



Australian Government

**Department of Infrastructure, Transport,
Regional Development, Communications and the Arts**
Bureau of Infrastructure and Transport Research Economics

STATISTICAL REPORT



Aviation

**Australian Aircraft Activity
2022**

In the spirit of reconciliation, the Department of Infrastructure, Transport, Regional Development, Communications and the Arts acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community.

We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander people.

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Highlights

Total hours flown increased in 2022

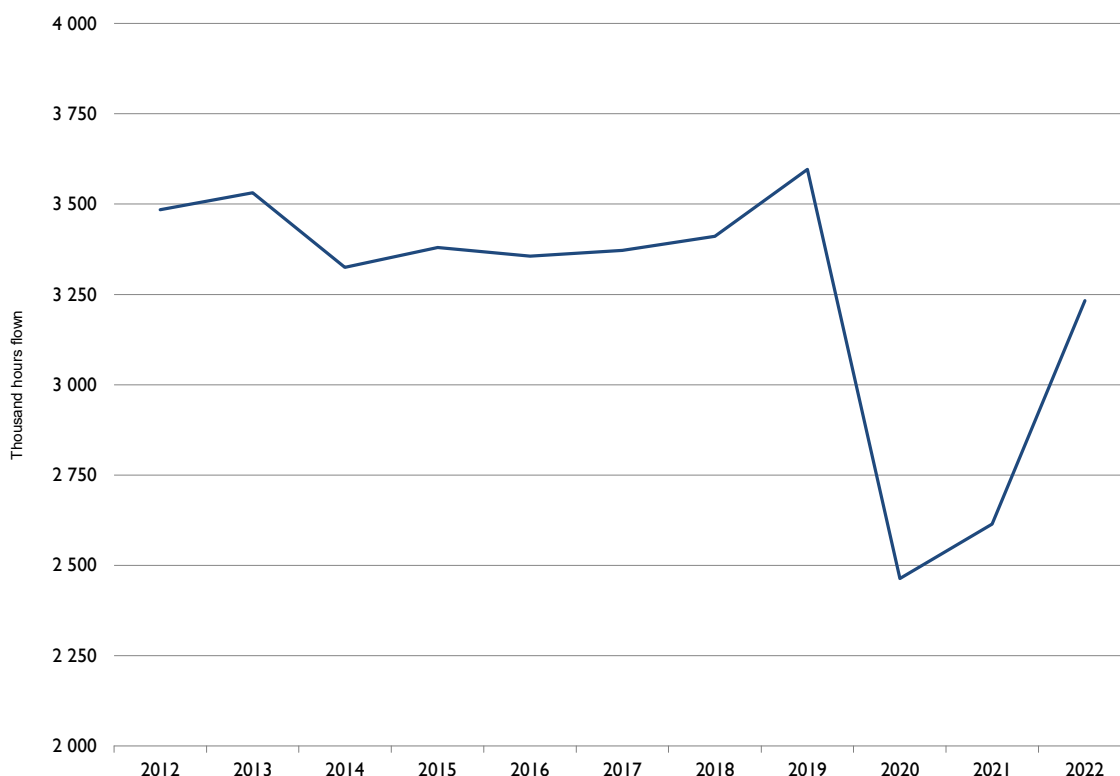
Total hours flown by Australian aircraft during 2022 was 3.23 million, an increase of 23.7 per cent when compared to the previous year (see Table 1 page 11 and Figure 1 below). This figure is made up of VH-registered and Sports and Recreation Association registered aircraft.

VH-aircraft are registered on the Australian Civil Aircraft Register (civil register) by the Civil Aviation Safety Authority (CASA). Sports and Recreation Association registered aircraft are registered with one of the following - Recreational Aviation Australia (RA-Aus), Gliding Australia (GA), Sports Aviation Federation of Australia (SAFA) or the Australian Sport Rotorcraft Association (ASRA). These organisations operate under self-administration, with CASA setting the regulations and then working with the organisations to ensure the regulations are applied and enforced.

Total airline Regular Public Transport (RPT) flying hours rose 75.0 per cent in 2022 to 1.09 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 9.6 per cent in 2022 to 1.79 million hours (see Table 1).

The sports and recreation association sector recorded 353,094 flying hours in a decrease of 1.8 per cent compared to 2021 (see Table 1).

