

The requirements for Key Personnel have generally been tightened to minimise variation within the CASA approval processes. However, depending on the size and scope of the operation it would disadvantage the small operator if reduced requirements were not catered for when determining suitability.

Disposition

General wording and acceptance criteria have been improved whilst still providing for variations for small operators.

Comment 5 – Applicability (DP reference 119.01)

Several respondents requested that small Aero Club and Flying School sightseeing operations be removed from Part 119 and placed in the Aerial Work classification.

CASA Response

The CASA Board has established the classification of Operations. The classification of Aerial Work operations was again reviewed following the release of the DP for Part 137.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 6 – Definitions (DP reference 119.02)

There were some general comments on the definitions in the DP. Several comments were directed at the definition of “crew member”, although few specific deficiencies were identified.

CASA Response

The definition of “crew member” has presented many discussions with a resulting review identifying some deficiencies. This definition is contained in the NPRM for Part 91 and will be incorporated into Part 1 at Rule making. All other definitions were reviewed and revised wording included in the NPRM.

Disposition

Revised definitions, where applicable, have been included in the NPRM.

Comment 7 – Content of Air Operator’s Certificate (DP reference 119.04)

The short term and short notice use of aircraft by an operator will be blocked by this requirement. Charter operators will not be able to identify their areas of operation or routes.

CASA Response

CASA agrees. In the form proposed in the DP, the delay seeking approvals would be prohibitive. Depending on the scope of operations, an area of operation may be a State or all Australian territory.

Disposition

The international practice of Operations Specifications has been included. Thus allowing short-term notice changes to the Certificate details.



Comment 8 – Content of Air Operator’s Certificate (DP reference 119.04)

The alternative of having aircraft details in the Operations Manual is flawed and should not be allowed.

CASA Response

CASA agrees. With the introduction of Operations Specifications the alternative proposed in 119.04(2) is no longer necessary.

Disposition

The option proposed in DP 119.04(2) has been removed from the NPRM.

Comment 9 – Safety Management, Accident Prevention and Flight Safety System (DP reference 119.05)

Safety Management requirements are too onerous for small operators.

CASA Response

CASA agrees. It is proposed that 121B Operators with less than four aircraft and operating solely within Australia will not be required to have a safety management system. The benefits of having a safety management system reduce, while costs are difficult to justify, for small operators with small staff numbers.

Disposition

The NPRM proposes that Safety System requirements will not be required for this type of operation.

Comment 10 – Safety Management, Accident Prevention and Flight Safety System (DP reference 119.05)

The Management representative identified in (1)(c) needs to be defined along with the approval process.

CASA Response

CASA agrees. The Safety Manager is now assigned a Key Personnel position as defined in Section 28(3)(e) of the Act. Safety Manager responsibilities and acceptance requirements have been added to the NPRM.

Disposition

The regulations relating to the responsibilities and acceptance of the Safety Manager has been added.

Comment 11 – Safety Management, Accident Prevention and
Flight Safety System (DP reference 119.05)

Why is Human Factors included under the heading of infrastructure?

CASA Response

CASA agrees this is incorrectly located.

Disposition

Safety Management Systems has been redrafted and the human factors material has been included in Parts 121A, 121B and 133.

Comment 12 – Safety Management, Accident Prevention and
Flight Safety System (DP reference 119.05)

119.05(7) allows two Management representatives to be appointed. Only one should be allowed to be responsible.

CASA Response

CASA agrees. With a review of this provision it has been decided to delete this variation.

Disposition

The allowance for two persons to be jointly responsible for safety management has been removed from the NPRM as it introduces a complexity that doesn't add to the safety system.

Comment 13 – Safety Management, Accident Prevention and
Flight Safety System (DP reference 119.05)

Compliance monitoring should be included in the safety system.

CASA Response

With the review of the Key Personnel the NPRM now identifies the CEO as ultimately responsible for compliance with the Head of Flying Operations responsible for day-to-day compliance monitoring.

Disposition

Key Personnel responsibilities have been redefined with compliance monitoring being included in the Head of Flying Operations responsibilities. Auditing functions, including non-compliance reporting, are included in the safety management system.



Comment 14 – Training and checking organisation (DP reference 119.06)

Training and checking requirements proposed will drive small operators out of business. Another comment commended training and checking being applied across all AOCs.

CASA Response

Training and checking is a fundamental requirement to improve safety for all levels of Air Transport operations with Part 142 providing this service to small operators who cannot afford the recourses for internal training. ICAO requires training and the Ministerial charter letter identifies the need for the minimisation of differences between RPT and charter.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 15 – Operations Manual to be provided (DP reference 119.09)

The Operations Manual requirements are too onerous.

CASA Response

CASA agrees. See Comment 2 of this summary.

Disposition

The Acceptable Means of Compliance (AMC) requirements in the DP have been placed into a table within the Part and AC 119-385(0) proposed, which contains both the structure and contents.

Comment 16 – Maintenance Control Manual to be provided (DP reference 119.10)

The Maintenance Control Manual can be overly costly to establish, as is a requirement to have multiple maintenance controllers for multiple maintenance providers. Also comments on the ability for pilots to conduct maintenance in remote areas seemingly being removed.

CASA Response

It is proposed that Air Transport operators under Parts 121A, 121B and 133 will be required to have an Maintenance Control Manual (MCM) whose contents will be described in a table in the regulation. The regulation will ensure a standardised approach to the MCM contents.

A single operator need only have the one maintenance controller but the larger and more complex operations may elect to utilise several people to control the maintenance. In all cases the person identified as the Head of Aircraft Maintenance Control in the organisation will hold overall responsibility for the control. The details for the conduct of operations after the organisation is certificated are contained in Part 121A, 121B, or 133 as appropriate.

Part 43 will list what preventative maintenance a pilot can do. The operator must ensure that any person performing maintenance on aircraft authorised by the operators AOC is properly trained. A pilot will not require specific authorisation from CASA to carry out pilot maintenance, as Part 43 will provide for this.

Disposition

The NPRM will reflect the roles of the person responsible for the control of maintenance and the contents of the Maintenance Control Manual.

Comment 17 – Flight and duty time limitation schemes (DP reference 119.12A)

Cabin crew should be included in flight and duty time limits.

