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Department of Infrastructure, Transport, Regional Development and Communications

Bureau of Infrastructure and Transport Research Economics



STATISTICAL REPORT

Australian Aircraft Activity 2019

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Bureau of Infrastructure, and Transport Research Economics (BITRE)
Department of Infrastructure, Transport, Regional Development and Communications
GPO Box 501, Canberra ACT 2601, Australia
Telephone: (international) +61 2 6274 7210
Fax: (international) +61 2 6274 6855
Email: bitre@infrastructure.gov.au
Website: www.bitre.gov.au

Inquiries

Should you require additional information about the statistics contained in this publication:

Andrew Platt
Telephone: (international) +61 2 6274 6135
Fax: (international) +61 2 6274 7727
Email: AVSTATS@infrastructure.gov.au
Andrew.Platt@infrastructure.gov.au
Website: http://www.bitre.gov.au/statistics/aviation/general_aviation.aspx

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Explanatory notes

COVID19 and the aviation industry

The aviation sector has been severely disrupted by COVID19. For example, from June 2019 to June 2020, international passenger services decreased 98 per cent to 65,000 passengers carried while domestic passenger numbers were down 92 per cent. This is the only BITRE publication to provide estimates of general aviation activity and it forms part of BITRE's long running time series. It is important to have ongoing time series to assess the state of the industry over time.

Australian aviation statistics publications

In order to provide a complete, integrated statistical summary of all Australian aviation, BITRE conducts a range of surveys covering the full spectrum of flying activity.

Monthly surveys of airlines are conducted to compile estimates of:

- Passengers carried to, from and within Australia by Australian and foreign-registered airlines.
- Cargo carried to, from and within Australia by Australian and foreign-registered airlines.
- Changes to airfares charged on competitive Australian domestic routes.
- The on time performance of domestic airlines.
- Aircraft movements and flying activity by airlines.

Originally, the scope of these monthly airline surveys was limited to scheduled regular public transport (RPT) flights, but in 2011 the scope was expanded to include large charter flights that are similar in scale to RPT flights. The monthly surveys of charter activity compile estimates of:

- Passengers carried within Australia on charter flights.
- Cargo carried within Australia on charter flights.
- Aircraft movements and flying activity by charter operators.

To provide a complete statistical summary of Australian aviation, BITRE compiles an annual survey of Australian registered aircraft undertaking Commercial Air Transport and General Aviation activity. The annual "General Aviation Survey" compiles estimates of:

- Aircraft movements and flying activity by Australian-registered aircraft.

The results of these surveys are published in activity-specific reports:

- The monthly International Airline Activity report provides a summary of international passenger and cargo air travel to and from Australia. The report also provides an estimate of the movement of passengers between Australian airports by foreign-registered airlines. Statistics published in this report are compiled from the results of monthly surveys of international airlines that operate to/from Australia.
- The monthly Domestic Aviation Activity report provides a summary of domestic passenger and cargo air travel within Australia. This publication also provides statistics on the movement of passengers through regional airports and summary statistics for the movement of passengers on large charter flights. Statistics published in this report are compiled from the results of monthly surveys of domestic airlines and aviation charter companies that operate in Australia.
- The monthly Domestic On Time Performance report provides measures of the on time performance of key domestic airlines on competitive routes. Statistics published in this report are compiled from the results of monthly surveys of key domestic airlines operating in Australia.
- The monthly Domestic Air Fare Indexes release is a web-based report providing an index-based measure of changes in air fares on competitive routes over time. Statistics published in this report are compiled from information published on domestic airlines' websites for specific routes identified as competitive in the Domestic Aviation Activity report.
- The annual Australian Aircraft Activity report provides statistics on the flying activity of all Australian-registered aircraft. Key measures are the number of hours flown and the number of landings, classified by the type of flying activity being undertaken. Statistics published in this report are compiled from the results of the annual General Aviation Activity Survey.

Data sources

Survey questionnaires were despatched to owners or operators of all aircraft listed on the Australian Civil Aircraft Register. Responses were received for 84.8 per cent of aircraft in scope of the Survey. For aircraft where a response was not received, careful estimates were substituted, based on the average of responses by similar aircraft.

Not all aircraft in Australia are listed on the Australian Civil Aircraft Register. Owners of ultralight aircraft, gliders, weight shift aircraft and gyrocopters may instead be registered with their respective associations. Statistics for these aircraft types have been supplied courtesy of Recreational Aviation Australia, the Gliding Federation of Australia, the Hang Gliding Federation of Australia and the Australian Sport Rotorcraft Association.

BITRE statistical surveys are conducted under the authority of Air Navigation Regulation 2016 Part 2. This instrument is made under the *Air Navigation Act 1920*. The survey is compulsory, with penalties for non-compliance. BITRE wishes to thank aircraft owners and operators for their assistance with these statistical collections.

Please note

Landings include touch-and-go landings and alighting on water.

Location statistics provided in this report refer to the location where the aircraft is most frequently based. For some operations, this may be a significant distance away from where aircraft activity may occur.

Aircraft make is generally the manufacturer. However in cases where there have been changes to the company's name, structure or ownership with little change to the line of aircraft produced, common names (or the most recent name) may be used or retained.

Where figures have been rounded, differences may occur between the sums of component items and totals.

Symbols and other usages

na	Not applicable.
r	Revised.
-	Greater than zero but less than 50.
..	Not available for confidentiality or other reasons.

Abbreviations

ASRA	Australian Sport Rotorcraft Association
BITRE	Bureau of Infrastructure, and Transport Research Economics
CASA	Civil Aviation Safety Authority
C of A	Certificate of Airworthiness
GA	General Aviation
GFA	Gliding Federation of Australia
HGFA	Hang Gliding Federation of Australia
RA-Aus	Recreational Aviation Australia
RPT	Regular Public Transport

Highlights

Total hours flown increased over 2019

Total hours flown by Australian aircraft was 3.60 million in 2019, an increase of 5.5 per cent compared with the previous year (see Table 1). This is made up of VH registered aircraft and Sports and Recreations Association registered aircraft.

