



Australian Government

Australian Transport Safety Bureau

ATSB TRANSPORT SAFETY REPORT

Aviation statistics AR-2008-057(4)

Final

Aviation statistics
1 January 1998 to 31 December 2008

January 2009



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Published by: Australian Transport Safety Bureau
Postal address: PO Box 967, Civic Square ACT 2608
Office location: 15 Mort Street, Canberra City, Australian Capital Territory
Telephone: 1800 020 616; from overseas + 61 2 6257 4150
Accident and incident notification: 1800 011 034 (24 hours)
Facsimile: 02 6247 3117; from overseas + 61 2 6247 3117
E-mail: atsbinfo@atsb.gov.au
Internet: www.atsb.gov.au

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ISBN and formal report title: see 'Document retrieval information' on page iv.

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DOCUMENT RETRIEVAL INFORMATION

| Report No. | Publication date | N^o. of pages | ISBN |
|-------------------|-------------------------|--------------------------------|-------------------|
| AR-2008-057(4) | January 2009 | 23 | 978-1-921490-68-2 |

Publication title

Aviation statistics: 1 January 1998 to 31 December 2008

Prepared by

Australian Transport Safety Bureau
PO Box 967, Civic Square ACT 2608 Australia
www.atsb.gov.au

Publication No.

INFRA-08249

Abstract

This report provides aviation accident and incident, collectively termed occurrence, data for the period 1 January 1998 to 31 December 2008. This data was provided to the Australian Transport Safety Bureau by 'responsible persons' as defined in the Transport Safety Investigation Regulations 2003, Part 2.5. The data excludes non-VH registered operations in the sport aviation category, and is current as at 31 December 2008.

The data will be adjusted quarterly to reflect new information received during the reporting period.

THE AUSTRALIAN TRANSPORT SAFETY BUREAU

The Australian Transport Safety Bureau (ATSB) is an operationally independent multi-modal bureau within the Australian Government Department of Infrastructure, Transport, Regional Development and Local Government. ATSB investigations are independent of regulatory, operator or other external organisations.

The ATSB is responsible for investigating accidents and other transport safety matters involving civil aviation, marine and rail operations in Australia that fall within Commonwealth jurisdiction, as well as participating in overseas investigations involving Australian registered aircraft and ships. A primary concern is the safety of commercial transport, with particular regard to fare-paying passenger operations.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and Regulations and, where applicable, relevant international agreements.

Purpose of safety investigations

The object of a safety investigation is to enhance safety. To reduce safety-related risk, ATSB investigations determine and communicate the safety factors related to the transport safety matter being investigated.

It is not the object of an investigation to determine blame or liability. However, an investigation report must include factual material of sufficient weight to support the analysis and findings. At all times the ATSB endeavours to balance the use of material that could imply adverse comment with the need to properly explain what happened, and why, in a fair and unbiased manner.

Developing safety action

Central to the ATSB's investigation of transport safety matters is the early identification of safety issues in the transport environment. The ATSB prefers to encourage the relevant organisation(s) to proactively initiate safety action rather than release formal recommendations. However, depending on the level of risk associated with a safety issue and the extent of corrective action undertaken by the relevant organisation, a recommendation may be issued either during or at the end of an investigation.

The ATSB has decided that when safety recommendations are issued, they will focus on clearly describing the safety issue of concern, rather than providing instructions or opinions on the method of corrective action. As with equivalent overseas organisations, the ATSB has no power to implement its recommendations. It is a matter for the body to which an ATSB recommendation is directed (for example the relevant regulator in consultation with industry) to assess the costs and benefits of any particular means of addressing a safety issue.

About ATSB investigation reports: How investigation reports are organised and definitions of terms used in ATSB reports, such as safety factor, contributing safety factor and safety issue, are provided on the ATSB web site www.atsb.gov.au.

ABBREVIATIONS

| | |
|--------------|------------------------------------------------------------|
| AOD | Aviation Occurrence Database (Superweb) |
| ATSB | Australian Transport Safety Bureau |
| BITRE | Bureau of Infrastructure, Transport and Regional Economics |
| SIIMS | Safety Investigation Information Management System |
| TSI | Transport Safety Investigation Act/Regulations 2003 |

