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General  
Aviation

# General Aviation

## *Ensuring a vibrant general aviation industry*

### **Issues Paper Themes**

- > The impact of micro-economic reform on general aviation businesses
- > Strategies for ensuring that viability and growth are not impeded by airport access constraints
- > Meeting increased skilled labour costs and improving recruitment and retention of staff
- > The role of governments in protecting secondary airport infrastructure and in providing for new infrastructure
- > Investing in new aircraft

### **What the submissions said**

There were mixed views on the health of the general aviation industry, reflecting a varying level of performance across the sector.

Several industry associations representing general aviation users were critical of the privatisation of secondary airports and subsequent cost increases for general aviation users. Some airports, on the other hand, argued that that privatisation has resulted in much-needed investment at general aviation airports. These submissions argued operators needed to recognise that a commercial return is required for ongoing investment.

Several industry associations representing general aviation users complained of over-regulation by the Civil Aviation Safety Authority (CASA), particularly when compared to the self-administered safety arrangements for the recreational sector. There was some support for extending the self-administration model to other sectors of the industry. There were also claims that security requirements went beyond those required for small aircraft and airports.

Some respondents called for government incentives to replace ageing aircraft and for other forms of assistance, while others argued that general aviation needs to operate on a user-pays basis and should not expect subsidies.

### **General aviation in Australia – an important role**

General aviation services play an important role in supporting other industries and in providing broader community support including:

- as an enabler for agriculture and mining;
- contributing to broader community programs such as medical evacuations, aerial fire-fighting services and law enforcement activities; and
- providing a public transport service in remote areas of Australia, in the same way that taxis might in metropolitan areas.

The general aviation industry also plays an important support role for the wider aviation industry through the training of commercial pilots and engineers.

## What is general aviation?

The term general aviation, or GA, refers to a range of aviation-related activities, individuals and businesses, primarily occurring in smaller aircraft and at secondary airports, usually not involving regular public transport (scheduled) services.

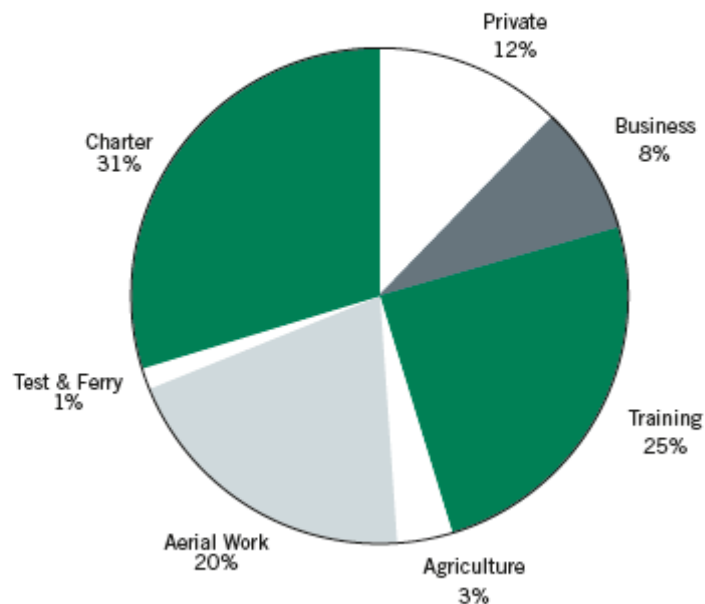
These activities include:

- charter and low-capacity passenger-carrying operations;
- business flights;
- aerial agriculture;
- commercial pilot training;
- aeromedical services such as search and rescue, aerial fire fighting and Coastwatch;
- other aerial work such as surveying and photography;
- aircraft maintenance and repair work;
- private pilot training;
- sports aviation; and
- recreational flying.


Figure 5.1 shows relative activity levels of general aviation aircraft in Australia.