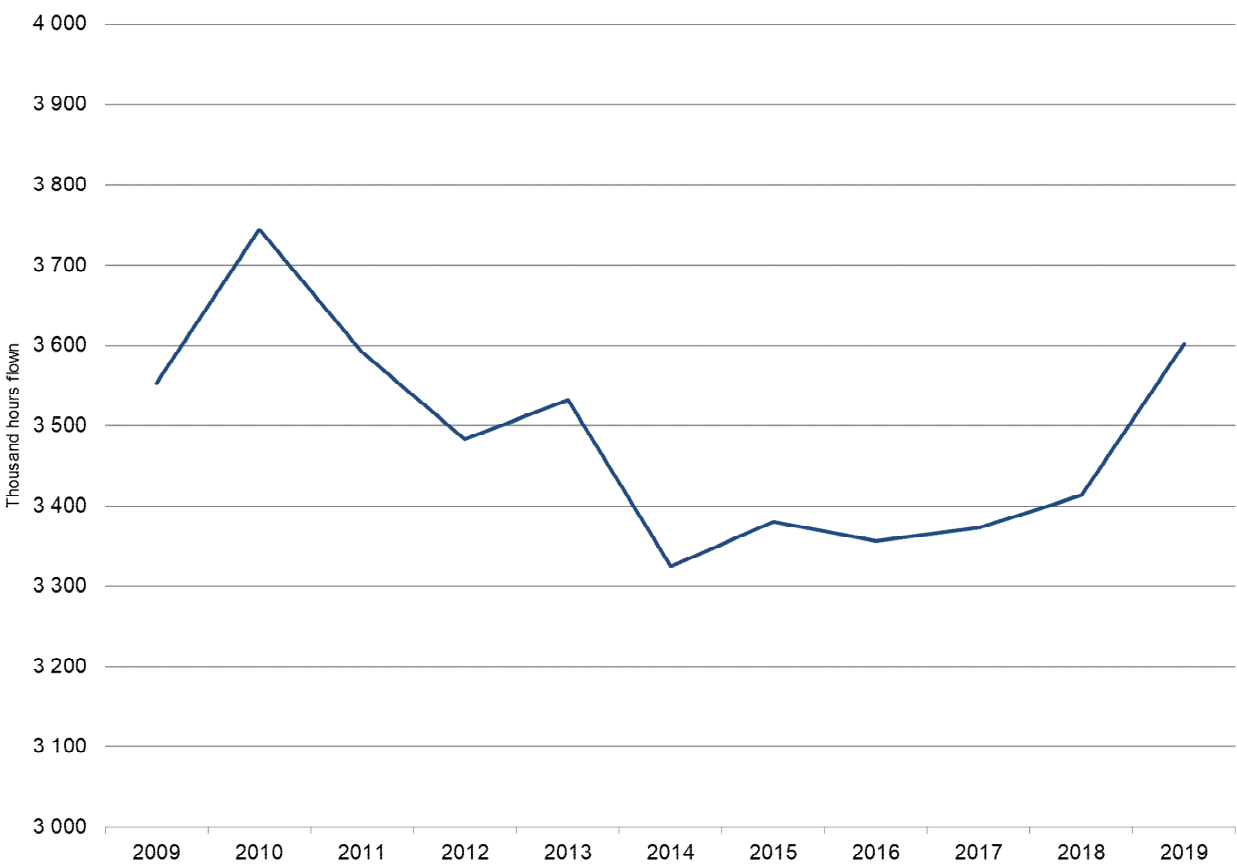
VH aircraft are registered on the civil aircraft register by the Civil Aviation Safety Authority (CASA). Sports and Recreations Association registered aircraft are registered with one of the four associations (Recreational Aviation Australia (RA-Aus), Gliding Federation of Australia (GFA), Hang Gliding Federation of Australia (HGFA) or the Australian Sport Rotorcraft Association (ASRA)). These associations operate under self-administration, with CASA setting the regulations and then working with the self-administering organisations to ensure the regulations are applied and enforced.

Total airline RPT (Regular Public Transport Services) flying hours rose 7.2 per cent in 2019 to 1.53 million hours (see Table 1). RPT refers to all air service operations in which aircraft are available for the transport of members of the public and are conducted in accordance with fixed schedules. Other VH-Registered aircraft flying hours rose 4.7 per cent in 2019 to 1.72 million hours (see Table 1).

The Sports and Recreation Associations registered sector recorded 356 thousand flying hours in 2019, an increase of 2.4 per cent compared to 2018 (see Table 1).

Figure 1 shows the flying hours performed by Australian Aircraft.

Figure 1 Australian Aircraft Fleet hours flown, (2009–2019)



The General Aviation and Commercial Air Transport VH-registered fleet

The total number of hours flown by General Aviation and Commercial Air Transport VH-registered aircraft for the year ending 31 December 2019 was 3.25 million. This consisted of 1.93 million hours in Commercial Air Transport and 1.32 million hours in General Aviation (see Table 7).

The total number of landings by General Aviation and Commercial Air Transport VH-registered aircraft for the year ending 31 December 2019 was 3.00 million. This consisted of 1.23 million landings in Commercial Air Transport and 1.76 million landings in General Aviation (see Table 7).

The general aviation and commercial air transport VH registered fleets include 13 812 aircraft on the Civil Aviation Aircraft Register (Table 3). The number of aircraft registered at 31 December 2019 represents an increase of 0.4 per cent over the number registered at 31 December 2018 (13 753 aircraft).

Commercial Air Transport consists of two sectors, Scheduled and Non-Scheduled. The Scheduled sector of Commercial Air Transport operates flights according to schedules drawn up to cover several months or even years at a time. Whereas the Non-Scheduled sector refers to Commercial Air Transport that operates without fixed or published flying schedules. Scheduled Commercial Air Transport recorded 1.53 million hours, while Non-Scheduled recorded 400 thousand hours. Within Scheduled, the largest activity was Domestic, with 1.00 million hours. While in Non-Scheduled, Passenger transport charters was the largest activity with 244 thousand hours (see Table 7).

General Aviation consists of five different sectors of flying. Aerial Work (485 thousand hours), Own Use Business (146 thousand hours), Instructional flying (423 thousand hours), Sport and pleasure flying (233 thousand hours), and Other flying (33 thousand hours). The largest flying activity in Aerial Work was Agricultural mustering, recording 153 thousand hours. Commercial Instructional flying activity made up the majority of the Instructional flying sector, recording 396 thousand hours. While within the Sport and pleasure flying sector the largest flying activity was Pleasure and personal transport, recording 125 thousand hours (see Table 7).

Figure 2 shows the flying hours performed by VH-registered aircraft by the major industry sectors.

Figure 2 VH-Registered fleet hours flown, by major industry sectors (2019)