EXPLANATORY NOTES

| Reference | Notes |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Introduction | <ul style="list-style-type: none"> → The data contained in this document is dynamic and subject to change based on additional information received post publication. → Where 2008 data has been referred to in this report, this includes data up to 31 December 2008. |
| Table 1 | <ul style="list-style-type: none"> → Data includes all occurrences including non-VH registered recreational aircraft and parachute accidents not specifically relating to aircraft safety. → The significant increase in incident numbers from 2003 are the result of a healthier industry wide reporting regime supported largely with the introduction of the TSI in 2003 which provided specific guidelines for mandatory reporting requirements. |
| Tables 2 to 5 | <ul style="list-style-type: none"> → Recreational accident numbers exclude non-VH registered aircraft. → During the 10-year reporting period, there were 24 accidents across all categories that involved multiple aircraft including one accident involving both a VH and non-VH registered aircraft (ATSB reference number 200707452 refers). |
| Tables 6 to 9 | <ul style="list-style-type: none"> → Twelve (12) accidents resulted from parachute operations where aircraft safety was not a factor. These have <u>NOT</u> been included in the data. → The data excludes non-VH registered recreational aircraft. → In 2007, a VH- registered flying training aircraft collided with a non-VH registered ultralight resulting in fatal injuries to the pilot of the ultralight only. This accident has <u>NOT</u> been included in the fatality numbers. → The fatality number now include ground fatalities previously excluded from this publication |
| Tables 10 to 12 | <ul style="list-style-type: none"> → Rate data applies to VH-registered aircraft only. → The spike in the 2000 and 2005 fatality number and rate for low capacity air transport is attributed to two accidents, which collectively resulted in 23 fatalities (ATSB investigation reports 200002157 and 200501977 refer). → Hours flown data is provided courtesy of the Bureau of Infrastructure, Transport and Regional Economics. → Totals and grand totals are an aggregate of each group, not an average. |

| | |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Tables 13 & 14</p> | <ul style="list-style-type: none"> ➔ Includes a fatal mid-air accident between a VH and non-VH registered aircraft that resulted in a fatality to the non-VH aircraft. The VH aircraft landed safely sustaining minor damage only. ➔ An accident may have multiple aircraft associated with it. This table is a distinct count of accidents only and excludes non-VH registered recreational aircraft. ➔ The total count for Table 13 and 14 for 'Fatal' and 'Non-Fatal' was correct in the previous publication of these statistics; however, the distribution of totals for individual states was corrupted during the transfer to the on-line document. These have been corrected. ➔ 'Other' – VH registered aircraft operating outside the mainland Australia, Tasmanian and Australian territories 12 nautical mile limit. |
| <p>Tables 15 & 16</p> | <ul style="list-style-type: none"> ➔ 'Other' - VH-registered aircraft operating outside the mainland Australia, Tasmanian and Australian territories 12 nautical mile limit. |

1 INTRODUCTION

1.1 Background to the report

The ATSB maintains its own database, the Safety Investigation Information Management System (SIIMS), in which details of all reported occurrences are recorded.

Occurrences are those notifications received by the ATSB that are assessed to meet accident and incident definitions for the purpose of entry into SIIMS. The legal basis for this assessment changed from 1 July 2003 with the introduction of the *Transport Safety Investigation Act/Regulations 2003*.

Non-VH registered recreational aircraft data have not been included in these statistics.

Latest aviation statistics includes the following:

- a. Aviation occurrence data, 1998 to 2008
- b. Number of aviation accidents for air transport, general aviation and recreational aviation, 1998 to 2008
- c. Number of aviation fatalities for air transport, general aviation and recreational aviation, 1998 to 2008
- d. Accident rates per 100,000 hours flown for air transport and general aviation, 1998 to 2007
- e. Number of accidents by State/Territory, 1998 to 2008
- f. Number of fatalities by State/Territory, 1998 to 2008
- g. Number of birdstrikes for major aerodromes GAAP aerodromes and towered regional aerodromes, 2000 to 2008.

1.2 Aviation Occurrence Database (AOD)

The Aviation Occurrence Database - Superweb (AOD) is now available for public use. The AOD is available on the Aviation Statistics page of the ATSB's website at www.atsb.gov.au.

1.3 Avstats

The Bureau of Infrastructure, Transport and Regional Economics (BITRE), Aviation Statistics section (Avstats) routinely collects activity data for general aviation and commercial operations that include:

- hours flown
- aircraft type
- statistical grouping

Hours flown data for rate calculations provided by the BITRE are only available up to 2007. The 2008 data is expected to be available with the release of the 2009 3rd quarter report.

For more detail on Avstats data please visit the BITRE website.

1.4 Disclaimer

These data are supplied to the ATSB by responsible persons as defined in the Transport Safety Investigation Regulations 2003 Part 2.5.

The ATSB accepts no liability for any loss or damage suffered by any person or corporation resulting from the use of these data.

The data contained in SIIMS is dynamic and figures may change after the publication of this report.