CASA Response

CASA agrees. A separate NPRM is being developed to propose the introduction of a fatigue management system that will include cabin crew.

Disposition

The NPRM will reserve this requirement until this proposal is reviewed.

Comment 18 – Carriage of officers of the Authority (DP reference 119.13)

Only FOI's should be permitted to travel on the aircraft.

CASA Response

The change in title from FOI to authorised officer was substituted for current requirements to allow CASA to change the job title at a future time. There is no proposal to change any existing travel permissions. The term authorised officer is defined in the Act.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 19 – Carriage of officers of the Authority (DP reference 119.13)

The circumstances identified in 119.13(2)(c) & (3) should be more clearly stated when these requirements are invoked.

CASA Response

CASA agrees. Further review of the wording and redrafting appears in the NPRM.

Disposition

Further clarification and additional wording added.

Comment 20 – Laws, regulations and procedures – operator’s responsibilities (DP reference 119.15A)

Employees must be adequately trained to comply with the laws of each country they are required to operate to.

CASA Response

CASA agrees. Additional wording added.

Disposition

Revised wording including ‘adequately trained’ included.

Comment 21 – Laws, regulations and procedures – operator’s responsibilities (DP reference 119.15A)

Operations in foreign States should be to the higher standard of that States requirements or the Australian requirements.

CASA Response

Part 91.090 applies and is required by Part 119 operators.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 22 – Common language (DP reference 119.15B)

Ground support and crew members must also be able to read in the language that the Operations Manual and instructions are written in.

CASA Response

CASA agrees. Revised wording added.

Disposition

Revised wording includes the requirement to be able to read the instructions.

Comment 23 – Organisation (DP reference 119.25)

Does a Chief Pilot 119.25(2)(b) have to be employed at all times?

CASA Response

Full time employment for Key Persons is not always mandatory depending on the size and type of operation. Table A refers.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 24 – Organisation (DP reference 119.25)

Why not use part time check pilots?

CASA Response

CASA agrees. Part 121B operations will allow part time check pilots.

Disposition

Check pilot requirements identified in the DP have largely been removed from Part 119 and placed in the other relevant Parts.

Comment 25 – Weighing scales (DP reference 119.26 & 119.35)

Several respondents raised concerns with the use and transport of weighing scales.

CASA Response

During the review of these requirements in light of the comments received it was decided that Part 119 was not the place for weighing scales.

Disposition

Weighing scales requirements have been removed from Part 119.

Comment 26 – Documents: Flight crew members, ground support personnel (DP reference 119.28)

If the pilot doesn't wish to provide a list of endorsements how does the operator meet these requirements?

CASA Response

For information pertinent to the use of the pilot within the scope of the operation, the operator must have this information.

Disposition

No changes are proposed to these regulations arising from the above comments.



Comment 27 – Inaugural flights (DP reference 119.32)
Clarification of intent required.

CASA Response

CASA reserves the right to travel on inaugural flights for operations of 30 passenger seats or freight operations with a payload capacity above 3410kg.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 28 – Organisation (DP reference 119.34)
Who is looking after the non-checking roles of the Chief Pilot? Confusion over Chief Pilot and Head of Training and Checking.

CASA Response

Several respondents have identified a need for further clarification of various key person roles. Key Personnel titles and responsibilities have been reviewed.

Disposition

Key Personnel titles aligned with the Act. A greater level of description of responsibilities included.

Comment 29 – Operational documents (DP reference 119.36)
Retention of a current copy of the Flight Manual should be included.

CASA Response

CASA agrees. Aircraft Flight Manual and Operations Manual included in NPRM.

Disposition

Additional manuals included.

Comment 30 – Other documents to be kept (DP reference 119.38)
How long do the records have to be kept?

CASA Response

The length of retention is detailed in the other related parts.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 31 – Chief pilot’s functions and duties (DP reference 119.40)

No mention of Chief Pilot delegation ability. The Chief Pilot should have sole responsibility that cannot be shared.

CASA Response

All Key Personnel positions may delegate tasks but not the responsibility.

Disposition

Improved wording added to provide clarity of intent.

Comment 32 – Chief pilot’s functions and duties (DP reference 119.40)

How does the Chief Pilot ensure compliance. The Chief pilot’s responsibilities, authority and role should be better defined.

CASA Response

The new provisions of the NPRM assign ultimate responsibility to the CEO with the Head of Flying Operations ensuring compliance with a feedback procedure to the CEO.

Disposition

Key Personnel aligned with the Act with responsibilities more clearly defined.

Comment 33 – Approval for appointment as Chief Pilot (DP reference 119.43)

Further instructions are required to avoid inequities in the approval process. What is meant by a satisfactory standard?

CASA Response

CASA agrees. The AOC Manual (AOCM) will need to be revised and improved to minimise these problems with certification. Beyond the scope of the proposed Regulation.

Disposition

No changes are proposed to these regulations arising from the above comments.



Comment 34 – Approval for appointment as Chief Pilot (DP reference 119.43)

Clarification of requirements, for Chief Pilot’s responsibilities, where fixed wing and rotary wing operations are conducted.

CASA Response

CASA agrees. The NPRM now proposes minimum time on both types is now required.

Disposition

Minimum flight time on both fixed and rotary wing now required for operations using both types.

Comment 35 – Approval for appointment as Chief Pilot (DP reference 119.43)

The Chief pilot should be allowed to oversee 2 or 3 organisations.

CASA Response

Depending on the size and scope of the operation the Head of Flying Operations (Chief Pilot) will be permitted to be a key person in more than one operation.

Disposition

Regulations allow for the Head of Flying Operations to perform these functions in more than one operation with CASA approval.

Comment 36 – Chief Pilot appointment requirements (DP reference Table A)

Check and Training pilots should have minimum requirements displayed in a similar way to Table A.

CASA Response

Part 61 will specify minimum requirements for a person to hold an instructor rating or examiner rating. Part 61 is being developed.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 37 – Chief Pilot appointment requirements (DP reference Table A)

“Relevant kind of aircraft” needs definition.

CASA Response

The term has been changed to “Aircraft relevant to operator’s fleet type” and is linked to the first column.

Disposition

Column headings changed.

