

I have just finished reading the submission by AOPA and realise I had forgotten a couple of things. The FAA have, amongst other things, the requirement to "Foster and Encourage" aviation and when the Regulatory review started under John Sharpe and Leroy Keith we attempted to get this requirement put in place for CASA..... There was an uproar from the entrenched Bureaucrats and we failed. Now, in the face of CASA wanting to get right away from hands on business in anything except Public Transport I believe that CASA should take an active role in guiding aviation to better and safer practices..... (AOPA uses the outdated term "Fare-paying Passenger." Since the CEO brought in the current "Classification of Activities" this is no longer accurate. There are either Passengers or Participants..... For your information a Participant is any person who accepts the risks in riding in any aircraft that is not Transport category..... For a fuller explanation see "Classification of Activities" attached.

The other point I would like to make is to do with the remark by the AOPA that the Gliding Federation has a better record of safety than that in the USA which is directly under the FAA and is done on a commercial basis. I started my flying career in gliders and the reason that the Gliding Federation has a better record is because all gliders except powered sailplanes operate in a club environment with strict checks and balances and always under the watchful eye of the "duty instructor." This is because the clubs own all the means of taking the glider aloft..... Having hired gliders in the USA I have experienced the commercial methods and they don't have the club atmosphere. What we know as private aviation in Australia is not and can never be under similar constraints as operating in a club atmosphere unless CASA extends it's authorisations to deal with it and the aviation industry, namely the CASA approved flying schools, agree.

The AOPA also made reference to entry level aviation being the pool from which comes tomorrow's airline pilots and that is a very good reason to want this sector of aviation to be well designed for simplicity of movement between sectors that must preserve the freedom of choice. The system, apart from gliders, that was put in place in the USA is excellent and CASA should study this with a view to implementing it in Australia. The CEO's directive 1/2007 actually instructs them to do this in his fourth dotpoint. See Directive 1/2007 attached



Australian Government
Civil Aviation Safety Authority

CEO DIRECTIVE – 001/2007

**Development of Regulations and the
Regulatory Framework**

Date of Directive:	18 June 2007
To:	Shane Carmody
Action Officer:	Not Applicable
Title of Addressee:	Not Applicable
Directive No:	001/2007
Response Required:	Immediate Effect

Directive

This Directive replaces CEO Directive 016/2004, which is hereby repealed. It updates CASA's Guiding Principles for the development of the regulatory framework and proposed aviation safety regulations.

Guiding Principles

Regulatory policies

- The aviation safety regulations must take into account CASA's Classification of Civil Aviation Activities policy and the priority given under the policy to passenger-carrying activities.
- Aviation safety regulations must be shown to be necessary. They are to be developed on the basis of addressing known or likely safety risks that cannot be addressed adequately by non-regulatory means. Each proposed regulation must be assessed against the contribution it will make to aviation safety.
- If a regulation can be justified on safety risk grounds, it must be made in a form that provides for the most efficient allocation of industry and CASA resources. The regulations must not impose unnecessary costs or



unnecessarily hinder high levels of participation in aviation and its capacity for growth.

- Where appropriate, the aviation safety regulations are to be aligned with the standards and practices of leading aviation countries, unless differences are required to address the Australian aviation environment and these differences can be justified on safety risk grounds. Where the standards and practices of the leading aviation countries vary, CASA will align its regulations with those that effectively address the safety risks in the most cost-effective manner.
- Wherever possible, the aviation safety regulations must be drafted to specify the safety outcome required, unless, in the interests of safety, and to address known or likely aviation safety risks, more prescriptive requirements need to be specified.
- The aviation safety regulations must be drafted to be as clear and concise as possible.

Regulatory framework

- Wherever possible, the aviation safety regulations are to be developed within a two tier regulatory framework comprising the Civil Aviation Act and the Civil Aviation Safety Regulations (CASRs), supported by advisory material that details acceptable means of compliance with the CASRs, together with appropriate guidance material.
- Manuals of Standards (MOSs) are to be developed only where there is a clear requirement, on the basis of safety, to specify standards that for the purpose of clarity and effective administration should not be contained in the regulations.
- The content of proposed MOSs must also be assessed against the contribution it makes to aviation safety.
- A MOS must only contain such standards as are clearly authorised by a particular regulation and must not be used as a vehicle for promulgating advisory material and other information.

All CASR Parts and MOSs are to be developed and maintained using the Guiding Principles stated above.