2

AVIATION ACCIDENT AND INCIDENT DATA

2.1 Aviation occurrence data

Table 1: Total number of accidents, serious incidents and incidents by occurrence category and year, 1998 to 31 December 2008

| Occurrence category | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Accident | 230 | 196 | 224 | 203 | 164 | 157 | 167 | 133 | 103 | 153 | 180 | 1,910 |
| Serious incident | 1 | 7 | 9 | 9 | 8 | 6 | 20 | 28 | 24 | 41 | 64 | 217 |
| Incident | 4,991 | 5,377 | 5,764 | 5,491 | 5,841 | 4,856 | 5,129 | 6,712 | 7,483 | 7,787 | 7,833 | 67,264 |
| Total | 5,222 | 5,580 | 5,997 | 5,703 | 6,013 | 5,019 | 5,316 | 6,873 | 7,610 | 7,981 | 8,077 | 69,391 |

2.2 Number of aircraft involved in aviation accidents

Table 2: Total number of air transport¹ aircraft involved in accidents, 1998 to 31 December 2008

| Air transport | Injury level | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|---------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| High capacity | Fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Non-fatal | 1 | 8 | 3 | 3 | 3 | 1 | 1 | 1 | 2 | 3 | 3 | 29 |
| Low capacity | Fatal | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| | Non-fatal | 2 | 3 | 2 | 3 | 4 | 3 | 0 | 1 | 0 | 1 | 0 | 19 |
| Charter | Fatal | 2 | 3 | 3 | 4 | 4 | 2 | 0 | 1 | 1 | 2 | 3 | 25 |
| | Non-fatal | 39 | 18 | 24 | 28 | 16 | 25 | 15 | 8 | 9 | 14 | 23 | 219 |
| Total | Fatal | 2 | 3 | 4 | 4 | 4 | 2 | 0 | 2 | 1 | 2 | 3 | 27 |
| | Non-fatal | 42 | 29 | 29 | 34 | 23 | 29 | 16 | 10 | 11 | 18 | 26 | 267 |

¹ High capacity and low capacity are often collectively termed as regular public transport (RPT) or air transport operations

Table 3: Total number of general aviation aircraft involved in accidents, 1998 to 31 December 2008

| General aviation | Injury level | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Aerial work | Fatal | 4 | 1 | 5 | 5 | 1 | 3 | 3 | 2 | 4 | 3 | 5 | 36 |
| | Non-fatal | 47 | 40 | 43 | 37 | 22 | 31 | 41 | 27 | 18 | 26 | 32 | 364 |
| Business | Fatal | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 7 |
| | Non-fatal | 9 | 4 | 3 | 4 | 1 | 0 | 1 | 0 | 0 | 3 | 0 | 25 |
| Flying training | Fatal | 1 | 2 | 0 | 2 | 1 | 5 | 1 | 1 | 0 | 0 | 2 | 15 |
| | Non-fatal | 25 | 30 | 37 | 17 | 24 | 14 | 13 | 22 | 11 | 17 | 19 | 229 |
| Private | Fatal | 13 | 14 | 9 | 10 | 4 | 3 | 6 | 9 | 12 | 7 | 11 | 98 |
| | Non-fatal | 68 | 53 | 69 | 67 | 67 | 49 | 65 | 42 | 34 | 41 | 43 | 598 |
| Total | Fatal | 21 | 19 | 14 | 17 | 6 | 11 | 11 | 12 | 16 | 11 | 18 | 156 |
| | Non-fatal | 149 | 127 | 152 | 125 | 114 | 94 | 120 | 91 | 63 | 87 | 94 | 1216 |

Table 4: Total number of recreational aviation aircraft involved in accidents, 1998 to 31 December 2008

| Recreational | Injury level | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|----------------|--------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Ballooning | Fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Non-fatal | 1 | 0 | 2 | 3 | 1 | 3 | 1 | 0 | 1 | 2 | 3 | 17 |
| Gliding | Fatal | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 1 | 2 | 13 |
| | Non-fatal | 5 | 6 | 10 | 5 | 8 | 6 | 8 | 6 | 3 | 4 | 2 | 63 |
| Sport aviation | Fatal | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 |
| | Non-fatal | 0 | 2 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 3 | 1 | 11 |
| Total | Fatal | 2 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 3 | 1 | 2 | 16 |
| | Non-fatal | 6 | 8 | 14 | 8 | 10 | 9 | 9 | 7 | 5 | 9 | 6 | 91 |

Table 5: Total number of air transport, general aviation and recreational aviation aircraft involved in accidents, 1998 to 31 December 2008

| All categories | Injury level | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|----------------|--------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Grand total | Fatal | 25 | 23 | 18 | 22 | 10 | 14 | 12 | 18 | 20 | 14 | 20 | 199 |
| | Non-fatal | 197 | 164 | 195 | 167 | 147 | 132 | 145 | 108 | 79 | 114 | 126 | 1,574 |