**Figure 5.1** General aviation flying hours: Australia 2007

Source: BITRE 2008



Due to the regulatory framework in a number of countries, general aviation activity commonly refers to activity carried out with aircraft of less than 5,700 kg maximum takeoff weight, or alternatively, to civil aviation activity other than scheduled airline services.



The General Aviation Action Agenda Strategic Industry Leaders Group, which reported to the Government earlier this year, noted a number of common issues affecting all small aircraft operators and the businesses that support them.

One issue which has become important in the general aviation industry over recent decades is the cut-off point at which smaller aircraft, those below 650 kg, are subject to alternative arrangements for oversight of safety and security. Under limited operational circumstances (including day-time operations, visual flight rules, uncontrolled airspace, maximum of two occupants) these aircraft may be operated under self-administration arrangements.

Self administration arrangements currently apply to the sports aviation sector, where peak bodies in each aviation sport administer regulations set by CASA. These peak bodies issue licences and certificates, carry out safety surveillance and provide other regulatory services.

CASA then audits the activities of the peak bodies to ensure compliance with regulatory standards. This approach means CASA only devotes a relatively small level of resources directly to sports aviation, allowing more attention to be focussed on higher priority passenger-carrying operations.

Due to the differences in regulatory approach between the recreational and traditional general aviation sectors, some stakeholders define general aviation to exclude recreational aircraft activity.

## How are various sectors performing?

Data from the Bureau of Infrastructure, Transport and Regional Economics<sup>18</sup> demonstrate an overall flat level of growth in total general aviation flying hours from 1991 to 2007, with a peak activity of 1.88 million hours in 1997, a low of 1.64 million hours in 2004 and a return to growth over recent years to 1.83 million hours in 2007.

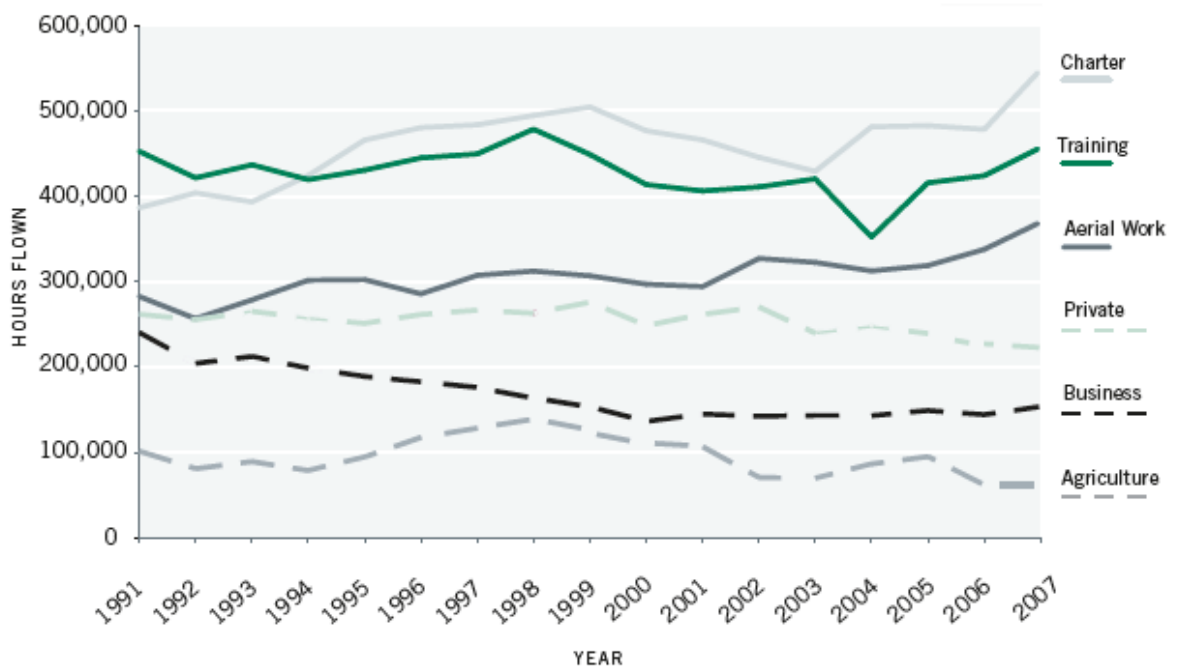
Figure 5.2 shows activity performance by sector. There is a notable decline in private and business flying hours, which coincides with strong growth in commercial airline activity in Australia. The graph also shows the cyclical trends in agricultural activity which tends to be severely impacted by drought conditions.