Comment 38 – Chief Pilot appointment requirements (DP reference Table A)

The stated total flight time on the relevant type of aircraft is inadequate.

CASA Response

The title of column 3 has been redefined which changes the intent to - flight time on the operator’s fleet type. CASA believes the hour requirements are adequate. This does not limit the best possible candidate from applying.

Disposition

Some changes proposed in Table A for the NPRM.

Comment 39 – Chief Pilot appointment requirements (DP reference Table A)

Recommend a more comprehensive break of aircraft types.

CASA Response

CASA disagrees. There are too many divisions proposed, making it too hard for an applicant to meet all these divisions. Many suitable applicants would be eliminated.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 40 – Approval for appointment to act as Chief Pilot (DP reference 119.44)

A deputy position for key personnel should be allowed due to unplanned absences.

CASA Response

CASA agrees. A deputy may be appointed, however only the Key Person shall appear on the Operations Specifications and be responsible.



Disposition

Further wording added to the NPRM to clarify the responsibility and appointment of deputies.

Comment 41 – Approval for appointment to act as Chief Pilot (DP reference 119.44)

A defined period of absence should be included before a need for a deputy to take over.

CASA Response

CASA agrees.

Disposition

Temporary appointments are provided for in the NPRM.

Comment 42 – Approval of appointment of head of training and checking (DP reference 119.50)

Requirements are too subjective.

CASA Response

A new Table 119.155 in the NPRM provides more minimum requirement detail similar to the DP Table A.

Disposition

Table 119.155 established to provide clarity.

Comment 43 – Approval of training and checking manuals (DP reference 119.53)

What does “command responsibility” mean in the context in 119.53(2)(e)?

CASA Response

The wording in the NPRM has been altered to improve clarity of intent.

Disposition

Revised wording included in NPRM.

Comment 44 – Maintenance scheduler’s functions and duties (DP reference 119.57)

There does not seem to be an opportunity for them to be the same person.

CASA Response

Part 119 will require an AOC holder to appoint a person responsible as the Head of Aircraft Maintenance Control (HAMC) – called whatever the operator wants to call them. That person is responsible for the airworthiness control of aircraft authorised by the operators AOC.

Part 121A, 121B and 133 will require an operator to appoint a Maintenance Controller – again called whatever the operator wants to call them. The current intention is not to differentiate between controller and scheduler because of the confusion that may generate. To ensure flexibility and to recognise small operators, there will be no requirement to appoint more than one person in this role. In fact, the HAMC can fulfil all functions for the operator.

Disposition

The proposed regulations do not require separate people, and no changes are proposed to these regulations arising from the above comments. The requirements relating to the structure of an organisation will remain entirely flexible in Parts 121A, 121B, and 133.

Comment 45 – Aircraft maintenance programs (DP reference Table B)

The requirements do not reflect the appropriate qualifications and experience.

CASA response

The operator is responsible for nominating and appointing the person responsible for maintenance control and must advise CASA of the person's appointment. The term maintenance scheduler will be removed in favour of one term to remove confusion.

The appointed person must hold the qualifications and experience as prescribed in the relevant regulation in Part 121A, 121B or 133. These qualifications and experience will recognise all appropriate people. In particular the certification base for the aircraft – Part 23, 25, 27, or 29 – will determine the qualifications and experience required by the maintenance controller.

Disposition

The requirements in this part of the discussion paper will be contained in the appropriate Subpart M of Part 121A, 121B, or 133. The requirements will be considered in light of the comments received.



Comment 46 – Nomination of Maintenance Scheduler & 119.61 – Appointment of a Maintenance Controller (DP reference 119.60)
The requirements are too stringent and do not recognise some qualifications.

CASA response

The operator is responsible for nominating and appointing the person responsible for maintenance control and must advise CASA of the person's appointment.

The appointed person must hold the qualifications and experience as prescribed in the relevant regulation in Part 121A, 121B or 133. These qualifications and experience will recognise all appropriate people.

Disposition

The requirements in Parts 121A, 121B, and 133 will be considered in light of the comments received.

Comment 47 – Approval of acting Maintenance Controller (DP reference 119.62)

There does not appear to be any provision for appointing multiple maintenance controllers for the same fleet easily.

CASA response

An operator may appoint as many Maintenance Controllers as the operator considers necessary, without approval from CASA. The operator must advise CASA who has been appointed. Each person appointed must meet the qualifications and experience prescribed in the relevant regulation in Parts 121A, 121B or 133. This retains a flexibility for the operator and removes CASA from dictating an organisational structure in the regulations.

Disposition

The requirements relating to maintenance controllers and their responsibilities will be incorporated into Parts 121A, 121B, and 133 in such a way as to allow complete flexibility for an operator with the minimal involvement of CASA.

Comment 48 – Structure and content of Operations Manual (DP reference Schedule 1)

Does this schedule apply to all aircraft?

CASA Response

Yes. Requirement for rotorcraft to also comply.

Disposition

NPRM reworded with aeroplane being replaced with aircraft.

Comment 49 – Structure and content of Operations Manual (DP reference Schedule 1)

Operations Manual requirements are too excessive.

CASA Response

See Comment 2 of this summary.

Disposition

The Acceptable Means of Compliance (AMC) requirements in the DP have been incorporated into a table and an Advisory Circular (AC) containing both the structure and contents is to be issued.

Comment 50 – Structure and content of Operations Manual (DP reference Schedule 1)

Restrictions with inexperienced crew flying together should be included at A4.

CASA Response

This will be included the other related parts.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 51 – Structure and content of Operations Manual (DP reference Schedule 1)

Dangerous goods and weapons need further clarification.

CASA Response

Parts 91 and 92 will provide this detail.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 52 – Structure and content of Operations Manual (DP reference Schedule 1)

Requirements for planning for forced landing areas in single engine aircraft should be deleted.

CASA Response

Yes. This has been removed from the NPRM.

Disposition

Wording removed from the NPRM.



Comment 53 – Structure and content of Operations Manual (DP reference Schedule 1)

Rules of the Air should not have to be repeated as required by A12.

CASA Response

The operator needs to provide information to pilots relating to their operations.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 54 – Content of Maintenance Control Manual (DP reference Schedule 2)

Schedule 2 is too prescriptive.