2.3 Number of aviation fatalities

Table 6: Total number of air transport fatalities, 1998 to 31 December 2008

| Air transport | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|---------------|----------|-----------|-----------|-----------|-----------|----------|----------|-----------|----------|----------|----------|-----------|
| High capacity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Low capacity | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 23 |
| Charter | 7 | 10 | 11 | 10 | 12 | 8 | 0 | 3 | 2 | 2 | 6 | 71 |
| Total | 7 | 10 | 19 | 10 | 12 | 8 | 0 | 18 | 2 | 2 | 6 | 94 |

Table 7: Total number of general aviation fatalities, 1998 to 31 December 2008

| General aviation | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Aerial work | 5 | 2 | 9 | 9 | 1 | 7 | 4 | 2 | 9 | 3 | 6 | 57 |
| Business | 6 | 2 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 2 | 0 | 16 |
| Flying training | 1 | 2 | 0 | 2 | 1 | 7 | 2 | 1 | 0 | 0 | 3 | 19 |
| Private | 27 | 25 | 10 | 19 | 10 | 11 | 11 | 14 | 21 | 15 | 20 | 183 |
| Total | 39 | 31 | 19 | 30 | 12 | 25 | 23 | 17 | 30 | 20 | 29 | 275 |

Table 8: Total number of recreational aviation fatalities, 1998 to 31 December 2008

| Recreational | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Ballooning | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gliding | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 1 | 3 | 15 |
| Sport aviation | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 |
| Total | 2 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 4 | 1 | 3 | 18 |

Table 9: Total number of air transport, general aviation and recreational aviation fatalities, 1998 to 31 December 2008

| All categories | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Grand total | 48 | 42 | 38 | 41 | 24 | 34 | 24 | 39 | 36 | 23 | 38 | 387 |

2.4 Accident rates

Table 10: Air transport accident rates per 100,000 hours flown, 1998 to 2007

| Air transport | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------|-----------------|------|------|------|------|------|------|------|------|------|------|
| High capacity | Accidents | 0.14 | 1.13 | 0.39 | 0.38 | 0.42 | 0.13 | 0.11 | 0.11 | 0.21 | 0.30 |
| | Fatal accidents | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Fatalities | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Low capacity | Accidents | 0.70 | 1.05 | 1.05 | 1.20 | 1.92 | 1.52 | 0.00 | 1.00 | 0.00 | 0.63 |
| | Fatal accidents | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 |
| | Fatalities | 0.00 | 0.00 | 2.80 | 0.00 | 0.00 | 0.00 | 0.00 | 7.53 | 0.00 | 0.00 |
| Charter | Accidents | 8.29 | 4.17 | 5.68 | 6.92 | 4.53 | 6.33 | 3.13 | 1.87 | 2.10 | 2.94 |
| | Fatal accidents | 0.40 | 0.60 | 0.63 | 0.86 | 0.91 | 0.47 | 0.00 | 0.21 | 0.21 | 0.37 |
| | Fatalities | 1.42 | 1.98 | 2.31 | 2.16 | 2.72 | 1.88 | 0.00 | 0.62 | 0.42 | 0.37 |
| Total | Accidents | 2.96 | 2.13 | 2.15 | 2.52 | 1.97 | 2.24 | 1.03 | 0.75 | 0.75 | 1.16 |
| | Fatal accidents | 0.13 | 0.20 | 0.26 | 0.26 | 0.29 | 0.14 | 0.00 | 0.12 | 0.06 | 0.12 |
| | Fatalities | 0.47 | 0.67 | 1.24 | 0.66 | 0.88 | 0.58 | 0.00 | 1.12 | 0.12 | 0.12 |