Figure 1 Australian aircraft fleet hours flown (2012–2022)



General Aviation and Commercial Air Transport - VH-registered

The total number of hours flown by general aviation and commercial air transport VH-registered aircraft for the year ending 31 December 2022 was 2.88 million. This consisted of 1.60 million hours in commercial air transport and 1.28 million hours in general aviation (see Table 7 page 18).

The total number of landings by general aviation and commercial air transport VH-registered aircraft for the year ending 31 December 2022 was 3.11 million. This consisted of 1.2 million landings in commercial air transport and 1.9 million landings in general aviation (see Table 7).

The general aviation and commercial air transport fleets include 14,139 aircraft on the civil register (Table 3). The number of aircraft registered at 31 December 2022 represents an increase of 0.5 per cent over the number registered at 31 December 2021 (14,069 aircraft).

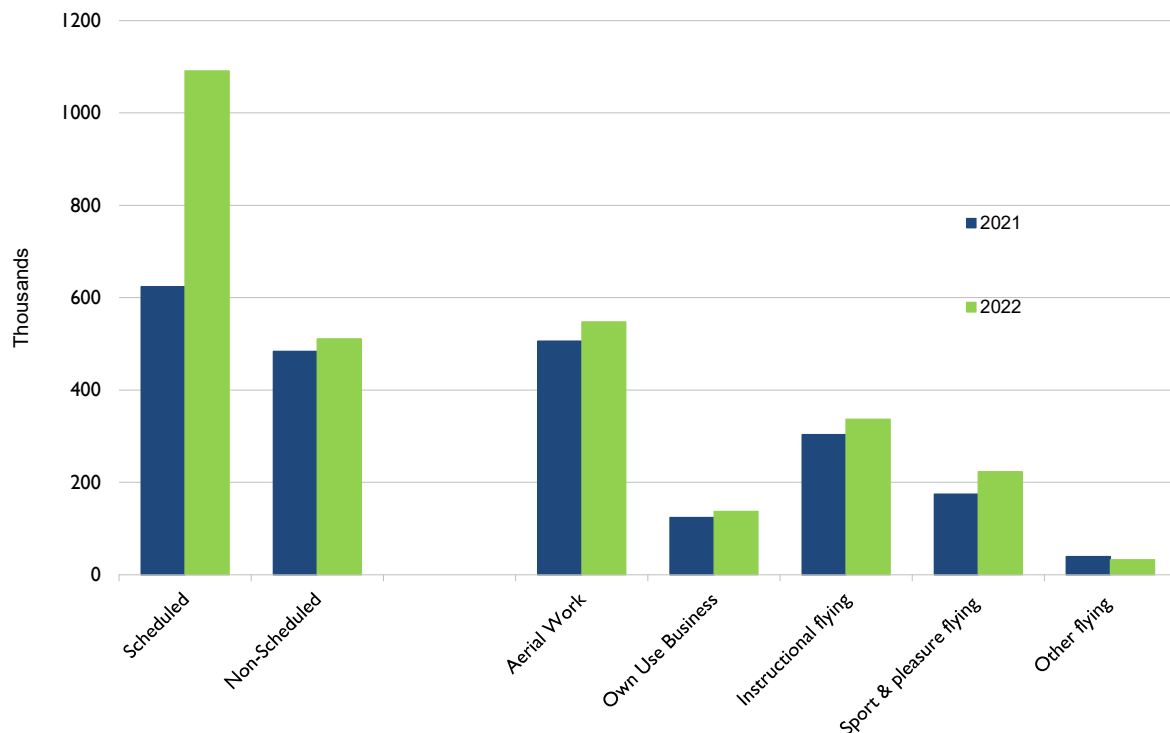
Commercial air transport consists of two sectors, scheduled and non-scheduled. The scheduled sector of commercial air transport operates flights according to timetables drawn up to cover several months or even years at a time. Whereas the non-scheduled sector (often referred to as charter) relates to commercial air transport that operate without fixed or published timetables. Scheduled commercial air transport experienced a significant rise compared to 2021, recording 1.09 million hours (up 75 per cent). Non-scheduled commercial air transport also rose compared to 2021, recording 511,249 hours (up 5.7 per cent). Within scheduled, the largest activity was domestic, with 858,937 hours. While in non-scheduled, passenger transport charters were the largest activity with 334,371 hours (see Table 7).