Signed

Bruce Byron
Chief Executive Officer



Australian Government
Civil Aviation Safety Authority

Regulatory Policy – CEO-PN001-2004

**CASA's Industry Sector Priorities and
Classification of Civil Aviation Activities**

Sponsor: Director of Aviation Safety
Policy Issue No: Two
Policy Issue Date: April 2007
Policy Review Date: June 2008
Regulatory Provision: All CASR Parts, Civil Aviation [Regulations](#), and [subordinate rules](#)

1. Reason for the Policy

1.1 This policy document formally acknowledges that, while carrying out all of its statutory functions, it is necessary for CASA to prioritise its activities, and in doing so, to focus particularly on the interests of the air travelling public. It is appropriate that CASA should devote its resources accordingly.

1.2 This document also sets out CASA's policy on classifying aviation activities conducted by civil aircraft in Australian airspace, based on aircraft use and who or what is carried in the aircraft, both as a matter of public policy and for the purposes of providing a risk-based framework for establishing safety outcome-based rules under the [Civil Aviation Act](#).

1.3 This policy also enables CASA to explain to the Australian public that three levels of safety oversight apply to occupants of aircraft who are not crew:

- a. *Passengers* are occupants who are not expected or assumed to have knowledge of the risks they are exposed to and have little or no control over the risks (other than choosing not to fly);



- b. *Task specialists* are occupants who have assigned in-flight duties related to a specialised use of an aircraft and are informed of and accept the associated risks;
- c. *Participants* are occupants who voluntarily engage in an aviation activity, are informed of the risks, and have explicitly accepted the risks of their involvement in that activity.

2. Policy

2.1 Primary Factors Determining a Hierarchy of Priorities

2.1.1 In establishing a risk-based hierarchy of priorities, CASA will, in the first instance, base this on the estimated degree of public risk. This in turn will be based on factors, that include:

- a. Control of risk;
- b. Safety expectations (public perception/concern) and acceptance of risk;
- c. Potential for multiple fatalities;
- d. Aircraft occupant characteristics; and
- e. The potential effect on other airspace users and people and property on the ground.

2.2 Initial Hierarchy of Priorities

2.2.1 CASA will, subject to modifying factors discussed later, devote its resources in line with the following hierarchy of aviation activities (listed in descending order of priority):

1. Aviation Activities involving Crew and Passengers	<p>A. Regulatory oversight of passenger-carrying activities in large aircraft, where the passengers are not expected or assumed to have knowledge of the risks they are exposed to and have little or no control over the risks (other than choosing not to fly).</p> <p>B. Regulatory oversight of passenger-carrying activities in small aircraft, where the passengers are not expected or assumed to have knowledge of the risks they are exposed to and have little or no control over the risks (other than choosing not to fly).</p>
2. Aviation Activities involving Crew and Task Specialists	<p>Regulatory oversight of activities involving the carriage of task specialists who:</p> <ul style="list-style-type: none"> • have assigned in-flight duties related to the specialised use; and • are informed of the risks associated with their involvement in the activity (non-acceptance involves choosing not to fly).



3. Aviation Activities involving Crew only	<p>Protection of persons and property on the ground and other airspace users through regulatory oversight of:</p> <ul style="list-style-type: none"> • mail-, freight- and cargo-only flights; • crew-only flights; and • unmanned aerial vehicles.
4. Aviation Activities involving Crew and/or Participants	<p>General oversight and compliance assurance for flights in which participants:</p> <ul style="list-style-type: none"> • are informed of the risks of their involvement in the aviation activity; and • have explicitly accepted those risks (non-acceptance includes choosing not to fly).

Note: Passengers, task specialists, and participants are described in paragraph 1.3.

2.2.2 In dealing with infrastructure and support areas (e.g. maintenance organisations, aerodromes, airspace issues, etc.), resource allocation priorities will be estimated by the proportion of their functions servicing these various sectors. For example, a maintenance organisation that primarily services large passenger-carrying aircraft would be assigned a higher priority than one that primarily services aircraft engaged in specialised activities, such as agricultural operations.

2.3 Resource Implications

2.3.1 CASA is moving towards a model where:

- a. The relative allocation of CASA resources to an industry sector broadly corresponds with the sector's position in the hierarchy; and
- b. The major proportion of CASA's resources will be allocated to contributing to the safety of passengers who have limited or no knowledge of the risks they are exposed to and little or no control over the risks, other than choosing not to fly (priority category 1 in the table above).

2.4 Classification of Aviation Activities Framework

2.4.1 In developing this policy, CASA has taken into consideration how aircraft and operations were classified by the International Civil Aviation Organization (ICAO) in 1987, as well as by foreign civil aviation authorities since then. The reasons behind previous unsuccessful attempts by CASA and its predecessors to redefine the classification of operations have also been taken into account, as well as recommendations made by bodies such as the Seaview Air Commission of Inquiry.