Figure 1: Air transport accidents rates per 100,000 hours flown, 1998 to 2007

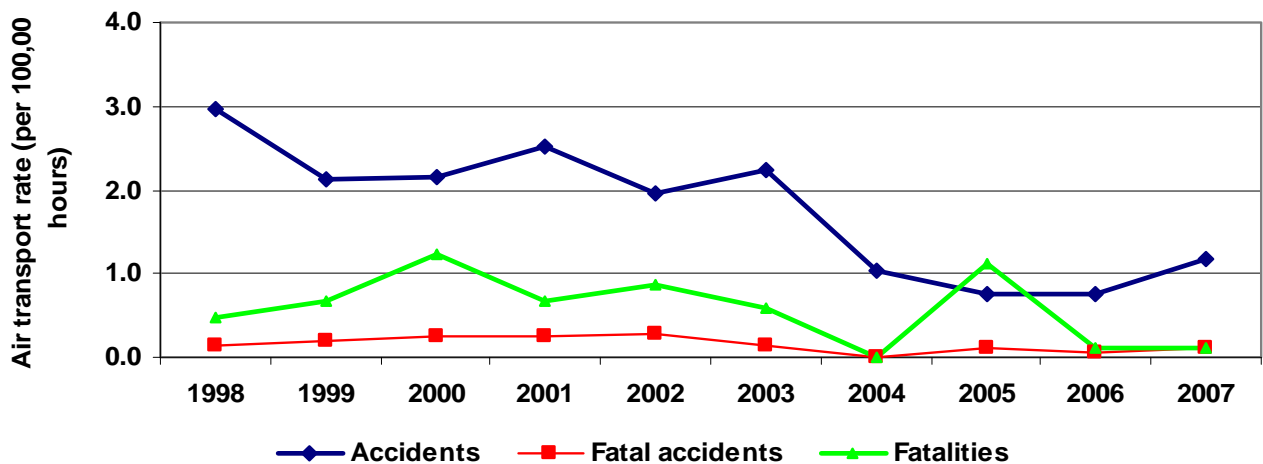


Table 11: General aviation accident rates per 100,000 hours flown, 1998 to 2007

| General aviation | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------------|------------------------|--------------|--------------|--------------|--------------|-------------|-------------|--------------|-------------|-------------|-------------|
| Aerial work | Accidents | 11.15 | 9.35 | 11.47 | 10.33 | 5.71 | 8.56 | 10.88 | 6.92 | 5.43 | 6.65 |
| | Fatal accidents | 0.87 | 0.23 | 1.19 | 1.23 | 0.25 | 0.76 | 0.74 | 0.48 | 0.99 | 0.69 |
| | Fatalities | 1.09 | 0.46 | 2.15 | 2.21 | 0.25 | 1.76 | 0.99 | 0.48 | 2.22 | 0.69 |
| Business | Accidents | 7.23 | 3.86 | 2.16 | 2.73 | 0.69 | 0.00 | 1.38 | 0.00 | 0.00 | 2.57 |
| | Fatal accidents | 1.81 | 1.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.69 | 0.00 | 0.00 | 0.64 |
| | Fatalities | 3.62 | 1.29 | 0.00 | 0.00 | 0.00 | 0.00 | 4.14 | 0.00 | 0.00 | 1.29 |
| Flying training | Accidents | 5.36 | 7.03 | 8.81 | 4.62 | 6.01 | 4.46 | 3.92 | 5.46 | 2.56 | 3.69 |
| | Fatal accidents | 0.21 | 0.44 | 0.00 | 0.49 | 0.24 | 1.17 | 0.28 | 0.24 | 0.00 | 0.00 |
| | Fatalities | 0.21 | 0.44 | 0.00 | 0.49 | 0.24 | 1.64 | 0.56 | 0.24 | 0.00 | 0.00 |
| Private | Accidents | 30.56 | 24.09 | 31.15 | 29.23 | 26.14 | 21.17 | 28.49 | 21.13 | 19.67 | 21.37 |
| | Fatal accidents | 4.90 | 5.03 | 3.59 | 3.80 | 1.47 | 1.25 | 2.41 | 3.73 | 5.25 | 3.12 |
| | Fatalities | 10.19 | 8.99 | 3.99 | 7.21 | 3.68 | 4.57 | 4.41 | 5.80 | 9.18 | 6.68 |
| Total | Accidents | 12.38 | 11.00 | 13.52 | 11.56 | 9.72 | 8.60 | 11.34 | 8.36 | 6.46 | 7.67 |
| | Fatal accidents | 1.53 | 1.43 | 1.14 | 1.38 | 0.49 | 0.91 | 0.95 | 0.97 | 1.32 | 0.86 |
| | Fatalities | 2.84 | 2.33 | 1.55 | 2.44 | 0.97 | 2.07 | 1.99 | 1.38 | 2.48 | 1.57 |