General aviation consists of five different sectors of flying. Aerial work (548,027 hours, up 8.3 per cent compared to 2021), own use business (136,934 hours, up 10.5 per cent compared to 2021), instructional flying (337,090 hours, up 11.1 per cent compared to 2021), sport and pleasure flying (223,185 hours, up 27.9 per cent compared to 2021), and other flying (32,259 hours, down 18.9 per cent compared to 2021).

The largest flying activity in aerial work was agricultural mustering, recording 158,658 hours. Commercial instructional flying activity made up the majority of the instructional flying sector, recording 294,125 hours. Within the sport and pleasure flying sector the largest flying activity was pleasure and personal transport, recording 124,256 hours (see Table 7).

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

Figure 2 VH-registered fleet hours flown, by major industry sectors (2021-2022)



Fixed wing, multi-engine aircraft are larger airplanes predominantly used in commercial air transport. Fixed wing, multi-engine aircraft increased by 1.0 per cent in 2022, to 2,301 (16.3 per cent of the total) compared to 2021 (see Table 4 page 14).

Fixed wing, single engine aircraft are smaller airplanes used for instructional flying, pleasure and personal transport and own use business flying. The number of fixed wing, single engine aircraft increased by 0.1 per cent to 9,046 compared to 2021, representing 64.0 per cent of all registered aircraft in the general aviation and commercial air transport categories (see Table 4).

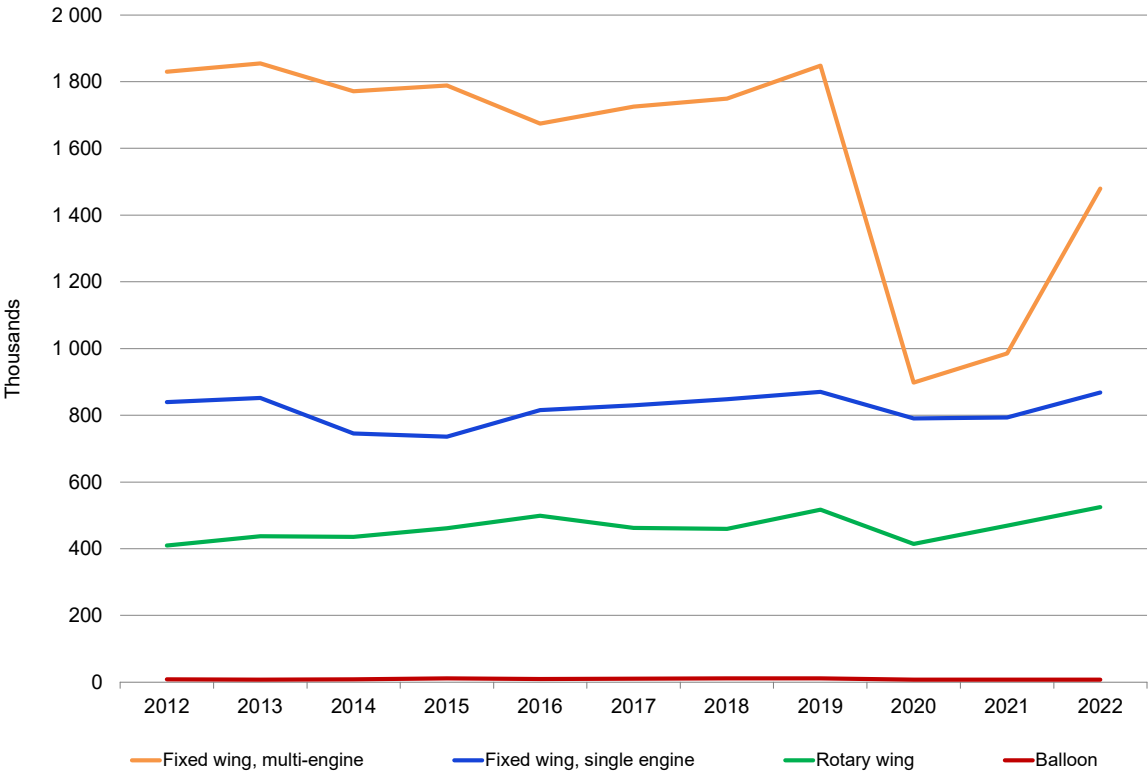
Rotary wing aircraft are helicopters largely used in agricultural mustering, other aerial work and passenger charter transport. In 2022, the number of helicopters increased by 1.5 per cent to 2,386 (16.9 per cent of the total), with the number of single engine helicopters increasing by 1.8 per cent to 2,102. The number of multi-engine helicopters decreased by 0.7 per cent to 284 (see Table 4).