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<sup>18</sup> Bureau of Infrastructure, Transport, Regional Development and Local Government, 2008, General Aviation Survey 2007

**Figure 5.2** General aviation flying hours by sector: Australia 1991–2007

Source: BITRE 2008



In contrast to the decline in private general aviation flying hours, recreational aircraft activity has grown significantly over the past decade, from 70,500 hours in 1996 to over 138,000 hours in 2007.

These countervailing trends reflect a long-term structural adjustment within the industry as enthusiasts move into the lower-cost recreational sector. While having its origins in ultra-light aircraft, the recreational sector now includes many modern, sophisticated aircraft types, often administered under a lower-cost regulatory regime than those directly overseen by CASA.

Recent growth in commercial airline activity, particularly in the Asia-Pacific region, has generated growth opportunities for aviation training businesses. A number of highly successful aviation training businesses have developed in Australia. These businesses are characterised by an ability to form commercial partnerships with airlines and education providers, investment in new training aircraft and equipment, and a presence in both metropolitan and non-metropolitan airports.

Further information on aviation training is contained in Chapter 6 of the Green Paper.

In other key sectors, aerial work has grown moderately (1.4 per cent per annum from 1991 to 2007), as has charter (1.3 per cent per annum over the same period), while agricultural activity has declined significantly over the last decade due to long-term drought.

There are also geographic differences within Australia in performance, with the mining boom generating demand for charter services and aerial work in Western Australia and other mining-intensive areas and declines in areas focused on agricultural production.

## An industry in transition

The General Aviation Action Agenda found that the general aviation industry has been going through a structural shift worldwide. An industry that matured through the post-war years has experienced intense competition for people's leisure time and financial commitment through the



1980s and 1990s.

Also, general aviation's previous competitive edge in long-distance transport has been diminished by improved airline access and cheaper domestic airline fares. Where it was once economic to fly one or two people interstate, airline transport has become more competitive. Improvements in roads and modern cars have also outstripped product improvements in small aeroplanes for transport across shorter distances.

Until the late 1980s, the Australian Government was actively engaged as the owner-operator of many of Australia's airports, either through the Federal Airports Corporation (FAC), established in 1987 to manage 22 of Australia's major airports, or through the 234 Aerodrome Local Ownership Plan (ALOP) airports which were co-funded with individual local government authorities.

In 1997 the Australian Government commenced airport privatisation under a series of long-term leases of airports then operated by the FAC. The current framework encourages private businesses to negotiate business outcomes with minimal government intervention. This has resulted in significant investment in Australian airports.

However, the privatisation of secondary airports has resulted in general aviation operators being exposed to a commercial charging regime not fully experienced under the previous system of government ownership. This has exposed vulnerabilities in the business models of many general aviation businesses.

In many circumstances, rents levied on hangars, commercial premises and land have been increasing, particularly at the major metropolitan general aviation airports. The leases concerned are commercial agreements between airport lessees and their tenants and are a relatively new development in the industry. It is likely that these price changes have led to a reorganisation of general aviation activity.

The General Aviation Action Agenda Leaders Group found that the technical skills required to meet the technical, operational and regulatory requirements of small aviation businesses do not often translate to the business skills required to manage a rapidly changing business environment.

In addition, some sectors have not invested for growth but have relied on mature business models that have become less competitive over time. General aviation businesses often require significant capital investment to realise their growth potential. While there is evidence this investment is occurring in some parts of the industry, there have been concerns raised by some stakeholders that further incentives from governments are required to secure their future.