CASA Response

CASA disagrees, the contents of the MCM as prescribed in Schedule 2 meets the minimum ICAO standard for an MCM.

Disposition

No changes are proposed to these regulations arising from the above comments.

Comment 55 – Safety Management, Accident Prevention and Flight Safety Systems (DP reference AMC 119.05)

Risk Management concepts need improving.

CASA Response

Some redrafting and restructuring has been included in the NPRM.

Disposition

Some further changes incorporated.

Comment 56 – Safety Management, Accident Prevention and Flight Safety Systems (DP reference AMC 119.05)

4.33.2 Process Improvement as required by ISO 9001:2000 should be included in the Safety System.

CASA Response

This to be included in the NPRM.

Disposition

Process Improvement requirements included.

Comment 57 – Safety Management, Accident Prevention and Flight Safety Systems (DP reference AMC 119.05)

A comprehensive quality system should be required rather than just a safety system portion of the quality system.

CASA Response

CASA agrees this is desirable, however cannot be made mandatory as CASA regulates systems only for safety outcomes. Operators initiating a combined quality management and safety management systems will also meet regulatory compliance.

Disposition

Recommendation that operators adopt a total quality assurance and total quality management system has been included in the AC.

Comment 58 – Safety Management, Accident Prevention and Flight Safety Systems (DP reference AMC 119.05)

To establish a Safety System based on the number of employees is flawed.

CASA Response

CASA agrees. Safety system requirements are now required for all 121A operators and those 121B operators operating more than three aircraft.

Disposition

NPRM now describes safety system requirements based on type of operation.

Comment 59 – Safety Management, Accident Prevention and Flight Safety Systems (DP reference AMC 119.05)

The Safety System should be permitted to review changes to Operations Manuals instead of requesting approval from CASA.

CASA Response

The DP wording has been amended to require only the approved portions of the operations manual to require approval before coming into effect.

Disposition

NPRM wording revised to identify only the amendments to the approve portions require prior approval.



Comment 60 – Management organisation of an AOC holder (DP reference IEM 119 Subpart B)

Functions and Purpose on page B71 is irrelevant and subjective.

CASA Response

CASA agrees.

Disposition

IEM material removed from the NPRM.

List of respondents to DP 00030S consenting to publish their name

Paul R Algar – representing Strategic Air Services (Australia) Pty Ltd

Peter Algie – representing Aviatour Pty Ltd

Roman Badov – representing Elite Airways

Nick Beissel – representing Air Waves Gold Coast

Adrian Billing – representing Nautigus Aviation

Ross Birch – representing Marine Helicopters

C P Booth – representing Booth Aviation

Rob Britten – representing Sydney Harbour Seaplanes Pty Ltd

Christopher Bruce Cabot – representing Wagga Air Centre

Don Crittenden – representing Crittenden Aviation Services

Rick Davies – representing the Royal Flying Doctor Service (Queensland Section)

Graeme R Geraghty – representing Darling Downs Aero Club

Rob Haylock – representing Sydney Helicopters Pty Ltd

Stephen Ingham – representing The Guild of Air Pilots and Air Navigators

A Kerans – representing Canberra Aero Club

Egon Kohlhammer – representing the Flight Attendants Association of Australia

Robert John Leonard – representing Air Bush Charter

Ron Magrath – representing AD Astral Aviation

Murray McKinnon – representing the Central Coast Soaring Club NSW

Perry McNeil – individual

Alex Pedashenko – representing Adtronica International

Mr M Reid – representing ORD Air Charter Pty Ltd

Andrew Robertson – representing Aerial Enterprises

David Smith – representing the Australian Parachute Federation Incorporation

Michael Tucker – representing Tasfast Airfreight Pty Ltd

Pete Wade – representing South West Air Service Pty Ltd

Peter Warriner – representing Peter Warriner Aviation Services



Annex E

Benefit:Cost Analysis of Part 119 Etc.



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Benefit:Cost Analysis of Part 119 Etc.

1. Concept

1.1 The concepts upon which CASR Parts 119, 121A&B [hereafter referred to as ‘the CASR proposals’] are developed are essentially intuitive. If operators are required to develop safety management systems, have more comprehensive flight crew training and checking, more stringent airworthiness requirements, and specify key personnel as being ultimately responsible for safety functions, then logic and experience would suggest that these proposals are likely to lead to reductions in accident rates.

1.2 In practice, it is not easy to demonstrate this in the aviation industry. One international helicopter operator implemented a safety management system in the early 1990s that resulted in the accident rate stabilising at a lower rate than before. This is likely to be the effect of safety management systems, that is, they will lower accident rates to a new level.

1.3 The New Zealand experience, where safety management systems have been implemented since 1998, indicate that they may have accelerated the trend towards lower accident rates. However, given the relatively low numbers involved, and the NZ CAA’s use of five or ten year rolling averages, it is too early for reliable trends to be observed.

TABLE 1 – DECLINE IN NZ ACCIDENT RATES (BASED ON ROLLING AVERAGES & TRENDS)

NZ	Low capacity <6000lbs	Low-medium 6000-12,500lbs	High-medium 12,500-30,000 lbs	High capacity >30,000lbs
94-98	10%	<5%	10%	0%
98-00	25-30%	15-20%	20-25%	10-15%
difference	15-20%	10-15%	10-15%	10-15%

1.4 Assuming that some of the difference was due to the implementation of safety management systems, then their progressive implementation may reduce risk by somewhere between 5% to 20% each year. Assuming it takes about five or six years for these systems to achieve their full effect, they may reduce risk by 25% to 75%.

1.5 In other words, the effects of these systems on air safety could vary from minor to profound.

1.6 Since the CASR proposals are to be introduced over five or six years, it may take a decade for them to have their full effect. Much of this report concentrates on charter and RPT accident rates over the past decade [1991-2000], and possible changes in accident rates over the next decade.

2. Australian Accident Rates

2.1 The Australian Transport Safety Bureau [ATSB] and Avstats both use 38 seats as the cut off for low capacity RPT. This is reflected in their data on hours flown, and accident rates.