Hot air balloons were used primarily for sport and pleasure flying and joyflights/sightseeing. The number of hot-air balloons increased by 1.8 per cent to 406, or 2.9 per cent of total aircraft in 2022 (see Table 4).

The Australian general aviation and commercial air transport fleet contain many older aircraft, with the average age being 37.7 years for fixed wing aircraft, 21.6 years for rotary aircraft and 15.4 years for balloons and airships (see Table 4). Figure 3 (below) shows the flying hours performed by VH-registered aircraft by major category.

About one in every four (3,717 aircraft) general aviation and commercial air transport aircraft reported performing no flying during the year ended 31 December 2022. Reasons were provided for 3,536 of these aircraft (see Table 13 page 23), with the most common reason being "Repair/maintenance/restoration" (reported by 43.6 per cent of these aircraft).

Figure 3 VH-registered fleet hours flown, by category of aircraft (2012–2022)



The Sport and Recreational registered fleet

Not all aircraft in Australia are listed on the Australian Civil Aircraft Register. Statistics for gliders, hang gliders, paragliders, weight shift microlights and gyrocopters have been supplied courtesy of the Gliding Australia, the Sports Aviation Federation of Australia and the Australian Sport Rotorcraft Association. Prior to 2020 statistics for aircraft registered to RA-Aus were provided by RA-Aus. In 2020, following discussions with RA-Aus, the Bureau of Infrastructure and Transport Research Economics (BITRE) agreed to directly survey these aircraft types on behalf of RA-Aus.

In 2022 the sport and recreational registered fleet consisted of 8,253 aircraft, flying a total of 353,094 hours (see Table 5 page 16).

Ultralight flying

Information collected by General Aviation Activity Survey

In 2022, ultralight aircraft flew a total of 158,409 hours, representing a decrease of 6.0 per cent over 2021 (see Table 12 page 22).

At the end of December 2022, a total of 3,309 aircraft had current registrations issued by RA-Aus, an increase of 7.1 per cent over 2021 (3,091 aircraft) (see Table 5).

Gliding

Information provided by the Gliding Australia

The number of registered gliders in 2022 was 1,273, a decrease of 0.6 per cent compared with December 2021 (see Table 5). The total number of reported flying hours decreased by 2.0 per cent to 45,700 hours in 2021-22 compared with 2020-21 (see Table 1).

Hang gliding and paragliding

Information provided by the Sports Aviation Federation of Australia

The total number of hours flown by hang gliders and paragliders in 2021-22 increased by 8.5 per cent on the previous year to 100,414 hours (see Table 1).

Gyroplanes

Information provided by the Australian Sport Rotorcraft Association

The number of gyroplanes in 2022 was 316 (see Table 5). The total number of estimated hours flown by gyroplanes in 2022 decreased by 8.8 per cent to 48,571 hours, compared with 2021 (see Table 1).

Tables

Table 1 Total hours flown by industry sector (1993-2022)

Year	Total Scheduled ^a	Other VH-registered aircraft ^b	Ultralight flying	Gliding ^c	Hang Gliding ^d	Gyroplanes ^e	Total
	(thousand hours)						
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	57.8	105.1	46.8	3 484.6
2013	1 410.7	1 741.8	153.5	63.6 r	117.2	44.9	3 531.8
2014	1 402.1	1 526.4	176.1	67.7 r	113.8	38.9	3 324.9
2015	1 440.0	1 552.3	167.0	66.1 r	110.9	43.5	3 379.7
2016	1 389.4	1 608.8	148.2	65.1 r	107.7	37.0	3 356.2
2017	1 427.1	1 600.4	144.0	56.6 r	103.5	40.0	3 371.6
2018	1 423.9	1 642.3	126.4	58.1 r	117.8	42.0	3 410.5
2019	1 526.3	1 719.7	142.7	58.2 r	101.4	47.7	3 596.0
2020	524.2	1 585.4	166.8	46.7 r	97.2	43.3	2 463.7
2021	623.9	1 631.5	168.4	45.2 r	92.6	53.3	2 614.8
2022	1 091.5	1 788.7	158.4	45.7	100.4	48.6	3 233.3

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.

r revised

Table 2 Hours flown and percentage change, by industry sector and flying activity (2020-2022)