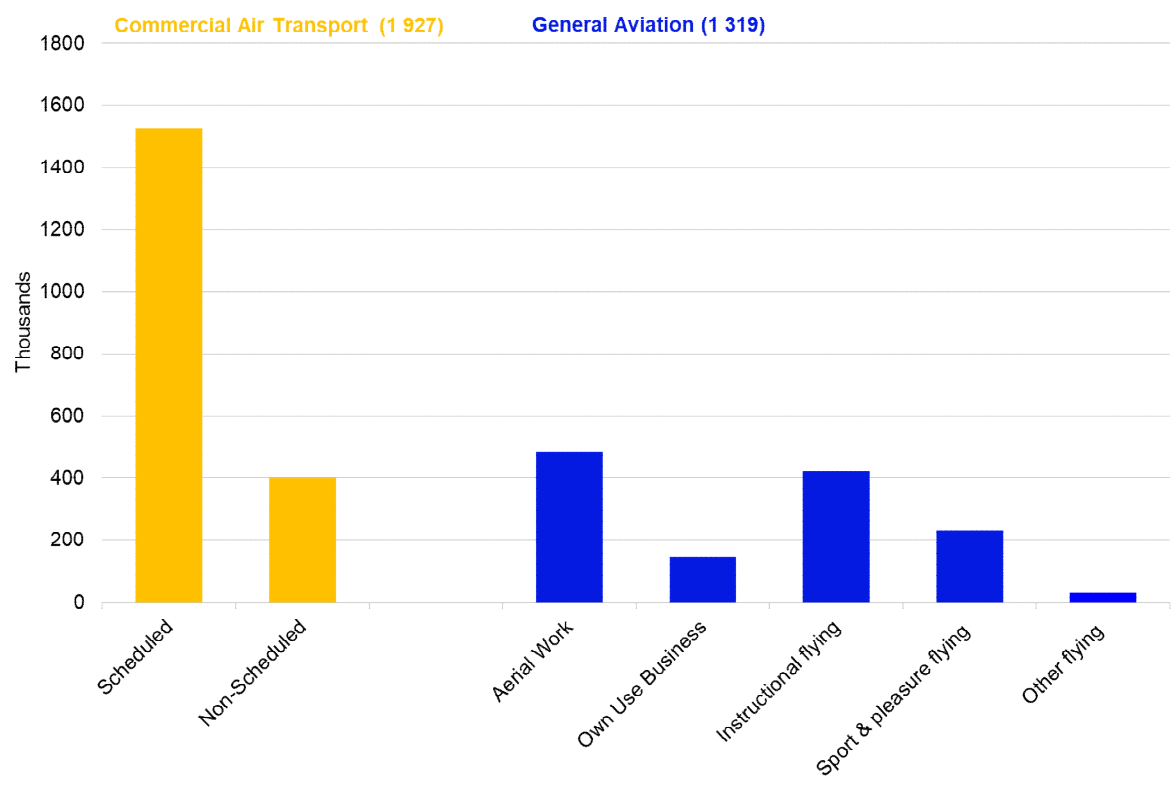
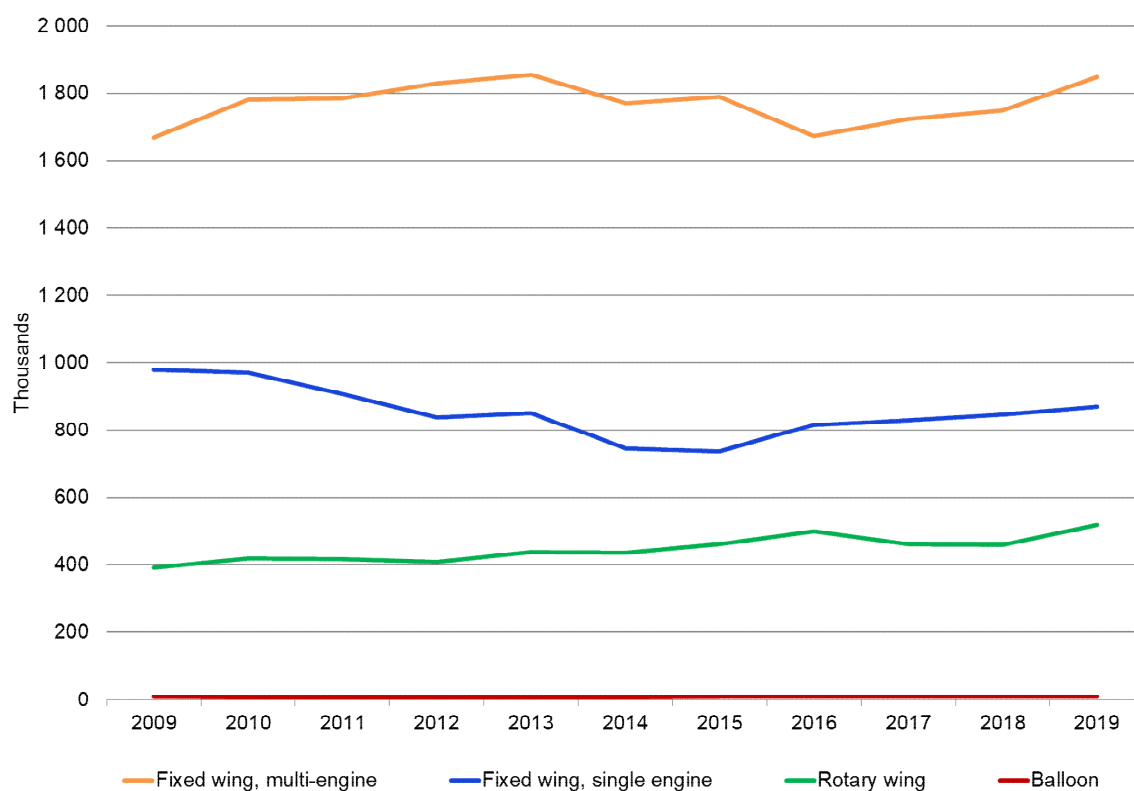


Figure 3 shows the flying hours performed by VH-registered aircraft by the major categories of aircraft.

Figure 3 VH-Registered fleet hours flown, by category of aircraft (2009–2019)



Fixed wing, multi-engine aircraft are larger airplanes predominately used in Commercial Air Transport. Fixed wing, single engine aircraft are smaller airplanes predominately used for Instructional flying, Pleasure and personal transport and Own use business flying. Rotary wing aircraft are helicopters predominately used in for Agricultural mustering, Other aerial work and Passenger charter transport. Hot air Balloons are used primarily for Sport and pleasure flying and Sightseeing.

The number of fixed wing, single engine aircraft increased by 0.3 per cent to 8 908, or 64.5 per cent of all registered aircraft in the General Aviation and Commercial Air Transport VH-registered fleet (see Table 4).

Fixed wing, multi-engine aircraft increased by 0.1 per cent to 2 271 (16.4 per cent of the total) (see Table 4).

The number of helicopters increased by 1.0 per cent to 2 211 (16.0 per cent of the total), with the number of single engine helicopters increasing by 1.7 per cent to 1 951. The number of multi-engine helicopters decreased by 4.4 per cent to 260 (see Table 4).

Hot-air balloons and airships increased by 2.9 per cent to 422, or 3.1 per cent of total aircraft (see Table 4).

The Australian General Aviation and Commercial Air Transport VH-registered fleet contains many older aircraft, with the average age being 36.0 years for fixed wing aircraft, compared to 20.0 years for rotary aircraft and 14.2 years for balloons and airships (see Table 4).

About one in every four (3 435 aircraft) General Aviation and Commercial Air Transport VH-registered aircraft reported performing no flying during the year ended 31 December 2019.

Reasons were provided for 3 331 of these aircraft for why they did not fly in 2019. These reasons are summarised in the following table:

Table A Reasons for nil flying activity (2019)

Reason for nil activity	Number of aircraft	Percentage of reporting inactive aircraft
Repair / maintenance / restoration	1 527	45.8
Aircraft in storage	519	15.6
Aircraft unserviceable / unairworthy	289	8.7
Aircraft awaiting sale	124	3.7
Sold prior to 1 January 2019	123	3.7
Work or other commitments	109	3.3
Amateur-built aircraft not yet completed	99	3.0
Owner's health issues / deceased	87	2.6
Financial reasons	74	2.2
Drought	55	1.7
Lack of business / company ceased operating	54	1.6
Awaiting parts or modifications	44	1.3
C of A not yet issued	33	1.0
This aircraft is unknown to the operator	27	0.8
Other	167	5.0
Total	3 331	100.0

Note: This table covers aircraft with zero hours reported and not those with reduced hours for any of the above reasons (for example, drought).