2.2 Because the CASR proposals use 5700kg as the cut off point for low capacity RPT and charter, it has been necessary to reconfigure the data on accident rates for the period January 1991 to December 2000. Because Avstats data is often aggregated by manufacturer, estimates have been made of the split of flight hours for Beechcraft and DeHavilland multi engine aircraft, between high and low capacity, in regional RPT and charter. This is not likely to significantly affect the analysis.

TABLE 2 – AUSTRALIAN AVIATION ACCIDENTS PER 100,000 FLIGHT HOURS

CLASS	1991-95	1996-2000	% CHANGE	1991-2000
High capacity RPT internatl	0.73	0.40	- 45	0.54
High capacity RPT domestic	0.11	0.31	+ 190	0.22
High capacity regional	0.52	0.40	- 23	0.44
Low capacity regional	3.57	1.50	- 58	2.71
High capacity charter planes	2.22	0.43	- 80	1.10
Low capacity charter planes	9.97	7.57	- 24	8.70
Charter rotor	11.44	9.57	- 16	10.49
Aerial Work	10.15	8.12	- 20	9.12

High Capacity = >5700kg MTOW

2.3 Note that some accidents to RPT aircraft, and possibly some charter, occurred while they were not carrying passengers, so the actual accident rates in those classes of operations would be somewhat lower.

2.4 Accident rates in low capacity charter fixed wing and rotor, and aerial work, were about the same, and roughly three to four times the rate for low capacity regionals. Low capacity regional and charter aeroplanes have about six to eight times the accident rates of the high capacity equivalents.

2.5 In most classes of operations, accident rates declined during the latter five years of the decade compared with the first five. Note, however, that the numbers of accidents to high capacity aeroplanes were too low for the changes in accident rates to be statistically significant, i.e. the changes may simply be chance variation.

2.6 The most significant changes for charter operations were the decline in the numbers of airworthiness related accidents. Despite flight hours increasing from 2.1 million to 2.4 million, airworthiness related accidents declined from about 100 to barely 60. The most common form of accident, landing gear failure (not including inadvertent wheels up landings) declined from 53 to 34.



2.7 Other types of accidents remained almost constant. These included environmental factors such as wind gusts and wet, soft or uneven runways and beaches; pilot error, especially inadvertent wheels up landings, heavy landings and over running runways; and other factors, such as collisions with fauna and miscellaneous causes.

2.8 A comparison of accident rates by type of accident reveals significant differences between high and low capacity aircraft operations. There is also a threefold difference in pilot error rates and environmental factors in charter operations compared with low capacity regional airlines.

TABLE 3 – ACCIDENT CAUSES PER 100,000 FLIGHT HOURS, 1991-2000

CLASS	Airworthiness	Environmental	Pilot Error	Other
High capacity RPT internatl	0.09	0.23	0.05	0.18
High capacity RPT domestic	0.07	0.02	-	0.12
High capacity regional	0.25	0.06	-	0.13
High capacity charter planes	0.27	-	0.27	0.55
Low capacity regional	1.77	0.31	0.21	0.31
Low capacity charter planes	3.70	1.49	2.30	0.98
Charter rotor	3.98	1.27	3.07	1.08

High Capacity = >5700kg MTOW

2.9 The major differences in airworthiness and pilot error related accidents in low capacity regional versus charter operations suggest that charter operations would benefit significantly from being subject to the same airworthiness and pilot training regimens as regional operators. The differences in environmental and other factors might also be reduced, although some differences are likely to remain, given the propensity for charter aeroplanes and helicopters to operate from beaches, dirt strips, oil platforms and grasslands.

2.10 The differences in accident rates between low and high capacity aircraft in charter and RPT operations are also significant, as are the differences between regional airlines and the major domestic and international operators. The accident rates for high capacity aircraft generally need to be regarded with caution, however, because of the low numbers involved. With the major domestic and international airlines, eight of the accidents were caused by being hit by baggage trucks, air bridges etc, while several international accidents were due to clear air turbulence. The airworthiness and pilot error rates were very low, which may give the regional operators something to aim for in terms of improving their safety performance.

2.11 In short, there may be significant potential for improvement in accident rates, particularly among the lower capacity RPT and charter operators. For the major airlines, while the accident rates are already lower, the potential costs of accidents are an incentive for them to improve their performances as well.

3. Economic Losses of Aircraft Accidents

3.1 The Bureau of Transport Economics (BTE) estimated the cost of aviation accidents in Australia for 1996 to be \$112 million, which it regarded ‘as a lower bound figure’. It did not indicate what an upper bound figure might be, but it is significant to note that it uses a statistical value of life of only \$1.5 million. CASA cost benefit analyses use a figure of \$2.0 million, and there may be a case for increasing this.

3.2 The BTE study also included costs of injuries, including productivity losses; damage to aircraft and property, apparently including time costs; and legal, insurance, emergency services and accident investigation costs. The costs of airport closures were not included, but may be in future studies.

3.3 In 1996, charter and RPT operations had 38 accidents, at an estimated total cost of \$30.1 million. Note that there were actually only 34 charter accidents: BTE probably counted a taxiway collision at Bankstown as two accidents.

TABLE 4 – SUMMARY OF BTE COSTING OF 1996 ACCIDENTS

Class of ops	No Accidents	Total Cost \$M	Cost per accident \$M
Charter	35	25.49	0.73
High capacity RPT	2	4.50	2.25
Low Capacity RPT	2	0.14	0.07
TOTAL	39	30.13	Not applicable

Charter

3.4 The number of charter accidents in 1996 was close to the annual average of 37.5 for the decade. However, six of the accidents were fatal, claiming 13 lives, against an annual average of 3.5 fatal accidents and 9.2 deaths. The higher number of deaths in 1996 may compensate for the BTE using a somewhat lower statistical value of life than CASA uses, and so the average cost per charter accident of around \$730K may be realistic.

3.5 Since the Consumer Price Index rose by 13.0% from mid 1996 to the end of 2001, the current average cost per charter accident becomes about \$820K. At 37.5 charter accidents per year, the total cost of charter accidents is nearly \$31 million.

Low Capacity RPT

3.6 Both of the low capacity accidents in 1996 happened to a DHC-8. Under the CASR proposals, this is a high capacity RPT aircraft. Therefore, none of the accidents the BTE examined was for a low capacity RPT.