Flying Activity	2020 ^a		2021 ^a		2022 ^a	
	Hours flown (thousands)	Percentage change over 2019	Hours flown (thousands)	Percentage change over 2020	Hours flown (thousands)	Percentage change over 2021
Scheduled	524.2	-65.7%	623.9	19.0%	1 091.5	75.0%
Non-Scheduled ^b	351.8	-0.7%	409.0	16.3%	455.3	11.3%
Private	145.4	-10.9%	139.4	-4.1%	158.6	13.8%
Business	110.8	-24.3%	123.9	11.8%	136.9	10.5%
Test & ferry	20.1	-38.1%	39.8	97.6%	32.3	-18.9%
Training	382.9	-9.4%	303.4	-20.8%	337.1	11.1%
Agriculture	108.4	29.9%	158.8	46.5%	165.8	4.4%
Survey & photography	41.2	-5.2%	40.4	-1.9%	57.4	42.1%
Pipe & powerline patrol	33.7	5.7%	40.5	20.4%	40.4	-0.4%
Mustering	140.0	-8.4%	153.3	9.5%	158.7	3.5%
Search & rescue	18.4	131.2%	8.0	-56.3%	12.6	56.4%
Ambulance	111.6	0.0%	106.0	-5.0%	115.8	9.3%
Towing	4.0	-9.3%	4.3	7.4%	5.2	19.2%
Other aerial work	117.1	-29.1%	104.7	-10.6%	112.7	7.7%
Total Hours Flown	2 109.6	-35.0%	2 255.3	6.9%	2 880.2	27.7%

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 (2022)^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	3 826	2 717	680.0	391	180.6	2 730	316.0	496.5
QLD	3 344	2 544	728.6	545	219.6	2 366	351.3	570.9
VIC	2 799	1 910	360.3	222	51.3	1 875	180.9	232.2
WA	1 891	1 426	438.5	447	203.6	1 235	198.3	401.9
SA	931	740	350.4	121	78.2	687	130.2	208.5
NT	730	550	196.4	280	100.8	404	76.1	176.9
TAS	220	173	39.5	47	8.6	154	19.1	27.7
ACT	118	82	14.1	15	4.3	75	5.7	10.1
Interstate	226	226	263.5	226	532.2			532.2
International	54	54	40.4	54	223.5			223.5
Australia	14 139	10 422	3 111.8	2 348	1 602.7	9 526	1 277.5	2 880.2

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 (2022)

Aircraft make	Number of Aircraft	Average age of aircraft ^a (years)	Hours flown (thousands)	Landings
Fixed wing, single-engine				
Cessna	3 079	42.9	374.2	498.6
Piper	1 386	47.5	118.5	180.9
Air Tractor	212	18.1	78.8	154.3
Diamond	121	12.3	58.3	196.2
Pilatus	70	12.9	44.0	41.1
Amateur-built	1 474	18.1	42.1	59.1
Cirrus	222	10.4	22.5	23.9
Ayres	61	25.8	22.0	41.5
Aerospatiale/Eurocopter	75	19.1	18.0	25.2
Beechcraft	336	46.0	16.3	15.3
Other	2 010	50.5	73.8	132.4
Subtotal	9 046	39.0	868.5	1 368.6
Fixed wing, multi-engine				
Boeing	223	13.2	589.1	249.3
Airbus	128	13.2	285.7	117.8
Bombardier	94	14.5	95.9	84.6
Beechcraft	389	37.2	92.1	88.0
Fokker	73	29.8	78.2	51.5
Cessna	398	38.2	73.0	63.5
Saab	72	28.0	68.0	69.0
Piper	398	43.0	42.2	39.7
Embraer	41	13.0	30.4	15.5
Fairchild	43	33.8	17.2	17.2
Other	442	36.9	107.5	109.9
Subtotal	2 301	32.7	1 479.3	906.2
Total	11 347	37.7	2 347.7	2 274.8

Table 4 (continued) Australian Aircraft Fleet, VH-registered (2022)