The Sport and Recreational registered fleet

The sport and recreational registered aircraft fleet in 2019 consisted of 8 453 aircraft, which flew a total of 356 thousand hours (see Table 5).

Ultralight flying

Information provided by Recreational Aviation Australia (RA-Aus)

BITRE recommends caution when using these statistics as RA-Aus data are subject to frequent revision.

In 2019, ultralight aircraft flew a total of 143 thousand hours, representing an increase of 12.9 per cent over 2018 (see Table 12).

At the end of December 2019, a total of 3 210 aircraft had current registrations issued by Recreational Aviation Australia, an increase of 7.1 per cent over 2018 (2 997 aircraft) (see Table 5).

Gliding

Information provided by the Gliding Federation of Australia (GFA)

The number of registered gliders in 2019 was 1 281, an increase of 0.4 per cent compared with December 2018 (see Table 5). The total number of reported flying hours increased by 4.6 per cent to 64 thousand hours in the calendar year 2019 compared with 2018 (see Table 1).

Hang gliding

Information provided by the Hang Gliding Federation of Australia (HGFA)

The total number of hours flown by hang gliders in 2018–19 decreased by 13.9 per cent on the previous year to 101 thousand hours (see Table 1).

Gyroplanes

Information provided by the Australian Sport Rotorcraft Association (ASRA)

The number of gyroplanes in 2019 was 331 (see Table 5). The total number of estimated hours flown by gyroplanes in 2019 increased by 13.6 per cent to 48 thousand hours, compared with 2018 (see Table 1).

Tables

Table 1 Total hours flown by industry sector (1990-2019)

Year	Total Scheduled ^a	Other VH-registered aircraft ^b	Ultralight flying	Gliding ^c	Hang Gliding ^d	Gyroplanes ^e	Total
(thousand hours)							
1990	613.1	1 930.8	..	72.6	2 616.4
1991	692.8	1 754.7	..	74.2	63.7	..	2 585.4
1992	750.3	1 651.0	52.4	83.3	73.5	..	2 610.4
1993	781.2	1 703.9	56.8	73.0	86.2	..	2 701.1
1994	838.7	1 715.7	73.0	80.1	77.6	15.0	2 800.1
1995	899.6	1 761.3	72.0	75.9	86.4	14.4	2 909.6
1996	938.5	1 799.0	70.4	69.2	103.2	23.3	3 003.7
1997	969.8	1 839.3	75.1	68.9	102.3	23.3	3 078.7
1998	958.2	1 877.9	67.6	65.4	87.5	33.4	3 090.0
1999	963.5	1 842.2	73.9	63.9	104.6	30.4	3 078.5
2000	1 074.2	1 714.8	74.1	..	106.7	29.7	2 999.5
2001	1 044.3	1 702.9	76.5	..	120.0	37.0	2 980.6
2002	926.0	1 687.7	80.6	..	122.2	32.3	2 848.9
2003	969.0	1 645.9	84.5	..	124.7	28.3	2 852.5
2004	1 090.4	1 645.0	87.1	..	132.0	29.3	2 983.7
2005	1 144.1	1 722.8	92.9	194.7	134.2	32.9	3 321.6
2006	1 156.7	1 695.0	120.2	228.9	103.0	27.9	3 331.6
2007	1 191.6	1 831.8	138.3	343.4	94.5	28.0	3 627.6
2008	1 250.5	1 857.7	156.2	169.9	88.3	30.5	3 553.1
2009	1 241.4	1 807.5	174.3	198.4	96.0	35.6	3 553.2
2010	1 325.7	1 847.7	200.4	228.7	97.9	44.4	3 744.9
2011	1 347.4	1 771.4	198.6	126.9	98.7	48.6	3 591.5
2012	1 382.1	1 704.9	187.9	56.8	105.1	46.8	3 483.6
2013	1 410.7	1 741.8	153.5	63.6	117.2	44.9	3 531.8
2014	1 402.1	1 526.4	176.1	67.7	113.8	38.9	3 324.9
2015	1 440.0	1 552.3	167.0	66.3	110.9	43.5	3 379.9
2016	1 389.4	1 608.8	148.2	65.0	107.7	37.0	3 356.1
2017	1 427.1	1 600.4	144.0	58.0	103.5	40.0	3 373.0
2018	1 423.9	1 642.3	126.4	61.3	117.8	42.0	3 413.7
2019	1 526.3	1 719.7	142.7	64.1	101.4	47.7	3 601.9

^a Hours flown by Australian (including regional) airlines on domestic and international flight stages in Scheduled operations. From August 2004 RPT freight operations are included.

^b Includes hours flown in General Aviation as well as Non-Scheduled Commercial Air Transport (Charter)

^c Year ended 30 April prior to 2000. No data are available between 2000 and 2004. Data from 2005-2010 are for year ended 30 June. Data from 2011 are for calendar year.

^d Year ended 30 June.

^e Year ended 30 June until 2005. From 2006 onwards, calendar year data are provided.

Table 2 Hours flown and percentage change, by industry sector and flying activity (2017-2019)

Flying Activity	2017 ^a		2018 ^a		2019 ^a	
	Hours flown (thousands)	Percentage change over 2016	Hours flown (thousands)	Percentage change over 2017	Hours flown (thousands)	Percentage change over 2018
Scheduled	1 427.1	2.7%	1 423.9	-0.2%	1 526.3	7.2%
Non-Scheduled ^b	342.3	7.3%	370.9	8.4%	354.2	-4.5%
Private	161.7	0.2%	168.3	4.1%	163.3	-3.0%
Business	136.6	3.7%	133.9	-2.0%	146.4	9.3%
Test & ferry	30.5	-12.1%	29.0	-4.9%	32.5	12.0%
Training	359.0	5.7%	390.1	8.7%	422.7	8.4%
Agriculture	104.7	-5.4%	94.3	-9.9%	83.5	-11.5%
Survey & photography	36.1	3.4%	43.3	20.2%	43.4	0.2%
Pipe & powerline patrol	44.1	-12.6%	37.0	-16.1%	31.8	-13.9%
Mustering	137.6	-25.5%	137.1	-0.3%	152.8	11.4%
Search & rescue	7.5	-17.4%	13.0	72.9%	8.0	-38.9%
Ambulance	105.6	3.6%	106.6	0.9%	111.6	4.6%
Towing	4.8	-1.0%	4.4	-8.3%	4.4	1.8%
Other aerial work	129.9	3.1%	114.3	-12.0%	165.1	44.5%
Total Hours Flown	3 027.5	1.0%	3 066.1	1.3%	3 246.0	5.9%

Note: Includes data from General Aviation Activity Survey.