3.7 However, it may be possible to estimate low capacity RPT costs by comparing them with charter over a longer period. In the 1991-2000 decade, there were 375 charter accidents with 92 deaths, at an average of 0.25 per accident. There were also 26 accidents low capacity RPT accidents, with 17 deaths, at an average of 0.65 per accident.

3.8 If one were to assume that other costs (such as damage to aircraft and injuries) were in the same proportion (0.65 to 0.25), then the cost of a low capacity RPT at present day value would be $\$820K \times 0.65/0.25 = \2.13 million. For 2.6 accidents per year, total costs are $\$5.54$ million, which may be rounded up to $\$6$ million per year.

High Capacity RPT

3.9 There were four high capacity RPT accidents that year. A B747 encountered clear air turbulence, while an A340 pitched up when the autopilot tripped up. No damage was reported to either aircraft, but cabin crew and passengers suffered a total of four serious and 37 minor injuries at a total cost of $\$4.5$ million -- an average cost per accident of $\$2.25$ million (or $\$2.55$ million at current figures).

3.10 Two accidents happened to the same aircraft (a DHC-8), at the same airport (Broome), three months apart. Both involved structural damage, but no injuries. BTE estimated the cost at $\$143K$, averaging $\$71K$ per accident.

3.11 For the four accidents, total costs were $\$2.4$ million or $\$600K$ apiece ($\$680K$ in 2001 dollars). At 2.6 accidents per year, total costs for high capacity RPT would be $\$1.8$ million per year, which can be rounded up to $\$2.0$ million. Note, however, that the accident to the Qantas B747 at Bangkok in 1999 could considerably increase this figure.

3.12 Also, none of the 26 high capacity RPT and charter accidents in the last decade, nor indeed in the last quarter century, has been fatal. If such an accident were to happen, it could claim anywhere from a few to a few hundred lives, with costs in the region of ten million to one billion dollars. It may be realistic to factor in a $\$100$ million fatal accident during the next decade, such as the crash of a B737, the workhorse of the RPT fleets. Assuming around 70% loadings and 50% fatalities, this would mean about 40 fatalities.

3.13 This would increase the total cost of high capacity RPT accidents by $\$10$ million per annum, to around $\$12$ million per year.

Other categories

3.14 Other categories of aircraft operations include private, business, training, agriculture, aerial work, and test and ferry operations. For 1996, BTE estimated the total cost of accidents in these categories at around $\$80$ million. 1996 was a fairly typical year in terms of numbers of aircraft accidents, but the number of fatalities was somewhat higher than average. When it comes to working out average annual costs, this tends to compensate for BTE using a somewhat lower statistical value of life figure than CASA used. Total costs of these accidents in 2001 dollars is $\$90$ million per year.

4. Economic Benefits of Accident Prevention

4.1 As discussed in the Section 1, the safety initiatives included in the CASR proposals could have effects ranging from minor to profound. (Better training for charter pilots seems to be the area where the greatest improvements could be made.)

4.2 If the benefits are minor, then the reduction in accident rates may be less than five per cent per year, with a long term effect of a 25% improvement. On the other hand, there is evidence to suggest that certain air safety innovations, such as establishing control towers at uncontrolled terminal areas, or introducing TCAS and GPWS, can reduce risk by up to 75%. This seems to be the upper limit of benefits when introducing any major safety system.

4.3 For the purpose of this analysis, therefore, low, medium and high benefits are set at 25%, 50% and 75% reduction in risk and economic losses.

4.4 There is, however, a flow-on effect in the case of applying safety management systems to charter operations. In 2000, about one sixth of hours flown in other categories (i.e. not RPT or charter) were by charter aircraft. The flow-on benefits should therefore be 25-75% of one sixth of the economic losses of \$90 million a year in those other categories. The flow-on benefits may actually be greater than this, if charter operators have other aircraft operating exclusively in those other categories.

TABLE 5 – ACCIDENT LOSSES & PREVENTION BENEFITS IN MILLIONS OF DOLLARS

CLASS	TOTAL LOSS	25% BENEFIT	50% BENEFIT	75% BENEFIT
CHARTER	31.00	7.75	15.50	23.25
FLOW-ON	[90.00]	3.75	7.50	11.25
TTL CHARTER		11.50	23.00	34.50
LO CAP RPT	6.00	1.50	3.00	4.50
HI CAP RPT	12.00	3.00	6.00	9.00
TOTAL		16.00	32.00	48.00

4.5 Note that there may be certain other benefits in accident prevention that are difficult to calculate and are therefore intangible. The most notable is public confidence in air transport, i.e. people's willingness to travel by air. Supply and demand in air transport is not only price-elastic, but 'confidence-elastic' as well.



5. Costs of the proposals

5.1 As indicated earlier in this NPRM, eight proposals were identified as being the key issues in the proposed changes to AOC Air Transport certification (Part 119). Of these, the second and fourth (identifying key personnel and the CEO's responsibilities) are not costing matters, while the first (a single standard for RPT and charter operators) is covered as separate elements in the other five problems.

5.2 The attached table summarises the costs of implementing the CASR proposals, in terms of the five problems that incur costs, over the range of AOC holders that are affected by the proposals.