## **Key challenges**


### **Airport privatisation**

While the General Aviation Action Agenda found general industry support for commercial arrangements at airports, there have been continuing calls to revert to government intervention in arrangements between airport lease holders and airport users. There are potentially conflicting objectives in maintaining commercial arrangements at airports while increasing government interventions.

### **Regulatory environment**

There is strong support for maintaining high safety standards in the general aviation industry but concern about the pace of the CASA regulatory reform process. There is continuing debate around the potential for self-administration of some safety functions in privately-owned, non-commercial general aviation operations. Self-administration is seen as a major contributor to the growth of the recreational aviation sector.

Changes to security regulatory requirements since 2001 have created challenges for some pilot



training organisations, particularly where training of foreign pilots represents a significant part of the business. Background identity checking requirements are now more rigorous and time-consuming.

## **Skills**

There is a general need for improved workforce planning in the aviation industry with a particular need in the general aviation sector. Some general aviation businesses have not remained competitive in a strong employment market, having lost trained workers to airlines and facing challenges in recruiting new workers.

## **Ageing aircraft**

Well-maintained aircraft can operate safely for at least 20 years, but eventually will need to be replaced. Many general aviation aircraft built in the 1970s and purchased in large numbers when government subsidies were available are now in need of replacement. The cost of replacement aircraft, which are able to be financed over lengthy periods, needs to be included in business planning as part of businesses' ongoing cost base. While aircraft are eligible for accelerated depreciation under current tax arrangements, many submissions have called for further acceleration of taxation depreciation, investment allowances or direct subsidies to purchase aircraft. The General Aviation Action Agenda recommended direct subsidy of 50 per cent of replacement aircraft costs by government, subject to a commercial business case.

## **New technologies and fuels**

There has been significant development in small aircraft technology in recent years, with manufacturers utilising new composite materials, modern avionics equipment and alternative engine design. It is important that industry is positioned to invest in new technology and that regulatory oversight keeps up with technology developments so as to not impede innovation in the industry.

While there are many reasons the development of alternative fuels may in time prove a welcome innovation for the aviation industry, many older engine types in the general aviation fleet continue to be dependent on aviation gasoline (avgas). There was some concern raised in the General Aviation Action Agenda process on the reliability of future supplies of avgas and the ability of the industry to adapt to new fuels.

## **General aviation in crisis? – findings of the General Aviation Action Agenda**


Several submissions to the Aviation Issues Paper have stated that traditional (i.e. non-recreational) general aviation is in long-term decline. It is true that there has been a long-term decline trend in general aviation activity since peak activity periods of ten years ago. However, that trend appeared to level out in 2003-04 with the industry returning to growth since that time. Statistics for 2007 show that industry activity grew by eight per cent over 2006 levels.

As well as long-term structural changes, the Australian industry was adversely impacted by the fuel contamination crisis of 1999. As noted previously, there has also been a marked disparity between different general aviation sectors.

The Australian experience reflects an earlier study by the UK Civil Aviation Authority<sup>19</sup> which noted 'the composite picture is one where general aviation appears to be roughly in steady-state, or perhaps experiencing slight growth.' The UK Review also noted (p ii), 'Although often presented as a sector in decline, this Review has not found evidence of this. Many parts of general aviation are

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<sup>19</sup> UK Civil Aviation Authority, Strategic Review of General Aviation, July 2006



growing strongly, in particular the business aviation market and the smaller end of the market (such as micro-lights and helicopters).<sup>7</sup>

Although the reliance on general aviation for services in regional and remote areas is likely to be less in the UK, the trends in activity show marked similarities.

The General Aviation Action Agenda also found evidence, through the CASA Aircraft Register, of strong growth in new aircraft coming onto the Australian register over the last five years. It might be expected that this investment is following similar trends to the activity data, where increased charter, training and aerial work is being reported. The CASA data does not include those aircraft registered by Recreational Aviation Australia (RA-Aus) which has a registration base of approximately 2,500 aircraft across Australia.