Figure 2: General aviation accident rates per 100,000 hours flown, 1998 to 2007

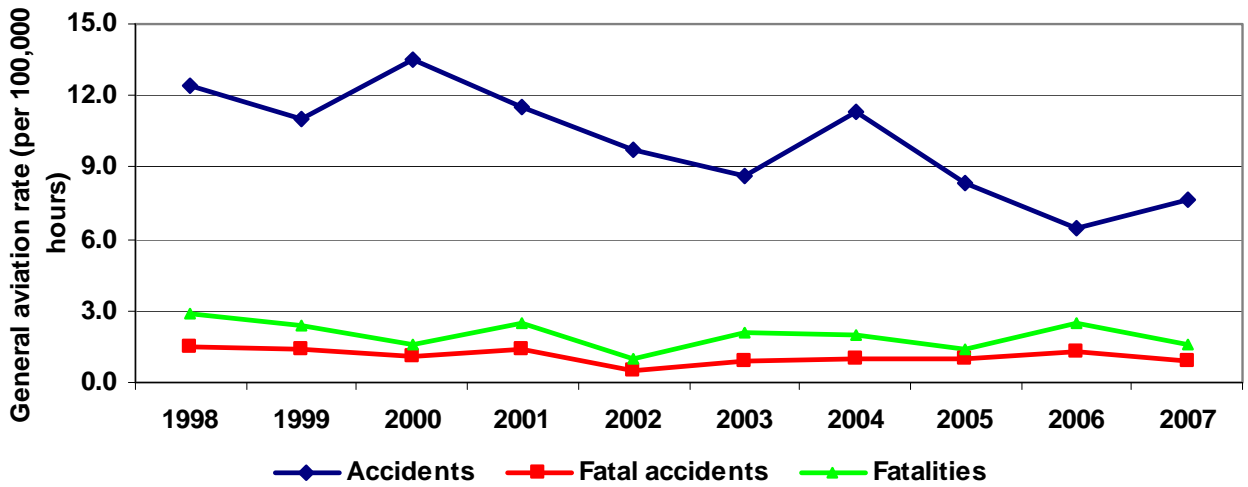
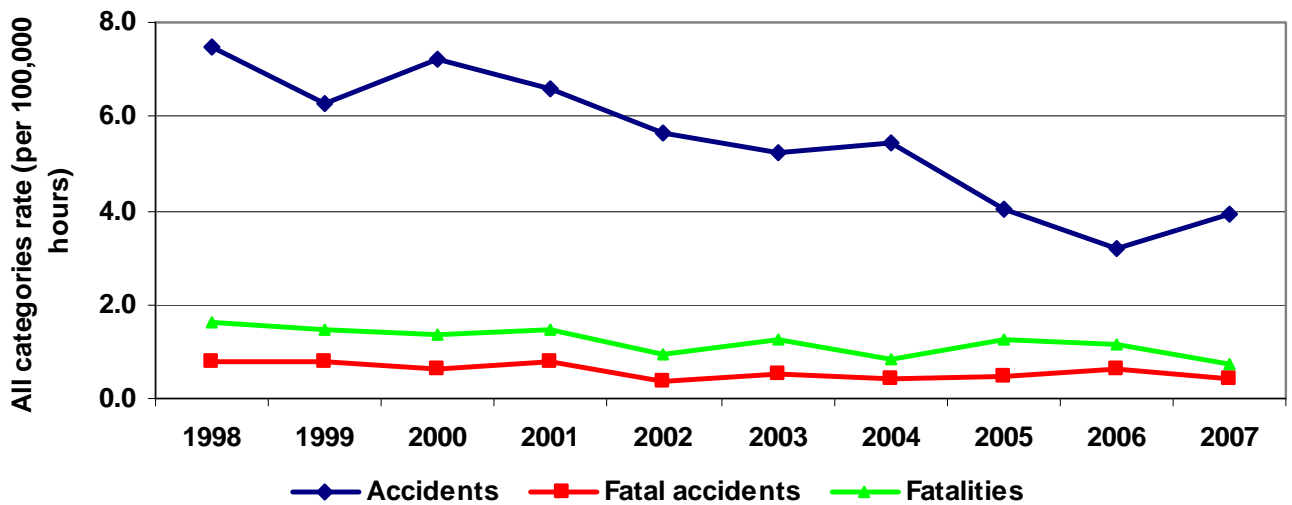


Table 12: Total air transport and general aviation accidents rates per 100,000 hours flown, 1998 to 2007

| All categories | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------|-----------------|------|------|------|------|------|------|------|------|------|------|
| Grand total | Accidents | 7.48 | 6.30 | 7.19 | 6.57 | 5.64 | 5.21 | 5.44 | 4.05 | 3.20 | 3.94 |
| | Fatal accidents | 0.80 | 0.78 | 0.65 | 0.77 | 0.38 | 0.50 | 0.41 | 0.49 | 0.60 | 0.43 |
| | Fatalities | 1.61 | 1.45 | 1.37 | 1.46 | 0.92 | 1.27 | 0.85 | 1.23 | 1.14 | 0.73 |

Figure 3: Total air transport and general aviation accident rates per 100,000 hours flown, 1998 to 2007