TABLE 6 – ANNUAL OPERATOR COSTS FOR PART 119

No	Item	Notes	Charter (1 to 3 aircraft)	Charter (4 to 8)	Charter (> 8)	Low cap RPT and cargo**	Major domestic/ international carrier		
3	Safety Manager								
	Costs of employing Safety Manager*	Salary*	Not required	0	1 part time 37.5	1 full time 75	1 full time 100	1 full time 150	
	Training costs	Approx \$1000 per day for 7-30 days	0	0	5	10	20	20	
	<i>sub-total</i>		0	0	42.5	85	120	170	
5	Safety Management System								
	Establishment: facilities + equipment	Office, training aids, PCs etc	0	0	2.5	5	10	20	
	: management costs*	Management time* setting objectives and procedures	Not required	0	200 hours	200 hours	500 hours	1000 hours	
	Ongoing costs: course materials etc	Stationery etc	0	0	2	3	5	10	
	: participants' time*	Staff costs*	0	0	120 hours	240 hours	500 hours	1000 hours	
	<i>sub-total</i>		0	0	30.5	40	90	180	
6	Flight Crew Training & Checking								
	Cost of checking and training	In house or contracted out, approx \$3K per pilot per year	4 pilots	12	12 pilots 36	24 pilots 72	Already done	0	Already done 0
7	Operations & Maintenance manuals								
	Costs of upgrading or revising manuals	Will vary greatly between operators	3	3	5	10	30	100	
8	Airworthiness & maintenance control								
	Costs of employing controllers*	Salary of airworthiness officer*	1 part time	40	1 part time 40	1 full time 80	Already done	0	Already done 0
	TOTAL	Sum of sub-totals		55	154	287	240	450	
	Number of affected operators	Number of operators		187	56	32	31	15	
	COSTS TO INDUSTRY	Cost per operator x number of operators		10120	8624	9184	7440	6750	
		Costs of CASA projects						1000	
							TOTAL	43118	

*All salaries and salary differences to include 65% on costs - super, insurance, lighting, rental, furniture etc

** 8 cargo operators are included with low capacity RPT for averaging purposes, the rest being high capacity.

N.B. Costs will vary widely from one operator to another; e.g. a small operator may be able to combine the roles of Chief Pilot, Safety Manager, and airworthiness and maintenance controllers in one person, while large airlines may already meet many of the requirements in Parts 119 and 121A.



6. Benefit:Cost Ratios

6.1 By dividing the benefits of implementing safety systems, as calculated in Table 5 by the costs in Table 6, one can calculate the benefit:cost ratios for various classes of operators assuming 25%, 50% and 75% effectiveness of the CASR proposals. A ratio of greater than 1.00 means that the benefits of the safety systems should outweigh the costs of implementing them.

TABLE 7 – BENEFIT:COST RATIOS

CLASS	25% BENEFIT	50% BENEFIT	75% BENEFIT
CHARTER	0.41	0.82	1.24
LOW CAP RPT* + CARGO	0.20	0.40	0.60
HI CAP RPT	0.44	0.89	1.33
TOTAL	0.37	0.74	1.11

*Low Cap RPT only b:c ratios are 0.28 0.55 0.82

6.2 On this basis, the CASR proposals would be cost-beneficial for the charter and high capacity RPT operations if the benefits are in the region of 50 to 75%, i.e. if the accident rates are reduced to between one half and one quarter of the current figures, and the same is true of the proposals overall. But, even at 75% effectiveness, low capacity RPT operations are only approaching the margins of being cost-beneficial. However, as pointed out in paragraph 4.5, there are certain intangible benefits, to do with lack of public confidence in an operator that has had an accident, or in the airline industry in general, that will be affected as accident levels are reduced.

6.3 In practice, because of the diverse range of operators in each class, there are two things to note:

- (i) The costings are based on averages for operators in each class. Costs for individual operators may vary widely from the mean; and
- (ii) The benefits may be distributed unevenly, with only marginal gains in some areas, and big improvements in others.

Robert Phillips
Senior Researcher
Aviation Safety Standards

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Annex F

Summary of Principle Differences between the Proposed CASR Part 119, the Discussion Paper and the Current Requirements

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Summary of Principle Differences between the Proposed CASR Part 119, the Discussion Paper and the Current Requirements

The summary below is provided to assist readers of the CASR Part 119 NPRM by identifying the principle changes to current requirements that are incorporated therein. It is not intended to be read as a stand-alone document nor to be an exhaustive summary.

1. General

1.2 The definitions of “air transport operation”, “flight crew member”, “cabin crew member” and “crew member” are located in the Part 91 NPRM and are subject to the evaluation of responses received and will ultimately be incorporated in the Dictionary, Part 1. (Included at the end of Part 119 as a Consultation Note for ease of reference)

1.3 “Operator” added as an alternative to “owner” at the equivalent of CAR 262(3). (Included at the end of Part 119 as a Consultation Note for ease of reference)

1.4 The frequency of proficiency and competency checks are to be stated in the training and checking program requirements of Part 121A, 121B and 133 instead of Part 119.

The following changes will occur consequentially when Parts 121A, 121B, 129 & 133 are implemented

1.5 A principle split in regulatory stringency at the 5700kg MTOW point, to accord with JARs/FARs, would be used in the AOC requirement and aircraft operating rules.

1.6 The terms “RPT” and “Charter” would disappear, the new classification of operations being reflected in the use of the single term “Air Transport Operation”.

1.7 Rules relating to “Air Transport Operations” would not, to the greatest extent practicable, depend on whether a flight was scheduled or non-scheduled.

Regulation No.	Summary of Principal Differences
119.005	The applicability of the Part identifies the Air Transport operations that require the issue of an “AOC – Air Transport”. This regulation, along with the definition of “Air Transport” equates to the current CAR 206(1) (b) and (c) with the exception of domestic cargo-only operations below 5700kg MTOW.
119.035	Operations Specifications have been expanded in Part 119 to identify, as a schedule attached to the AOC, the approvals authorised. Thus reducing the need to issue letters of approval to AOC holders.

Regulation No.	Summary of Principal Differences
119.035	<p>The AOC Operations Specifications require:</p> <ul style="list-style-type: none"> • For Part 121A operations, notification to CASA of aircraft registration markings and serial numbers (a current requirement for all RPT operations); • For all AOC holders, the operator’s location (an ICAO Annex 6 Part 1 requirement); • For all AOC holders, the AOC is to state whether the carriage of passengers is authorised.
119.060	<p>A detailed requirement for the library content is proposed as required of operators by section 28BH of the Act. May be kept in electronic medium, with CASA approval.</p>
119.065	<p>Flight crew member medical certificate details added to company record requirements.</p>
119.065	<p>Comprehensive cabin crew member training records now required to be kept by operators of relevant aircraft.</p>
119.105	<p>Part 119 proposes new rules requiring a common crew member language and a requirement for the Operations Manual to be in a language that the crew understand. English is required for Australian operators.</p>
119.110 - 119.115	<p>Specified minimum contractual requirements are included where contracting out of services forms part of the operator’s activities.</p>
119.120	<p>The term “authorised officer” is substituted for “FOI” (Flying Operations Inspector), DG Inspector, etc., to allow for CASA job title changes - based on current usage of this term in CAR 262. Fare for carriage of authorised officer of CASA is not to be automatically payable.</p>
119.125	<p>Requirements relating to Flying Operations Inspectors and inaugural flights at CAO 82.5 paragraph 9.5 now to be applied to aircraft carrying >30 passengers/3410kgs instead of using the current dividing line of 38 persons/4200kgs payload (this “high-capacity” bench mark will disappear with the introduction of the CASRs). Demonstration flights may be substituted for inaugural flights at the operator’s request and CASA’s discretion.</p>
119.135	<p>Part 119 proposes the appointment of a Safety Manager as “key personnel” as defined in subsection 28 (3) of the Act.</p>
119.145	<p>To ensure that operations are conducted in accordance with the Act, regulations, etc, it is now proposed that the responsibility be assigned to the Chief Executive Officer. The Head of Flying Operations is responsible for monitoring compliance and reporting to the CEO. Previously the Chief Pilot (CAO 82.0 App.1).</p>