The Government does not consider the case has been made for direct or indirect taxpayer-funded investment in new or replacement aircraft. In addition to evidence of recent strong investment in new aircraft made independently of any additional subsidies, it should be noted that the investment in new aircraft encouraged in the late 1970s may also have indirectly contributed to the present situation where Australia's small aircraft fleet is over-represented by aircraft which are thirty-years old.

## **Innovation – harnessing the growth**

There is widespread consensus from stakeholder submissions that the self-administration arrangements under which recreational aviation activity occurs has enabled that sector to grow in a way that has not been reflected in the traditional private general aviation sector. The extent to which growth in recreational activity reflects transfer from the traditional sector compared to new participants is unclear. In any case, RA-Aus has reported annual membership growth in excess of 35 per cent, with RA-Aus aircraft registrations growing at 15 per cent per annum. This is in addition to the growth of RA-Aus flight training facilities that are expanding at a rate of 16 per cent per annum.


Australia also has several innovative aircraft manufacturers, including Gippsland Aeronautics, which designs and manufactures aircraft such as the GA8 Airvan and GA200C Fatman, and Jabiru, a manufacturer of both factory-built, kit aircraft and aircraft engines. These companies have had significant export success with innovative and class-leading aircraft. The Government supports these companies through the Export Market Development Grants (EMDG) scheme.

EMDG encourages small and medium sized Australian businesses to develop export markets by reimbursing up to 50 per cent of eligible export promotion expenses in a financial year above a threshold of \$15,000, for any overseas market except New Zealand. Eligible businesses can receive a maximum of seven taxable grants of up to \$150,000 each.

Although Australia relies on imported aircraft for the overwhelming majority of its aircraft and components, Australia also exported \$353 million worth of aircraft and components in 2007.

For Australian aircraft manufacturers to make the most of export opportunities, it is preferable to have certifications issued by Australia's safety regulatory, CASA, recognised in other countries, rather than needing to duplicate the certification process. A key role of the Aerospace Industry Regulatory and Certification Advisory Panel is to assist CASA with concluding new international certification agreements. In November 2006 a Bilateral Aviation Safety Agreement was finalised with the United States, under which the US can accept certifications and approvals issued by CASA. Negotiations for similar arrangements are underway with other significant aerospace countries.

There have also been major innovations introduced into flight training practices over recent years. In addition to accumulating experience through hours in the air, modern training utilises flight simulators to allow trainee pilots to safely and efficiently experience a wide variety of flying conditions before taking to the skies. While capital-intensive initially, flight simulation offers



efficiencies and training approaches that complement traditional training techniques.

Some flight training schools have also benefited from partnering with client airlines, which provide certainty and improve outcomes for both flying schools and airlines. This has proved particularly helpful during recent shortages of pilots, as it helped to manage the problem of flight instructors being recruited by airlines without regard to future training needs. In some cases, airlines have released second officers to training schools for agreed periods to ensure continuity of training.

There is also scope to improve innovation in the delivery of safety services to the general aviation industry. The Government's priority for CASA to complete implementation of its regulatory reform process has been widely supported in industry submissions. In particular, completion of Civil Aviation Safety Regulation Part 135 (Air transport operations – small aeroplanes), Part 145 (Maintenance organisations) and Part 149 (Recreational aviation administration organisations) will allow industry to improve its safety outcomes and remove regulatory inefficiencies.

## Export opportunities – training services for our region

Australia has become a growing exporter of aviation-related services in recent years. These are services other than the transport of people and goods by airlines and include the provision of technical assistance and flight training.

### Examples of successful Australian exporters of aviation-related services

**Aviation Compliance Solutions** is one of a small number of audit organisations accredited by the International Air Transport Association to conduct aviation operational safety audits for airlines. The company's audits cover areas such as flight operations, safety management, aircraft maintenance, cabin safety, cargo and ground handling, flight planning and security. It has conducted audits for 65 per cent of China's airlines – including Air China – and is active in attempting to secure an even greater market share in China.