^a Activity Classifications based on 2013 categories.

^b Excludes Air Ambulance which was reclassified from General Aviation to Commercial Air Transport from 2014.

Table 3 Number of aircraft, landings and hours flown in General Aviation and Commercial Air Transport operations by state or territory (2019)^a

State or Territory	Number of aircraft		Number of landings (thousands)	Commercial Air Transport		General Aviation		Total hours flown (thousands)
	Total	Active ^b		No. Active aircraft ^b	Hours flown (thousands)	No. Active aircraft ^b	Hours flown (thousands)	
Intrastate								
NSW	3 729	2 659	555.5	309	143.3	2 621	314.7	458.0
QLD	3 206	2 463	643.8	440	224.2	2 402	356.1	580.3
VIC	2 787	2 009	446.6	202	50.2	1 946	252.7	302.9
WA	1 862	1 432	375.2	445	202.4	1 194	174.5	376.8
SA	875	697	277.6	103	44.4	656	105.7	150.1
NT	723	560	205.3	267	102.9	428	87.8	190.8
TAS	203	161	51.3	34	9.8	148	22.8	32.6
ACT	104	73	8.5	9	0.3	67	5.2	5.4
Interstate	171	171	342.6	171	662.3			662.3
International	152	152	89.4	152	486.8			486.8
Australia	13 812	10 377	2 995.7	2 132	1 926.6	9 462	1 319.4	3 246.0

Note: Includes data from General Aviation Activity survey

Note: Major Airlines are classified to Interstate and International

^a VH-registered aircraft only

^b General Aviation and Commercial Air Transport active aircraft may exceed total active aircraft as some aircraft may operate in both categories.

Table 4 Australian Aircraft Fleet, VH-registered (2019)

Aircraft make	Number of Aircraft	Average age of aircraft ^a	Hours flown	Landings
		(years)	(thousands)	
Fixed wing, single-engine				
Cessna	3 030	41.7	380.7	511.8
Amateur-built	1 404	16.5	40.1	55.7
Piper	1 374	45.4	117.3	183.6
Beechcraft	346	43.3	14.8	12.9
De Havilland	302	75.1	5.3	10.8
Cirrus	187	9.4	18.4	16.7
Air Tractor	163	18.4	31.2	58.6
Mooney	147	39.6	8.2	6.2
Auster	126	68.8	1.0	1.3
Diamond	106	10.0	66.0	157.4
Other	1 723	36.0	187.1	265.5
Subtotal	8 908	37.2	870.0	1 280.4
Fixed wing, multi-engine				
Beechcraft	403	34.2	98.2	91.2
Piper	389	42.7	41.1	39.8
Cessna	367	38.9	56.7	51.0
Boeing	227	11.3	765.0	300.8
Airbus	124	10.6	442.9	161.5
Bombardier	89	13.2	100.7	92.9
Fokker	88	26.8	91.5	56.8
Saab	65	25.4	75.3	80.6
Aero Commander	53	47.7	15.5	16.4
Fairchild	45	30.9	19.6	18.9
Other	421	30.5	141.5	132.7
Subtotal	2 271	31.0	1 848.0	1 042.5
Total	11 179	36.0	2 718.0	2 323.0

Table 4 (continued) Australian Aircraft Fleet, VH-registered (2019)

Helicopter make	Number of Aircraft	Average age of aircraft ^a (years)	Hours flown (thousands)	Landings
Rotary wing, single-engine				
Robinson	1 143	13.5	272.4	289.5
Bell	313	37.7	64.6	98.5
Aerospatiale/Eurocopter	195	22.1	54.6	81.6
Amateur-built	97	14.4	1.0	1.4
Schweizer	38	19.3	9.9	10.8
Agusta	24	43.7	1.8	2.2
Hughes	22	43.6	1.8	2.6
Airbus	18	3.1	9.3	15.3
Enstrom	16	32.7	0.9	1.0
McDonnell Douglas	13	30.8	3.1	2.1
Other	72	39.2	11.8	11.5
Subtotal	1 951	20.2	431.1	516.6
Rotary wing, multi-engine				
Agusta	67	7.3	29.7	59.0
Bell	58	24.3	15.3	21.9
Aerospatiale/Eurocopter	41	26.8	9.4	11.2
Sikorsky	27	19.9	8.2	5.8
Kawasaki	16	28.8	5.6	8.1
Other	51	16.5	17.8	39.2
Subtotal	260	18.6	86.1	145.1
Total	2 211	20.0	517.2	661.6

Table 4 (continued) Australian Aircraft Fleet, VH-registered (2019)

Balloon or airship make	Number of Aircraft	Average age of aircraft ^a (years)	Hours flown (thousands)	Landings
Kavanagh	283	11.4	8.8	9.0
Cameron	55	20.7	0.6	0.6
Thunder/Colt	30	30.6	0.2	0.2
Amateur-built	19	8.5	0.1	0.1
Balloon Works	8	33.6	0.1	0.1
Other	27	11.4	0.9	1.1
Total	422	14.2	10.8	11.1

Note: Includes data from General Aviation Activity survey

^a As at end of 2019

Table 5 Australian Aircraft Fleet, Sports and Recreational Registered Aircraft (2019)

Aircraft	Number of Aircraft	Hours flown (thousands)
Ultralight	3 210	142.7
Gliders	1 281	64.1
Hang gliders ^a	3 631	101.4
Gyroplanes	331	47.7
Total	8 453	355.9

Note: Includes data from Sport and Recreational Associations

^a In lieu of number of aircraft, number of members is used

Table 6 Number of Aircraft, by Fuel Type and Hours Flown in Australian Fleet (2019)

Fuel type	Number of aircraft	Total hours flown (thousands)
Fixed wing, single engine		
Diesel	7	1.5
Avtur	524	149.3
Avgas	8 377	719.3
Subtotal	8 908	870.0
Fixed wing, multi-engine		
Diesel	6	0.7
Avtur	1 114	1 694.2
Avgas	1 151	153.2
Subtotal	2 271	1 848.0
Subtotal (Fixed wing)	11 179	2 718.0
Rotary wing, single engine		
Avtur	614	143.2
Avgas	1 337	287.9
Subtotal	1 951	431.1
Rotary wing, multi-engine		
Avtur	260	86.1
Subtotal	260	86.1
Subtotal (Rotary wing)	2 211	517.2
Balloons and airships		
N/A	422	10.8
Total	13 812	3 246.0

Note: Includes data from General Aviation Activity survey, and Sport and Recreational Associations

Table 7 Flying Activity by VH-registered aircraft (2019)