Helicopter make	Number of Aircraft	Average age of aircraft ^a (years)	Hours flown (thousands)	Landings
Rotary wing, single-engine				
Robinson	1 238	15.2	289.8	418.5
Bell	339	38.9	57.2	116.6
Aerospatiale/Eurocopter	215	24.5	50.6	88.9
Airbus	26	5.0	8.4	17.7
Schweizer	34	21.2	5.0	6.1
Agusta	31	45.2	4.0	6.3
Guimbal	15	8.3	4.0	4.0
Hughes	19	47.6	2.1	3.4
McDonnell Douglas	9	33.7	1.8	1.4
Enstrom	16	36.7	1.7	2.6
Other	160	28.1	8.5	14.7
Subtotal	2 102	21.8	433.1	680.1
Rotary wing, multi-engine				
Agusta	86	9.7	44.2	81.0
Bell	67	24.3	15.3	25.5
Sikorsky	24	16.2	10.8	10.5
Aerospatiale/Eurocopter	32	33.6	5.8	6.0
Kawasaki	28	29.6	5.1	9.3
Other	47	19.4	10.6	16.6
Subtotal	284	20.0	91.6	148.8
Total	2 386	21.6	524.7	829.0

Table 4 (continued) Australian Aircraft Fleet, VH-registered (2022)

Balloon or airship make	Number of Aircraft	Average age of aircraft^a (years)	Hours flown (thousands)	Landings
Kavanagh	279	13.4	6.8	7.1
Cameron	57	21.1	0.4	0.4
Balony	11	4.0	0.2	0.2
Thunder/Colt	18	33.6	0.1	0.1
Amateur-built	20	10.4	-	-
Other	21	20.9	0.2	0.2
Total	406	15.4	7.8	8.0

Note: Includes data from General Aviation Activity survey

^a As at end of 2021

Table 5 Australian Aircraft Fleet, Sports and Recreational Registered Aircraft (2022)

Aircraft	Number of Aircraft	Hours flown (thousands)
Ultralight	3 309	158.4
Gliders	1 273	45.7
Hang gliders ^a	3 355	100.4
Gyroplanes	316	48.6
Total	8 253	353.1

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 (2022)

Fuel type	Number of aircraft	Total hours flown (thousands)
Fixed wing, single engine		
Diesel	27	3.8
Avtur	581	215.9
Avgas	8 438	648.8
Subtotal	9 046	868.5
Fixed wing, multi-engine		
Diesel	20	4.9
Avtur	1 170	1 338.9
Avgas	1 111	135.4
Subtotal	2 301	1 479.3
Subtotal (Fixed wing)	11 347	2 347.7
Rotary wing, single engine		
Avtur	681	132.4
Avgas	1 421	300.8
Subtotal	2 102	433.1
Rotary wing, multi-engine		
Avtur	284	91.6
Subtotal	284	91.6
Subtotal (Rotary wing)	2 386	524.7
Balloons and airships		
N/A	406	7.8
Total	14 139	2 880.2

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

Table 7 Flying Activity by VH-registered aircraft (2022)

Industry sector and flying activity		Number of Aircraft	Average age of Aircraft ^a	Hours flown	Landings	
			(years)	(thousands)		
Commercial air transport						
Scheduled	International	170	10.9	224.7	40.9	
	Domestic	634	19.4	858.9	545.2	
	Freight only	7	19.7	7.8	2.8	
Non-scheduled	Passenger transport charters	1780	26.6	334.4	407.6	
	Air ambulance	198	15.5	115.8	139.8	
	Freight only	134	31.5	50.8	45.0	
	Other commercial air transport	66	32.7	10.2	17.4	
Total Commercial air transport		2348 ^b	25.3	1 602.7	1 198.8	
General Aviation						
Aerial work	Agricultural spreading/spraying	782	23.6	127.6	293.2	
	Agricultural mustering	820	20.9	158.7	165.4	
	Agriculture - other	701	23.9	38.2	49.5	
	Construction - sling loads	36	27.1	2.6	2.9	
	Construction - other	8	22.9	0.7	0.7	
	Photography	116	29.7	13.0	9.0	
	Pipeline or powerline surveying	564	22.3	15.6	16.3	
	Other surveying	623	23.1	44.4	30.4	
	Observation and Patrol	546	21.7	24.8	12.9	
	Search and rescue	104	19.4	12.6	13.1	
	Policing	69	18.7	19.7	13.6	
	Firefighting	681	21.7	22.5	26.1	
	Advertising	9	30.9	0.5	0.4	
	Other aerial work	824	26.5	67.3	94.7	
	Own Use Business	Own business travel	2339	30.8	136.9	132.6
	Instructional flying	Instructional flying - commercial	1092	26.6	294.1	586.1
		Instructional flying - non-commercial	613	31.2	43.0	82.8
Sport & pleasure flying	Glider towing	63	50.6	4.7	29.2	
	Parachute dropping	307	49.0	13.9	33.4	
	Aerobatics	163	35.1	3.6	7.1	
	Joyflights/sightseeing charters	488	23.7	59.9	102.9	
	Pleasure and personal transport	3419	37.4	124.3	149.8	
	Community service flights	72	24.8	2.6	2.4	
	Other sport and pleasure flying	414	33.9	14.3	19.8	
Other flying	Test flights	403	27.2	2.1	5.1	
	Ferry flights	798	22.8	13.1	10.4	
	Other flights	470	27.6	17.0	23.1	
Total General Aviation		9526 ^c	31.7	1 277.5	1 913.0	
Total		10422 ^d	31.5	2 880.2	3 111.8	