2.5 Aviation accidents by State/Territory

Table 13: Total number of accidents by State/Territory, 1998 to 31 December 2008

| State | Injury Level | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|-------|--------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| ACT | Fatal | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | Non-fatal | 3 | 2 | 1 | 1 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 12 |
| NSW | Fatal | 7 | 6 | 1 | 2 | 3 | 5 | 2 | 7 | 10 | 3 | 10 | 56 |
| | Non-fatal | 52 | 40 | 55 | 38 | 44 | 36 | 32 | 36 | 18 | 23 | 30 | 404 |
| NT | Fatal | 0 | 1 | 2 | 1 | 2 | 0 | 1 | 0 | 2 | 2 | 3 | 14 |
| | Non-fatal | 13 | 10 | 15 | 17 | 8 | 11 | 10 | 6 | 7 | 11 | 9 | 117 |
| QLD | Fatal | 7 | 7 | 8 | 8 | 3 | 3 | 3 | 6 | 4 | 1 | 6 | 56 |
| | Non-fatal | 59 | 41 | 52 | 44 | 35 | 31 | 46 | 27 | 19 | 29 | 25 | 408 |
| SA | Fatal | 1 | 3 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 9 |
| | Non-fatal | 12 | 14 | 8 | 12 | 9 | 7 | 10 | 9 | 3 | 9 | 8 | 101 |
| TAS | Fatal | 3 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 6 |
| | Non-fatal | 5 | 4 | 2 | 2 | 6 | 4 | 4 | 0 | 5 | 2 | 3 | 37 |
| VIC | Fatal | 2 | 2 | 3 | 3 | 2 | 0 | 4 | 3 | 3 | 5* | 1 | 28 |
| | Non-fatal | 21 | 26 | 25 | 20 | 15 | 20 | 21 | 12 | 10 | 17 | 20 | 207 |
| WA | Fatal | 5 | 2 | 2 | 4 | 0 | 4 | 1 | 1 | 1 | 4 | 3 | 27 |
| | Non-fatal | 28 | 24 | 29 | 31 | 25 | 16 | 16 | 14 | 14 | 17 | 25 | 239 |
| Other | Fatal | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Non-fatal | 1 | 2 | 5 | 2 | 0 | 0 | 4 | 2 | 1 | 3 | 2 | 22 |
| Total | Fatal | 25 | 22 | 18 | 22 | 10 | 14 | 12 | 18 | 20 | 15 | 23 | 199 |
| | Non-fatal | 194 | 163 | 192 | 167 | 142 | 129 | 143 | 106 | 78 | 111 | 122 | 1,547 |

Table 14: Total number of accidents by month and State/Territory, 2008

| State | Injury level | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|--------------|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| ACT | Fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Non-fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NSW | Fatal | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 10 |
| | Non-fatal | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 30 |
| NT | Fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 3 |
| | Non-fatal | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 9 |
| QLD | Fatal | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 6 |
| | Non-fatal | 2 | 0 | 2 | 4 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 4 | 25 |
| SA | Fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Non-fatal | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 2 | 8 |
| TAS | Fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Non-fatal | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 |
| VIC | Fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | Non-fatal | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 4 | 2 | 1 | 3 | 2 | 20 |
| WA | Fatal | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 |
| | Non-fatal | 0 | 2 | 1 | 1 | 4 | 1 | 3 | 4 | 3 | 1 | 1 | 4 | 25 |
| Other | Fatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Non-fatal | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 |
| Total | Fatal | 0 | 2 | 2 | 1 | 2 | 0 | 0 | 2 | 6 | 1 | 3 | 4 | 23 |
| | Non-fatal | 6 | 7 | 9 | 10 | 8 | 6 | 10 | 14 | 16 | 9 | 10 | 17 | 122 |

2.5 Aviation fatalities by State/Territory

Table 15: Total number of fatalities by State/Territory, 1998 to 31 December 2008

| State | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| ACT | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| NSW | 19 | 11 | 1 | 5 | 8 | 10 | 4 | 11 | 14 | 3 | 16 | 102 |
| NT | 0 | 1 | 2 | 1 | 5 | 0 | 1 | 0 | 3 | 3 | 4 | 21 |
| QLD | 12 | 16 | 20 | 16 | 8 | 9 | 4 | 20 | 13 | 1 | 9 | 128 |
| SA | 1 | 6 | 9 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 21 |
| TAS | 5 | 0 | 0 | 1 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 11 |
| VIC | 3 | 5 | 4 | 4 | 3 | 0 | 12 | 5 | 4 | 9 | 1 | 50 |
| WA | 8 | 2 | 2 | 8 | 0 | 9 | 2 | 1 | 2 | 6 | 8 | 48 |
| Other | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 48 | 42 | 38 | 40 | 24 | 34 | 24 | 39 | 36 | 22 | 38 | 387 |

Table 16: Total number of fatalities by month and State/Territory, 2008

| State | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|-----------|
| ACT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NSW | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 4 | 0 | 4 | 4 | 16 |
| NT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 4 |
| QLD | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 9 |
| SA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TAS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VIC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| WA | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 0 | 8 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 3 | 3 | 1 | 2 | 0 | 0 | 3 | 12 | 1 | 8 | 5 | 38 |

3 BIRDSTRIKE DATA

The birdstrike data provided below is for major aerodromes, General Aviation Airport Procedures (GAAP) aerodromes and towered regional aerodromes. The data includes strikes up to a 5 km radius from the aerodrome. The figures presented for 2008 are provisional numbers up to, and including, 31 December 2008.