Industry sector and flying activity		Number of Aircraft	Average age of Aircraft ^a	Hours flown	Landings
			(years)	(thousands)	
Commercial air transport					
Scheduled	International	215	10.6	499.6	94.4
	Domestic	636	17.1	1 002.4	651.6
	Freight only	96	30.0	24.2	23.0
Non-scheduled	Passenger transport charters	1489	26.2	244.1	294.2
	Air ambulance	195	15.7	111.6	116.2
	Freight only	30	41.1	15.9	16.6
	Other commercial air transport	138	28.3	28.8	36.7
Total Commercial air transport		2132 ^b	24.0	1 926.6	1 232.7
General Aviation					
Aerial work	Agricultural spreading/spraying	552	23.4	54.4	134.7
	Agricultural mustering	653	19.0	152.8	111.2
	Agriculture - other	469	23.0	29.0	25.0
	Construction - sling loads	39	20.9	1.9	4.1
	Construction - other	13	24.9	0.9	2.6
	Photography	135	25.3	6.3	4.7
	Pipeline or powerline surveying	323	22.2	10.6	8.0
	Other surveying	444	22.8	37.1	26.0
	Observation and Patrol	113	22.1	21.2	7.5
	Search and rescue	107	20.3	8.0	8.4
	Policing	68	17.7	19.2	16.2
	Firefighting	585	22.3	87.5	87.9
	Advertising	9	25.9	0.3	0.3
	Other aerial work	687	23.9	55.6	59.0
Own Use Business	Own business travel	2182	30.0	146.4	134.3
Instructional flying	Instructional flying - commercial	1232	25.6	395.9	657.1
	Instructional flying - non-commercial	617	28.7	26.8	53.3
Sport & pleasure flying	Glider towing	55	50.0	4.2	31.8
	Parachute dropping	513	43.4	17.1	43.0
	Aerobatics	166	33.2	3.3	6.1
	Joyflights/sightseeing charters	541	25.1	65.5	128.6
	Pleasure and personal transport	3588	35.8	124.8	148.2
	Community service flights	68	30.2	2.4	2.3
	Other sport and pleasure flying	577	29.6	15.7	26.6
Other flying	Test flights	465	26.9	1.8	3.6
	Ferry flights	921	22.9	14.3	11.6
	Other flights	428	30.1	16.5	21.2
Total General Aviation		9462 ^c	30.6	1 319.4	1 763.1
Total		10377 ^d	30.1	3 246.0	2 995.7

Note: Includes data from General Aviation Activity survey

^a As at end of 2019

^b The sum of all Commercial Air Transport category's aircraft will exceed Total Commercial Air Transport aircraft as some aircraft operate in multiple categories.

^c The sum of all General Aviation category's aircraft will exceed Total General Aviation aircraft as some aircraft operate in multiple categories.

^d The sum of Total General Aviation and Total Commercial Air Transport aircraft will exceed Total aircraft as some aircraft operate in both industry sectors.

Table 8 Hours flown by broad activity type, by state or territory (2019), for VH-registered aircraft

State or Territory	Commercial Air Transport			General Aviation				Total
	Scheduled	Non-scheduled	Aerial Work	Own Use Business	Instructional flying	Sport & pleasure	Other flying	
	(thousands)							
Intrastate								
QLD	140.5	83.8	162.3	46.4	74.6	63.7	9.1	580.3
NSW	86.5	56.8	106.4	36.5	108.6	55.2	8.0	458.0
WA	89.8	112.6	80.6	14.2	47.1	27.7	4.8	376.8
VIC	16.5	33.7	41.3	23.6	123.5	58.7	5.6	302.9
NT	20.2	82.8	58.5	14.8	3.8	8.3	2.5	190.8
SA	18.8	25.6	22.9	9.3	58.5	13.0	2.0	150.1
TAS	5.0	4.8	11.9	1.2	5.2	4.2	0.3	32.6
ACT	0.0	0.3	1.0	0.3	1.5	2.2	0.2	5.4
Interstate	662.3							662.3
International	486.8							486.8
Australia	1 526.3	400.3	484.9	146.4	422.7	232.9	32.5	3 246.0

Note: Includes data from General Aviation Activity survey

Note: Major Airlines are classified to Interstate and International

Table 9 Landings by broad activity type, by state or territory (2019), for VH-registered aircraft

State or Territory	Commercial Air Transport			General Aviation				Total
	Scheduled	Non-scheduled	Aerial Work	Own Use Business	Instructional flying	Sport & pleasure	Other flying	
	(thousands)							
Intrastate								
QLD	129.3	106.4	140.2	43.5	103.8	109.7	10.9	643.8
NSW	90.3	63.0	123.7	32.6	148.9	89.7	7.3	555.5
VIC	18.8	54.4	51.7	21.8	200.1	93.0	6.7	446.6
WA	54.1	115.3	67.6	12.6	71.9	48.1	5.6	375.2
SA	17.4	31.3	34.9	8.3	166.2	17.6	1.9	277.6
NT	20.1	84.7	58.2	13.9	6.2	18.9	3.2	205.3
TAS	7.0	8.3	18.2	1.2	9.2	6.7	0.7	51.3
ACT	0.0	0.2	1.0	0.3	4.1	2.8	0.1	8.5
Interstate	342.6							342.6
International	89.4							89.4
Australia	769.0	463.7	495.5	134.3	710.4	386.4	36.4	2 995.7

Note: Includes data from General Aviation Activity survey

Note: Major Airlines are classified to Interstate and International

Table 10 Hours flown and landings by engine type (2019), for VH-registered aircraft

		Jet aircraft		Turbo-prop aircraft		Turbo-shaft aircraft		Piston engine aircraft	
		Hours flown	Landings	Hours flown	Landings	Hours flown	Landings	Hours flown	Landings
(thousands)									
Commercial Air	Scheduled	1 289.3	514.6	223.5	239.7	4.4	2.3	9.2	12.3
Transport	Non-scheduled	47.6	30.2	144.5	145.0	56.5	115.0	150.6	172.4
General Aviation	Aerial Work	8.6	4.7	78.2	104.6	130.1	155.3	266.0	228.4
	Own Use Business	9.4	5.2	10.8	11.8	8.3	12.4	117.8	104.9
	Instructional flying	0.6	0.8	5.2	4.8	8.7	10.0	408.1	694.6
	Sport & pleasure	1.1	1.1	16.6	37.9	17.4	51.8	190.5	288.1
	Other flying	4.4	2.1	4.0	3.6	3.7	6.1	20.3	24.5
Total		1 360.9	558.8	482.7	547.4	229.1	353.1	1 162.5	1 525.3

Note: Includes data from General Aviation Activity survey

Table 11 Hours flown^a in Ultralight operations, by state and category of aircraft (2019)

State or Territory	Uncertified aircraft CAO 95.10	Certified aircraft							Subtotal (Certified aircraft)	Total
		Commercially manufactured			Amateur-built		Weight shift			
		CAO 95.25	CAO 95.55	CAO 101.55	CAO 95.55	CAO 101.28	Powered parachutes CAO 95.32	Trikes CAO 95.32		
		(thousands)								
QLD	0.1	1.1	49.6	0.3	6.8	0.2	3.6	0.7	62.4	62.5
VIC	-	-	19.7	0.7	3.5	0.2	6.6	0.8	31.5	31.5
NSW	0.7	0.3	13.6	0.9	5.2	0.1	3.4	1.0	24.4	25.1
SA	0.1	0.3	5.8	0.7	2.7	0.1	0.6	0.6	10.8	10.9
WA	0.1	0.1	5.2	-	2.0	-	0.2	1.2	8.6	8.7
TAS	-	-	1.2	0.1	0.3	0.0	0.3	-	2.0	2.0
NT	0.0	0.1	0.9	-	0.1	0.0	0.1	-	1.3	1.3
ACT	0.0	-	0.3	-	0.1	0.0	0.2	-	0.6	0.6
Australia	1.0	1.9	96.3	2.8	20.7	0.6	15.0	4.3	141.7	142.7

Note: All statistics courtesy of Recreational Aviation Australia (RA-Aus). These statistics are subject to frequent revision.