Note: Includes data from General Aviation Activity survey

^a As at end of 2021

^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 (2022), 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								
NSW	92.0	88.6	137.6	32.7	88.2	47.0	10.4	496.5
QLD	93.8	125.9	169.1	47.6	67.0	58.1	9.5	570.9
VIC	8.8	42.5	43.1	18.2	70.5	45.8	3.2	232.2
WA	70.4	133.2	102.2	13.6	40.9	36.9	4.6	401.9
SA	47.4	30.9	35.5	10.6	60.4	22.1	1.6	208.5
NT	17.8	83.0	50.7	12.2	4.0	7.0	2.2	176.9
TAS	2.3	6.3	8.8	1.4	4.5	4.0	0.3	27.7
ACT	3.4	0.9	0.9	0.6	1.4	2.3	0.4	10.1
Interstate	532.2							532.2
International	223.5							223.5
Australia	1 091.5	511.2	548.0	136.9	337.1	223.2	32.3	2 880.2

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 (2022), 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								
NSW	82.8	100.9	227.4	32.2	152.1	72.3	12.3	680.0
QLD	87.3	178.8	219.6	46.8	91.0	94.6	10.6	728.6
VIC	10.0	68.0	56.9	17.8	133.0	70.3	4.3	360.3
WA	46.0	126.2	114.1	12.3	73.6	61.3	5.1	438.5
SA	34.2	31.3	43.9	10.4	200.3	28.5	1.9	350.4
NT	17.7	93.5	55.4	10.7	6.6	9.4	3.2	196.4
TAS	3.4	10.0	10.3	1.9	7.9	5.5	0.5	39.5
ACT	3.6	1.3	0.8	0.7	4.4	2.5	0.8	14.1
Interstate	263.5							263.5
International	40.4							40.4
Australia	588.9	609.8	728.2	132.6	668.9	344.5	38.7	3 111.8

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 (2022), 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	911.6	399.5	172.5	181.3	0.1	0.1	7.3	8.1
Transport	Non-scheduled	96.2	56.7	176.4	173.2	73.0	139.3	165.4	240.5
General Aviation	Aerial Work	8.0	4.3	136.9	222.4	119.1	182.8	283.9	318.5
	Own Use Business	9.0	5.1	11.2	9.8	8.4	12.8	108.4	104.9
	Instructional flying	0.2	0.2	2.9	4.5	5.5	11.7	328.5	652.5
	Sport & pleasure	2.1	1.3	18.9	34.6	12.3	39.1	182.7	261.8
	Other flying	5.1	2.2	3.8	4.2	5.8	11.3	17.6	20.9
Total		1 032.2	469.4	522.5	630.0	224.1	397.0	1 093.7	1 607.3

Note: Includes data from General Aviation Activity survey

Table 11 Hours flown^a in Ultralight operations, by state and category of aircraft (2022)

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	0.4	3.2	26.0	0.9	9.1	0.5	9.6	1.1	50.4	50.8
NSW	0.8	0.8	17.5	1.0	9.4	0.2	6.8	1.8	37.5	38.3
VIC	0.3	0.5	14.0	1.3	6.6	0.4	5.8	3.0	31.5	31.9
SA	0.3	0.4	9.1	1.4	3.7	0.4	2.2	1.1	18.2	18.5
WA	-	0.3	5.8	0.1	2.5	0.1	2.7	1.5	13.0	13.1
TAS	-	0.1	1.7	0.2	0.5	0.1	0.5	0.0	3.1	3.1
ACT	0.0	0.1	0.3	0.1	0.3	0.1	0.8	-	1.6	1.6
NT	0.1	0.1	0.3	0.1	0.5	0.0	0.1	-	1.1	1.1
Australia	1.9	5.4	74.7	5.0	32.6	1.7	28.5	8.6	156.5	158.4