**Flight Training Group:** Flight Training Group, operator of Flight Training Adelaide, is another example of a successful aviation-related services exporter. The college provides professional airline pilot training for many of the world's leading airlines, including Qantas, Cathay Pacific Airways, China Airlines, Emirates, JAL Express, Air China, Vietnam Airlines and Dragon Air.

## What the submissions said

While aviation-related service exports are not separately identified in published statistics, some submissions indicated that a number of firms that began by providing services to the domestic aviation industry are now achieving considerable success in international markets. Australia's skilled flight educators, large amount of available airspace and high quality aviation infrastructure have enabled it to become a successful provider of flight training services.

With continuing growth in international aviation expected over the medium to longer-term, there is considerable potential for further expansion in the value of Australia's aviation-related services exports. For instance, the rapid growth of new low-cost airlines in the Asia-Pacific is creating strong demand for Australian pilot training services.

The Government recognises the significant export growth opportunities in Australia's regional areas, where infrastructure costs are lower and airspace is less restricted by competing airline activity than in the major metropolitan centres. The Government encourages industry to pursue sustainable regional growth opportunities, particularly in pilot and engineering training, by working with local council aerodrome operators to identify opportunities to establish and expand appropriate training facilities.

## Moving ahead or back to the future?

The general aviation industry has been through substantial change over the past twenty years. With major changes to its commercial and regulatory environment and demographics, the sector has found it difficult to agree on the best approach to maintaining its viability and growth into the future. Submissions received have highlighted a range of options. Broadly, these fall into two categories:

- those involving active government intervention, including direct funding, regulation of commercial arrangements at general aviation airports and subsidies for aircraft purchase; and
- those requiring the industry to operate on a user-pays basis and to move to business models that recognise changed commercial and regulatory circumstances.

The Government recognises the difficulties experienced by the industry in adjusting to a number of changes over a relatively short time, but does not believe the industry will benefit by returning to outdated business models, reliant on a regulatory environment that no longer exists. It is clear, however, that the industry will benefit from the certainty created by a coherent government industry plan to guide its progress into the future.

The Government's priorities for general aviation will focus on the two key areas presented by industry stakeholders through submissions to the Green Paper and through the report of the General Aviation Action Agenda.

They are to:

- improve the responsiveness and oversight of CASA through the establishment of a CASA Board and a renewed focus on the regulator's relationship with industry; and
- improve planning arrangements at Australia's leased federal airports to provide greater certainty to airport users on the future aeronautical uses of airports.

More information regarding these priorities is included in chapters 1 and 8.

## General aviation – the way forward

The Government recognises the difficulties faced by a number of general aviation businesses, particularly small businesses, over the last decade in transitioning to an increasingly commercial environment, but considers that a return to subsidies for this sector is not in the broader interests of the industry in improving its efficiency, performance and competitiveness.

The Government's policy will be to maintain high standards of safety and security for Australia's general aviation industry. A strong message from industry submissions and from the recent General Aviation Action Agenda report was that maintaining safety and security standards was critical to maintaining confidence in the industry and to preventing low-cost, low-safety operators from undermining viable business markets. To assist this process, the Government proposes to take the following initiatives:

- ensure CASA finalises its regulatory reform process to remove unnecessary regulatory impediments to the ongoing viability and growth of the general aviation sector;
- consider options to help address the burden of regulatory charges, including charges on the general aviation sector
- through CASA, support continued work towards self-administration of private general aviation operations where it can enhance safety outcomes, noting the need to establish appropriate boundaries for the scope of self-administration;
- improve planning arrangements for leased federal airports to provide greater detail in airport Master Plans and improve certainty for general aviation operators;

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- support the continued development of Australia's aircraft manufacturing and assembly, components, parts and maintenance capability by minimising regulatory impediments; and
  - ensuring there are no unnecessary regulatory impediments to realising the growth potential of the flight training industry in Australia.