BITRE recommends caution when using these statistics.

^a Covers hours flown during the previous 12 months at time of annual renewal of each aircraft's registration.

Table 12 Hours flown^a in Ultralight operations, by category of aircraft (2009–2019)

Year	Uncertified aircraft CAO 95.10	Certified aircraft							Subtotal (Certified aircraft)	Total
		Commercially manufactured			Amateur-built		Weight shift			
		CAO 95.25	CAO 95.55	CAO 101.55	CAO 95.55	CAO 101.28	Powered parachutes CAO 95.32	Trikes CAO 95.32		
(thousands)										
2009	2.8	11.6	88.3	16.8	39.7	3.3	4.2	7.5	171.5	174.3
2010	3.0	9.0	111.8	12.3	41.0	3.0	3.5	16.7	197.4	200.4
2011	2.1	6.4	121.7	9.6	38.5	1.8	2.3	16.2	196.6	198.6
2012	1.0	6.9	125.1	8.5	34.0	1.4	2.9	8.1	186.9	187.9
2013	1.0	7.1	90.2	10.5	30.5	1.4	2.3	10.5	152.5	153.5
2014	2.4	7.8	112.8	7.7	32.0	1.4	2.6	9.4	173.7	176.1
2015	1.0	7.9	103.6	7.9	35.1	2.0	2.5	7.1	166.0	167.0
2016	1.0	4.8	93.8	5.8	29.9	1.5	4.4	7.1	147.2	148.2
2017	0.5	2.7	94.0	4.6	25.9	1.0	7.8	7.5	143.5	144.0
2018	0.5	2.1	75.5	7.4	21.7	0.7	10.7	7.7	125.9	126.4
2019	1.0	1.9	96.3	2.8	20.7	0.6	15.0	4.3	141.7	142.7

Note: All statistics courtesy of Recreational Aviation Australia (RA-Aus). These statistics are subject to frequent revision.

BITRE recommends caution when using these statistics.

^a Covers hours flown during the previous 12 months at time of annual renewal of each aircraft's registration.

Survey Form



Australian Government

Department of Infrastructure, Transport, Cities and Regional Development

Bureau of Infrastructure, Transport and Regional Economics

General Aviation Activity Survey

Year ended 31 December 2019

This information is collected under the authority of Air Navigation Regulation 2016, Part 2 which provides penalties for non-compliance. This survey has been approved by the Australian Government Statistical Clearing House (Approval Number 00560—11).

Please return the completed form by 28 February 2020.

For all aircraft operated in the year ending 31 December 2019, please provide aircraft registrations, postcode of aircraft base, and number of hours flown and landings. Flying activity performed entirely outside Australia or its Territories should not be recorded.

Name:	Username:
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		Aircraft Registration (a)						
		Postcode of Aircraft Base (b)						
			Hours	Landings	Hours	Landings	Hours	Landings
Commercial Air Transport	Scheduled	International						
		Domestic						
		Freight only						
	Non-Scheduled	Passenger transport charters						
		Air ambulance						
		Freight only						
		Other commercial air transport						
General Aviation	Aerial Work	Agricultural spreading / spraying						
		Agricultural mustering						
		Agriculture - other						
		Construction - sling loads						
		Construction - other						
		Photography						
		Pipeline or powerline surveying						
		Other surveying						
		Observation and Patrol						
		Search and Rescue						
		Policing						
		Firefighting						
		Advertising						
		Other aerial work						
		Own business travel						
	Sport & pleasure flying	Instructional flying - commercial						
		Instructional flying - non-commercial						
		Glider towing						
		Parachute dropping						
		Aerobatics						
		Joyflights / sightseeing charters						
		Pleasure and personal transport						
		Community service flights						
		Other sport and pleasure flying						
	Other flying	Test flights						
		Ferry flights						
		Other Flights						

Additional comments:

Email:

Phone:

Date:

- (a) Aircraft Registration: Pre-printed registrations are based on information supplied by the Civil Aviation Safety Authority. Please add any additional aircraft you operated in 2019 that are not listed. If insufficient room please photocopy form and attach additional sheets.
- (b) Aircraft Base: Please indicate the postcode of the aerodrome or landing area at which the aircraft was most frequently based during 2019. For balloon operations, indicate the postcode of the general area from which most flying was conducted.

DEFINITIONS

Flying hours should be recorded on the basis of the types of flying in which the aircraft was engaged, as defined below. Total time (including taxi time) is preferred, but airborne time or tacho time is acceptable if total time is not readily available.

Careful estimates are acceptable where exact figures are not readily available. *If your aircraft was inactive for all of 2019, please provide a 'Nil flying' response by entering '0' in the Hours and Landings fields, as this is required for producing accurate estimates of activity.*

Commercial Air Transport

Scheduled

International

Scheduled operations of international airlines operating into/out of Australia.

Domestic RPT

Scheduled operations of domestic airlines operating within Australia.

Freight only

Scheduled operations carrying freight only.

Non Scheduled

Passenger transport charters

Flying involving the carriage of passengers by the aircraft operator or his/her employees for hire or reward (but excluding scheduled airline operations).

Air Ambulance

Operations as an aerial ambulance for the transport of ill or injured persons (excluding Angel flights).

Freight only

Flying involving the carriage of cargo by the aircraft operator or his/her employees for hire or reward (but excluding scheduled airline operations).

Other commercial air transport

Includes on-demand charter and all other commercial air transport not classified elsewhere.

General Aviation

Aerial Work

Agricultural spreading / spraying

Flying involving the spreading/spraying of chemicals, seeds, and fertilisers. This includes flights to and from the spread / spray area.

Agricultural mustering

Aerial stock mustering involving the direct use of aircraft for the movement of livestock.

Other agriculture

Other agricultural activity including aerial culling and baiting.

Construction – sling loads

Flying using sling loads for construction purposes.

Construction – other

Includes all flying for construction purposes, excluding sling loads.

Photography

All aerial photographic work.

Pipeline or powerline surveying

Aerial inspection patrols along pipelines or powerlines.

Other Surveying

Flying involving the use of aircraft for surveying not classified elsewhere. Includes geophysical surveys.

Observation and patrol

Flying involving the use of aircraft for aerial observations and patrol. Includes coastal surveillance.

Search and rescue

Includes any search missions, as well as evacuation or rescue work.

Policing

Flying involving the use of aircraft in police operations, includes traffic control, ground support, high-speed car pursuits, observation, air patrol etc.