Table 12 Hours flown^a in Ultralight operations, by category of aircraft (2012–2022)

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)								
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
2020	3.2	6.5	73.5	5.9	46.1	4.4	12.1	15.1	163.6	166.8
2021	2.8	5.3	77.2	5.4	44.7	2.5	17.7	12.9	165.7	168.4
2022	1.9	5.4	74.7	5.0	32.6	1.7	28.5	8.6	156.5	158.4

Table 13 Reasons for nil flying activity (2022)

Reason for nil activity	Number of aircraft	Percentage of reporting inactive aircraft
Repair / maintenance / restoration	1 543	43.6
Aircraft in storage	711	20.1
Aircraft unserviceable / unairworthy	261	7.4
Work or other commitments	116	3.3
Aircraft awaiting sale	113	3.2
Amateur-built aircraft not yet completed	99	2.8
Sold prior to 1 January 2022	93	2.6
Financial reasons	87	2.5
Owner's health issues / deceased	78	2.2
This aircraft is unknown to the operator	57	1.6
Operator or owner travelling	57	1.6
Lack of business / company ceased operating	52	1.5
New Aircraft	39	1.1
C of A not yet issued	32	0.9
Other	198	5.6
Total	3 536	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).

Explanatory notes

The results presented in this report are drawn from BITRE's General Aviation Activity Survey. This survey gathered statistics on the flying activity of all Australian-registered aircraft during the 2022 calendar year.

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 for the Australian Aircraft Activity 2022 Publication

Survey questionnaires were despatched to owners or operators of all aircraft listed on the Australian Civil Aircraft Register. Responses were received for 79.5 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 aircraft registered to RA-Aus were provided directly by RA-Aus prior to 2020. BITRE has included these aircraft in the General Aviation Activity Survey since 2020, increasing the overall number of aircraft in the overall survey by around 25 per cent. Responses were received for 77.1 per cent of aircraft registered to RA-Aus. For aircraft where a response was not received, careful estimates were substituted, based on the average of responses by similar aircraft.

Statistics for gliders, weight shift aircraft and gyrocopters have been supplied courtesy of the Gliding Australia, the Sports Aviation 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.

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
GA	Gliding Australia
SAFA	Sports Aviation Federation of Australia
RA-Aus	Recreational Aviation Australia
RPT	Regular Public Transport

Survey Form



Australian Government

**Department of Infrastructure, Transport,
Regional Development, Communications and the Arts**
Bureau of Infrastructure and Transport Research Economics

Aviation Activity Survey

Year ended 31 December 2022

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 1 May 2023.

For all aircraft operated in the year ending 31 December 2022, 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:		USER NAME:						
		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							
		Instructional flying - commercial						
		Instructional flying - non-commercial						
	Sport & pleasure flying	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: Registrations are based on information supplied by the Civil Aviation Safety Authority. Please add any additional aircraft you operated in 2022 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 2022. 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 2022, 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

Pleasure and personal transport

Flying for private pleasure, or personal transport not associated with a business or profession.

Community service flights

Flights provided on a voluntary basis for public benefit. Includes non-emergency flights provided as part of an organised voluntary or charitable activity. Not including flights where a pilot provides a flight to a friend or family.

Glider towing

Includes the use of aircraft for glider towing.

Parachute dropping

Flying associated with the dropping of parachutists.

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.

Joyflights / sightseeing charters

Flying involving the carriage of passengers for joyflights or sightseeing purposes that take off and land at the same location.

Other sport and pleasure flying

Other sport and pleasure flying not classified elsewhere.

Other flying

Test

Flying associated with the testing of an aircraft.

Ferry

Flying associated with an aircraft delivery or movement to a location for maintenance, hire or other planned use.

Other flying

Flying not classified elsewhere.

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

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.
Commercial Air Transport - Scheduled	Commercial Air Transport that operates flights according to schedules drawn up to cover several months or even years at a time (e.g. Domestic RPT).
Commercial Air Transport – Non-Scheduled	Commercial Air Transport that operates without fixed or published flying schedules (e.g. charter passenger flights).
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.