Table 17: Birdstrikes at major aerodromes, 2000 to 31 December 2008

| Aerodrome | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Adelaide | 30 | 43 | 36 | 40 | 71 | 70 | 62 | 56 | 48 | 456 |
| Brisbane | 48 | 42 | 77 | 79 | 82 | 82 | 87 | 78 | 121 | 696 |
| Cairns | 34 | 37 | 41 | 66 | 64 | 109 | 64 | 103 | 102 | 620 |
| Canberra | 21 | 24 | 11 | 9 | 20 | 31 | 47 | 37 | 31 | 231 |
| Darwin | 30 | 29 | 72 | 66 | 98 | 118 | 69 | 77 | 85 | 644 |
| Gold Coast² | 12 | 23 | 22 | 37 | 24 | 42 | 36 | 31 | 31 | 258 |
| Hobart | 5 | 16 | 20 | 19 | 11 | 29 | 30 | 37 | 25 | 192 |
| Melbourne | 42 | 46 | 43 | 38 | 74 | 76 | 83 | 43 | 87 | 532 |
| Perth | 28 | 14 | 17 | 38 | 46 | 42 | 53 | 41 | 50 | 329 |
| Sydney | 67 | 58 | 61 | 76 | 108 | 102 | 85 | 102 | 96 | 755 |
| Total | 317 | 332 | 400 | 468 | 598 | 701 | 616 | 605 | 676 | 4,713 |

Table 18: Birdstrikes at GAAP aerodromes, 2000 to 31 December 2008

| Aerodrome | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Archerfield | 6 | 1 | 1 | 1 | 3 | 5 | 8 | 6 | 7 | 38 |
| Bankstown | 2 | 7 | 17 | 14 | 11 | 11 | 7 | 10 | 13 | 92 |
| Camden | 2 | 1 | 3 | 0 | 1 | 1 | 1 | 1 | 1 | 11 |
| Jandakot | 8 | 12 | 27 | 17 | 23 | 16 | 29 | 21 | 4 | 157 |
| Moorabbin | 5 | 6 | 9 | 7 | 11 | 12 | 7 | 10 | 10 | 77 |
| Parafield | 10 | 27 | 22 | 16 | 20 | 33 | 16 | 27 | 32 | 203 |
| Total | 33 | 54 | 79 | 55 | 69 | 78 | 68 | 75 | 67 | 578 |

² Gold Coast aerodrome was previously recorded as Coolangatta aerodrome.

Table 19: Birdstrikes at towered regional aerodromes, 2000 to 31 December 2008

| Aerodrome | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Albury | 4 | 7 | 6 | 2 | 10 | 10 | 10 | 15 | 11 | 75 |
| Alice Springs | 23 | 34 | 28 | 11 | 11 | 12 | 15 | 15 | 6 | 155 |
| Avalon | 5 | 2 | 3 | 2 | 1 | 15 | 5 | 8 | 8 | 49 |
| Coffs Harbour | 11 | 3 | 3 | 7 | 5 | 14 | 10 | 14 | 9 | 76 |
| Essendon | 2 | 6 | 5 | 3 | 6 | 8 | 13 | 7 | 8 | 58 |
| Hamilton Island | 2 | 6 | 2 | 2 | 5 | 9 | 10 | 10 | 6 | 52 |
| Launceston | 3 | 14 | 9 | 1 | 9 | 11 | 5 | 8 | 20 | 80 |
| Mackay | 4 | 13 | 16 | 8 | 32 | 24 | 17 | 11 | 12 | 137 |
| Maroochydore | 0 | 4 | 6 | 5 | 8 | 7 | 10 | 19 | 7 | 66 |
| Rockhampton | 15 | 14 | 14 | 41 | 33 | 34 | 40 | 23 | 37 | 252 |
| Tamworth | 2 | 1 | 15 | 22 | 13 | 10 | 19 | 18 | 23 | 123 |
| Townsville | 32 | 27 | 18 | 23 | 41 | 36 | 34 | 49 | 47 | 307 |
| Williamtown | 3 | 5 | 2 | 2 | 1 | 4 | 20 | 21 | 18 | 76 |
| Total | 106 | 136 | 127 | 129 | 175 | 194 | 208 | 218 | 212 | 1,506 |