Fire fighting

Flying involving the use of aircraft to combat fires (e.g. spotting, water bombing etc.). This includes flights to and from the fire area.

Advertising

Includes skywriting and banner towing advertising.

Other Aerial work

Includes aerial spotting (stock, fish, etc.), cloud seeding, etc.

Own-use business travel

Business flying not through a hire or reward arrangement.

Instructional flying	Flying involving training for the issue or renewal of a licence or rating, aircraft type endorsement or conversion training. Includes solo navigation exercises conducted as part of a course of applied flying training.
Sport and pleasure flying	
<i>Pleasure and personal transport</i>	Flying for private pleasure, or personal transport not associated with a business or profession.
<i>Community service flights</i>	Flights that are provided on a voluntary basis for public benefit. This includes non-emergency flights provided as part of an organised voluntary or charitable activity. This does not include flights where a pilot provides a flight to a friend or family member.
<i>Glider towing</i>	Includes the use of aircraft for glider towing.
<i>Parachute dropping</i>	Flying associated with the dropping of parachutists.
<i>Aerobatics</i>	Aerobatic flight involves manoeuvres intentionally performed by an aircraft involving an abrupt change in its attitude, an abnormal attitude, or an abnormal variation in speed.
<i>Joyflights / sightseeing charters</i>	Flying involving the carriage of passengers for joyflights or sightseeing purposes that take off and land at the same location.
<i>Other sport and pleasure flying</i>	Other sport and pleasure flying not classified elsewhere.
Other flying	
<i>Test</i>	Flying associated with the testing of an aircraft.
<i>Ferry</i>	Flying associated with an aircraft delivery or movement to a location for maintenance, hire or other planned use.
<i>Other flying</i>	Flying not classified elsewhere.

DIFFICULTIES AND ENQUIRES

The aircraft and operator/owner details included on this form are provided to the Bureau by the Civil Aviation Safety Authority shortly before dispatch of the survey forms. Although the latest available information is used, there will inevitably be a number of short-term discrepancies involving recent changes of operator, ownership or address.

Should any discrepancies occur over the longer term, please advise your local CASA office.

If you have any questions relating to the survey, please contact Aviation Statistics Section on (02) 6274 6135, fax (02) 6274 7727 or email avstats@infrastructure.gov.au.

Definitions

Advertising	Includes skywriting and banner towing advertising.
Aerobatics	Aerobatic flight involves manoeuvres intentionally performed by an aircraft involving an abrupt change in its attitude, an abnormal attitude, or an abnormal variation in speed.
Agricultural mustering	Aerial stock mustering involving the direct use of aircraft for the movement of livestock.
Agricultural spreading / spraying	Flying involving the spreading/spraying of chemicals, seeds, and fertilisers. This includes flights to and from the spread / spray area.
Air Ambulance	Operations as an aerial ambulance for the transport of ill or injured persons (excluding Angel flights).
Commercial Air Transport	An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.
Community service flights	Flights that are provided on a voluntary basis for public benefit. This includes non-emergency flights provided as part of an organised voluntary or charitable activity. This does not include flights where a pilot provides a flight to a friend or family member.
Construction – other	Includes all flying for construction purposes, excluding sling loads.
Construction – sling loads	Flying using sling loads for construction purposes.
Domestic RPT	Scheduled operations of domestic airlines operating within Australia.
Ferry	Flying associated with an aircraft delivery or movement to a location for maintenance, hire or other planned use.
Fire fighting	Flying involving the use of aircraft to combat fires (e.g. spotting, water bombing etc.). This includes flights to and from the fire area.
General Aviation	An aircraft operation other than a commercial air transport operation.
Glider towing	Includes the use of aircraft for glider towing.
Instructional flying	Flying involving training for the issue or renewal of a licence or rating, aircraft type endorsement or conversion training. Includes solo navigation exercises conducted as part of a course of applied flying training.
International	Scheduled operations of international airlines operating into/out of Australia.

Joyflights / sightseeing charters	Flying involving the carriage of passengers for joyflights or sightseeing purposes that take off and land at the same location.
Non- scheduled Freight only	Flying involving the carriage of cargo by the aircraft operator or his/her employees for hire or reward (but excluding scheduled airline operations).
Observation and patrol	Flying involving the use of aircraft for aerial observations and patrol. Includes coastal surveillance.
Other Aerial work	Includes aerial spotting (stock, fish, etc.), cloud seeding, etc.
Other agriculture	Other agricultural activity including aerial culling and baiting.
Other commercial air transport	Includes on-demand charter and all other commercial air transport not classified elsewhere.
Other flying	Flying not classified elsewhere.
Other sport and pleasure flying	Other sport and pleasure flying not classified elsewhere.
Other Surveying	Flying involving the use of aircraft for surveying not classified elsewhere. Includes geophysical surveys.
Own-use business travel	Business flying not through a hire or reward arrangement.
Parachute dropping	Flying associated with the dropping of parachutists.
Passenger transport charters	Flying involving the carriage of passengers by the aircraft operator or his/her employees for hire or reward (but excluding scheduled airline operations).
Photography	All aerial photographic work.
Pipeline or powerline surveying	Aerial inspection patrols along pipelines or powerlines.
Pleasure and personal transport	Flying for private pleasure, or personal transport not associated with a business or profession.
Policing	Flying involving the use of aircraft in police operations, includes traffic control, ground support, high-speed car pursuits, observation, air patrol etc.
Scheduled Freight only	Scheduled operations carrying freight only.
Search and rescue	Includes any search missions, as well as evacuation or rescue work.
Test	Flying associated with the testing of an aircraft.

Aviation Statistics publications

These publications and data releases are available in electronic format, and can be downloaded free of charge from the Department's website at www.bitre.gov.au/statistics/aviation/index.aspx

Airline On Time Performance

Produced: Monthly, calendar and financial years.

Contents: Domestic airline on time performance by airline, route and airport.

Airport Traffic Data

Produced: Calendar and financial year, monthly for top 20 airports.

Contents: Time series of airport activity for the international, domestic and regional RPT sectors.

Australian Aircraft Activity

Produced: Calendar year.

Contents: Commercial Air Transport and General Aviation flying activity; hours flown and landings by category of operation and aircraft type; numbers of aircraft by type.

Australian Air Distances

Produced: As required.

Contents: Air distances covering routes operated on commercial services.

Australian Domestic Aviation Activity

Produced: Monthly, calendar and financial year.

Contents: Data supplied by Australian airlines operating over Australian flight stages; traffic on top competitive city pairs and industry totals.

Avline

Produced: Financial year.

Contents: Overview of Australian aviation industry including traffic data, air fares, and airport charges.

Domestic Airfares indexes

Produced: Monthly.

Contents: Time series of fare indexes covering business, full economy, restricted economy and best discount fares.

International Airline Activity

Produced: Monthly, calendar and financial year.

Contents: Comprehensive data on all international services to/from Australia. International passenger and freight traffic; operator market shares; city pair data; industry analysis.