Regulation No.	Summary of Principal Differences
119.155	Part 119 proposes that instead of the current Chief Pilot requirement to <u>hold</u> licences and ratings appropriate to all the operator's operations, the Head of Flying Operations will not be required to have a current medical or be current to operate a type-representative aircraft. Head of Flying Operations approval process is to take into account the size of an operator's organisation as well as the nature of those operations. (CAO 82.0 App.1) Minimum requirements amended in light of the Part 61 Flight Examiner Rating proposed minimum requirements.
119.155	The Head of Training and Checking must be a current flight examiner on a type representative aircraft operated by the operator rather than the "most complex type". Part 61 identifies the minimum requirements for a flight examiner rating. Consequently this has altered the minimum requirements currently required for the Head of Training and Checking.
119.165	The Safety Manager must be adequately trained or experienced in safety management.
119.175	Provisions added to allow for an acting Head of Flying Operations and acting Maintenance Controller.
119.270	Part 119 has a new requirement for most operators to provide an accident prevention and flight safety program, called the safety management system. (<i>Note: ICAO Annex 6 Part 1 paragraph 3.6 and Annex 6 Part 11 Section II paragraph 1.6 require commercial air transport operators to establish an accident prevention and flight safety program</i>). The previous safety system proposals were not identified in the Rules.
119.385	<p>Operations Manual (CAR 215) changes include:</p> <ul style="list-style-type: none">• The specified content of an Operations Manuals have been made more comprehensive and useful by substantially adopting the equivalent JAR-OPS 1 model to encourage standardisation;• An Advisory Circular has been developed to provide a standardised structure to manual preparation;• the use of electronic medium for Operations Manuals;• requirement that operators ensure that the Operations Manual content does not conflict with regulations and procedures of States over-flown (ICAO Document 8335 paragraph 5.3.3(a));• requirement for prior notification to CASA of amendments to approved portions. <p>This requirement will supersede CAAP 215. Note, in 119.385(5), that duplication of material carried aboard the aircraft is not required to be included in the Operations Manual provided it is referenced.</p>

Regulation No.	Summary of Principal Differences
TABLE 119.385-1	Part D of Table 119.385-1 requires the operator to include in the operations manual the training syllabuses and checking programs for ground support personnel. There are no current equivalent requirements.
TABLE 119.385-1	Part 119 requires a register of aerodrome information to be provided where such information is not available from the AIP (e.g. at CAO 82.3 paragraph 5.3/CASR 121A/B.221). It is now made part of the Operations Manual content and based on JAR-OPS 1 requirements (see Table 119.385-1 Part C and the Advisory Circular).
TABLE 119.385-2	Table 119.385-2 clarifies which of the Operations Manual content must be approved by CASA.
119.405	The current requirements for a Maintenance Control Manual will remain and is proposed that the minimum requirements for the contents of the MCM will be standardized.
119.410	Maintenance Control Manual permitted to be in an electronic medium, with CASA approval, as for the Operations Manual.
119.425	Extends the requirement to provide for crew member training and checking to all AOC holders (CAR 217). However contracting out is allowed for, under Part 142.
119.425	Where the training and checking is contracted out, the Part 142 training organisation providing the training and checking must use the Operations Manual procedures and check lists used by the operator whose crews are being trained and/or checked. Where safety equipment training is contracted out, the same types of equipment that the operator uses on his or her aircraft must be used by the training organisation concerned.
119.445	Content of the Training and Checking manual included, to be complementary with Part 142 requirements.
Dictionary	Summary of Principal Differences
Dictionary Part 1, at the end of Part 119	The current definition of a “passenger” is altered in concert with the definition of a “crew member” to remove the confusing reference in CAR 2 to “operating crew”, so that all persons carried aboard an aircraft are clearly either passengers or crew members.



Dictionary	Summary of Principal Differences
Dictionary Part 1, at the end of Part 119	The term "operational support personnel" in CAO 82.0 is to be replaced with "ground support personnel" as this is more descriptive. This term will include: <ul style="list-style-type: none">• dispatchers;• load controllers;• load planners (load planners may not be the same persons as load controllers); and• personnel involved with performance calculations and updating computerised navigation databases.
Civil Aviation Orders (CAOs)	Summary of Principal Differences
CAO 82.3.2	The term "supervisory position" in CAO 82.3.2, currently used with reference to training and checking organisation personnel, is removed from the rules. This is because it is not clearly defined and has caused confusion as to whom it was intended to include. It will be replaced by specific references within Parts 61, 121A, 121B, 141 and 142 in relation to personnel who require approval to carry out training, checking or managerial functions.
Civil Aviation Safety Regulation (CASR)	Summary of Principal Differences
CASR 121A/B.1055	Requirements for the keeping of trip records at CAOs 82.1 and 82.3 extended to operators of larger aircraft (this is an ICAO Annex 6 Part 1 requirement) and moved to and defined in CASR 121A/B.1055.
The Act	Summary of Principal Differences
Section 27.AE of the Act refers	CASR Part 129 is proposed to apply to foreign operators of foreign registered aeroplanes or rotorcraft engaged in Air Transport Operations in Australian territory that are not regulated domestic flights.



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