2.4.2 Broad policy advice on CASA's approach to a classification system was provided by the Program Advisory Panel (PAP). The PAP was established in September 1996 to provide advice and guidance to the CASA Review Programs which were revising the Australian regulatory framework and the role of CASA in the delivery of its regulatory responsibilities.

2.4.3 This current policy acknowledges that, in 1998, references in the Civil Aviation Act to "commercial" were removed to avoid giving a misleading impression of the nature of operations being regulated by CASA. The Act's change recognised the fact that CASA's safety regulation of aviation activities is not based fundamentally on the commercial nature of an activity. CASA's application of regulatory oversight and risk mitigation is to be based on:

- a. the safety risks involved;
- b. the potential consequences of an accident; and
- c. the mitigators applied in that activity.

2.4.4 Certain fundamental principles were adopted by CASA in developing a policy for classifying civil aviation activities:

- a. The first principle recognises that CASA's responsibility under the *Civil Aviation Act* is for the safety regulation of Australian civil air activities. Ancillary to this is the principle that the safety of persons must have a higher priority than the safety of property.

Because CASA does not have unlimited resources, it must discharge its responsibilities under the Act in such a manner as to minimise the risks of harm, injury or damage to the greatest extent practicable. This is achieved by implementing a risk management approach to safety regulation which takes into account:

- The inherent riskiness of an aviation activity; and
 - The consequences of an accident in respect of the activity.
- b. Another principle is that the level of safety provided should reflect the degree to which persons who are intending to participate in an aviation activity are able to inform themselves in relation to the extent of the risks involved, CASA's safety oversight and the risk mitigators for that activity.

To persons who are adequately informed of the risks inherent in an aviation activity — and who voluntarily accept those risks — CASA's responsibilities are considered less than its responsibilities to those who have limited knowledge or control of the risks to which they are exposed.

- c. The classification policy also takes into account CASA's responsibilities to those who are only indirectly involved in, or affected by, aviation.



Persons on the ground expect to be protected from objects “falling from the sky” regardless of the type of object and the reason for its falling. Furthermore, the public does not generally view as acceptable situations in which large numbers of persons are left exposed to risk of serious injury or death, even when those persons have voluntarily accepted the risks.

- d. Since CASA’s mandate is limited to safety regulation, economic and commercial indicators have not been considered in isolation to determine an activity’s classification. They are only two of the many pressures affecting safety.

2.4.5 CASA’s regulatory activities are focussed on ensuring risks of specific aviation activities are recognised and addressed. Activities that fall into any particular class or grouping are typically very diverse and warrant different risk mitigation. CASA’s application of regulatory oversight and risk mitigators in all cases will potentially include:

- a. Air Operator’s Certificates (AOCs);
- b. Graduated AOCs;
- c. Certificates of airworthiness and flight permits including extended scope flight permits;
- d. Competency-based licences, endorsements and ratings;
- e. Other permissions and approvals and related Acceptable Means of Compliance (AMCs) and Guidance Material (GM); and
- f. Operational limitations (airspace, populous areas, etc).

2.4.6 The definitions, attributes, inclusions, exclusions and regulatory requirements for all activities in all classifications will be determined primarily through the development of the Civil Aviation Safety Regulations (CASRs) that implement the classification of activities framework.



2.5 Classification System

2.5.1 Three broad classes of aviation activities are established under this policy:

- a. The first class (**Passenger Transport**) comprises passenger-carrying activities that:
- are conducted in large and small aircraft which are certified in the transport, commuter or normal category; and
 - involve the carriage of passengers who have limited or no knowledge of the risks they are exposed to and little or no control over the risks (other than choosing not to fly).

The Passenger Transport class includes, but is not limited to, passenger operations in scheduled and non-scheduled air services provided to the public.

Activities in Passenger Transport require an Air Operator's Certificate (AOC) — full or graduated.

- b. The second class (**Aerial Work**) comprises activities in which:
- the aircraft is being used for specialised in-flight purposes; and
 - the activity presents elevated operational and/or organisational risks, or the potential for significant consequences if there is an accident (by virtue of the number of persons carried on board and/or the area of operation).

The activities in the Aerial Work class are very diverse. Some may require a full AOC, graduated AOC, some other permission from CASA or be subject to operational limitations.

Note: AOCs are one of the many tools and NOT the only tool that CASA can utilise to deal with operational and/or organisational risks.

- c. The third class (**General and Freight-only Activities**) comprises:
- activities involving the carriage of participants — individuals who are adequately informed and have explicitly accepted the risks to which they are exposed;
- Note: Limits will establish the maximum number of participants that can be involved before an activity triggers increased regulatory oversight.*
- freight-only activities; and
 - any other aviation activities (e.g. crew-only) that do not fall into one of the other two classes.

Some activities in General and Freight-only Activities, e.g. freight-only



activities in large aeroplanes, will require a full AOC or a graduated AOC.

2.5.2 The three classifications can be represented as shown below:

Passenger Transport	Aerial Work	General & Freight-only Activities
Carriage of passengers in large aeroplanes	Specialised activities that present elevated risks or significant consequences	Other activities involving adequately-informed participants
Carriage of passengers in small aeroplanes		
Carriage of passengers in rotorcraft		Freight-only activities
Carriage of passengers in balloons		Other crew-only activities

Note 1: It is CASA policy to regulate sport and recreational aircraft, regardless of the activity, by allocation to specific sport and recreational CASR Parts.

Note 2: The activity groupings in the table above are not wholly indicative of the regulatory coverage, e.g. freight-only activities in large aeroplanes would be regulated under the same rule set (CASR Part 121) that is used to regulate combined passenger/freight activities in large aeroplanes, because of the heightened risk to people on the ground.

2.6 ICAO vs. the Australian Classification System

2.6.1 The ICAO classification scheme (last updated in 1987) comprises *Commercial Air Transport* services, *Aerial Work* activities and *General Aviation*. The ICAO system relies primarily on distinguishing operations carried out in return for payment or promise of payment in respect of the flight. Australia's classification system is risk-based and depends on aircraft use, who or what is carried in the aircraft, and the size of the aircraft.

2.6.2 The ICAO classification of *Commercial Air Transport* can generally be aligned with Australia's **Passenger Transport** class above, combined with commercial freight-only activities in Australia's **General and Freight-only Activities** class.

2.6.3 The ICAO classification of *Aerial Work* can generally be aligned with Australia's *Aerial Work* class above.



2.6.4 The ICAO classification of *General Aviation* can generally be aligned with Australia's **General and Freight-only Activities** class above, but the ICAO classification excludes activities conducted on a commercial basis except for flying training.

2.6.5 It is important to note that within each of Australia's classifications, there is no single common aviation safety standard that applies. Regulatory requirements within each class vary, depending on aircraft size, complexity, number of aircraft occupants, area of operation and a number of other factors that collectively determine the risks to safety posed by a particular aircraft activity. These risks are managed jointly by CASA and the aviation community. CASA establishes appropriate rules and standards in respect of aircraft certification, continuing airworthiness, operational restrictions, and personnel licensing requirements and it is for the aviation community to ensure that the risks of their activities are identified and adequately mitigated.

2.7 Other Classification Systems

2.7.1 The regulations made under the *Civil Aviation Act* will focus more on specific aviation activities than on regulating any particular class of operation in a homogeneous way. This will enable CASA to identify any number of classes or groupings of aviation activities as may be required or appropriate for regulatory purposes, risk analysis, accident investigation purposes, safety purposes and statistical and other purposes. For example, CASA will be able to identify and group all activities that require AOCs.

2.8 Safety Goals by Class, Subclass and Activity

2.8.1 CASA will take an active role in contributing to the safety of passenger-carrying activities. However, it will generally only intervene in non-passenger-carrying activities to:

- a. Control entry;
- b. Ensure crew have an understanding of baseline rules and the competencies necessary to carry out ground and in-flight tasks relating to the safety of flight;
- c. Ensure that participants are aware of the risks they face — i.e. through compulsory warnings and waivers — and how they may be mitigated, e.g. through education and training; and
- d. Prosecute or remove from the aviation community those who endanger the lives or property of people on the ground or the occupants of other aircraft or are a reckless endangerment to themselves.



2.9 Modifying Factors

2.9.1 In practice, the quantity of resources allocated to various activities may be modified by a number of factors including:

- a. *Safety Functioning* — Aside from the consequences of an accident (defined in terms of public concern and cost), total risk is also influenced by accident probability. The relative allocation of resources to an activity would be increased if a large proportion of its members were operating unsafely.
- b. *Size of Operations* — The number of organisations in each class, subclass or activity and the size of each would also affect resource allocation. Growing and large industry sectors would be allocated more resources by CASA.
- c. *Availability of Resources* — Since the skills that CASA needs to contribute to safety may differ from one activity to another, there may be situations where there are insufficient numbers of appropriately skilled staff to meet resource allocation guidelines. CASA may apply a range of measures to mitigate safety risks in these circumstances.

Signed

**Director of Aviation Safety and
Chief Executive Officer**