

Aviation Industry Safety Update

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Introduction

This report uses calendar years; the first quarter is 1 January to 31 March.

Data in tables may not sum exactly to the total shown due to rounding.

Occurrence Statistics

The “Twelve Month Moving Average” graphs in the Occurrence Statistics sections give an indication of the levels of safety failure in New Zealand aviation during the period 1 July 2006 to 31 December 2008. They are constructed from data in the Civil Aviation Authority Management Information System, and use actual data reported to the CAA.

Industry Activity Statistics

Registered Aircraft

The following table summarises the number of aircraft on the register by Aircraft Category at 31 December 2008 and 6 months prior:

Aircraft Category	30 Jun 2008		31 Dec 2008		Change	
	Number	Percent	Number	Percent	Number	Percent
Large Aeroplanes	119	2.8	121	2.8	2	1.7
Medium Aeroplanes	81	1.9	81	1.9	0	0
Small Aeroplanes	1,471	34.2	1,492	34.7	21	1.4
Agricultural Aeroplanes	126	2.9	120	2.8	- 6	- 4.8
Helicopters	725	16.9	747	17.4	22	3.0
Sport Aircraft (Aeropl, FB, Helo only)	1,779	41.4	1,793	41.7	14	0.8
Total	4,301		4,354		53	1.2

Licences

The following table summarises the number of recreational pilot, private pilot, commercial pilot, airline transport pilot, air traffic controller, and aircraft maintenance engineer licences on the register at 31 December 2008 and 6 months prior:

Licence Type (Medical Certificate)	30 Jun 2008	31 Dec 2008	Change	
			Number	Percent
RPL (RPL Medical)	0	68	68.0	-
PPL (Class 1 & 2)	3,856	3,733	- 123.0	- 3.2
CPL (Class 2 only)	1,763	1,761	- 2.0	- 0.1
CPL (Class 1)	2,162	2,295	133.0	6.2
ATPL (Class 2 only)	847	991	144.0	17.0
ATPL (Class 1)	1,152	1,048	- 104.0	- 9.0
ATCL (Class 3)	332	342	10.0	3.0
LAME (N/A)	2,276	2,342	66.0	2.9
Total Licences	12,388	12,580	192.0	1.5

Note — the statistics above for pilot licences count only those with active class 1 or active class 2 medical certificates or, for RPL holders, a certificate, issued in accordance with rule 44(1) of the Land Transport (Driver Licensing) Rule 1999, that is applicable for a Class 2, 3, 4 or 5 driver licence with passenger endorsement. This means that for CPL and ATPL licences, the number with a class 2 medical only, must only be exercising PPL privileges (or not flying at all). The statistics above for Air Traffic Controller Licences count only those with an active class 3 medical certificate.

The statistics above do not show the number of licence holders as each client may hold more than one licence [e.g. PPL (helicopter) and PPL (aeroplane), or PPL (Helicopter) and CPL (Balloon), held by one client counts as two licences].

Certificated Operators

The following tables show the number of Civil Aviation Rule Part certificate holders at 31 December 2008 and 6 months prior.

Rule part	30 Jun 2008	31 Dec 2008	Change	
			Number	Percent
Part 119 Air Operator	174	174	0	0
Part 119 Air Operator - Pacific	3	2	-1	-33.3
Part 129 Foreign Air Operator	38	40	2	5.3
Part 137 Agricultural Aircraft Operator	108	109	1	0.9
Part 139 Aerodromes	25	25	0	0
Part 140 Aviation Security Service	1	1	0	0
Part 141 Aviation Training Organisation	48	49	1	2.1
Part 141 Restricted Training Organisation	0	0	0	-
Part 145 Aircraft Maintenance Organisation	57	55	-2	-3.5
Part 146 Aircraft Design Organisation	11	11	0	0
Part 148 Aircraft Manufacturing Organisation	22	22	0	0
Part 149 Aviation Recreation Organisation	8	9	1	12.5
Part 171 Aeronautical Telecommunication Service Organisation	3	2	-1	-33.3
Part 172 Air Traffic Service	1	2	1	100.0
Part 174 Meteorological Service Organisation	2	2	0	0
Part 175 Aeronautical Information Service Organisation	2	2	0	0
Part 19 Supply Organisation Certificate of Approval	61	64	3	4.9
Part 92 Dangerous Goods Packaging Approval	40	44	4	10.0

Note: The figures show the total number of approvals held by organisations with Part 92 certificates.

119 Air Operator	30 Jun 2008	31 Dec 2008	Change	
			Number	Percent
Part 108 Security Programme	21	19	-2	-9.5
Part 121 Large Aeroplanes	11	9	-2	-18.2
Part 125 Medium Aeroplanes	16	15	-1	-6.3
Part 135 Helicopters and Small Aeroplanes	161	163	2	1.2

119 Air Operator Pacific	30 Jun 2008	31 Dec 2008	Change	
			Number	Percent
Part 108 Security Programme	3	2	-1	-33.3
Part 121 Large Aeroplanes	3	2	-1	-33.3
Part 125 Medium Aeroplanes	2	2	0	0
Part 135 Helicopters and Small Aeroplanes	2	2	0	0

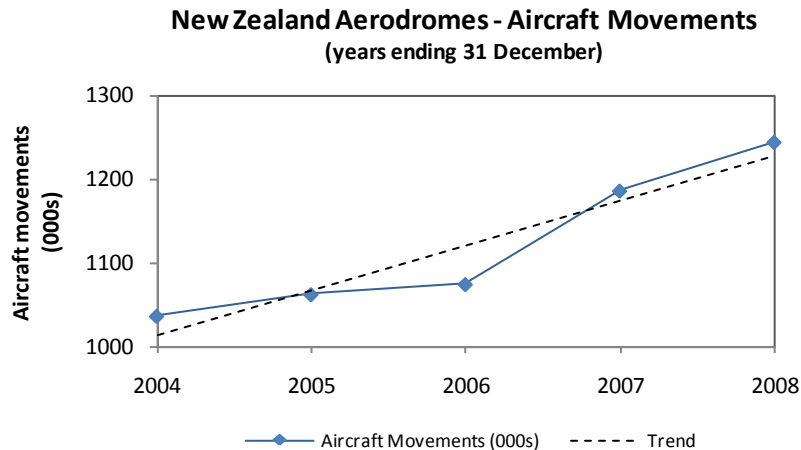
129 Foreign Air Operator	30 Jun 2008	31 Dec 2008	Change	
			Number	Percent
Part 108 Security Programme	30	30	0	0

Aircraft Movements

The following graph and table show the number of aircraft movements at the following aerodromes: Auckland, Christchurch, Dunedin, Gisborne, Hamilton, Invercargill, Milford Sound, Napier, Nelson, New Plymouth, Ohakea, Palmerston North, Queenstown, Rotorua, Taupo, Tauranga, Wellington, Whenuapai and Woodbourne.

Long-Term Change in Aircraft Movements

The following graph shows the number of aircraft movements for the five-year period 1 January 2004 to 31 December 2008.



The number of aircraft movements increased at an average of 4.7% each year from the year ended 31 December 2004 until the year ended 31 December 2008 when a high of 1,243,430 was reached.

Six-Monthly Comparison

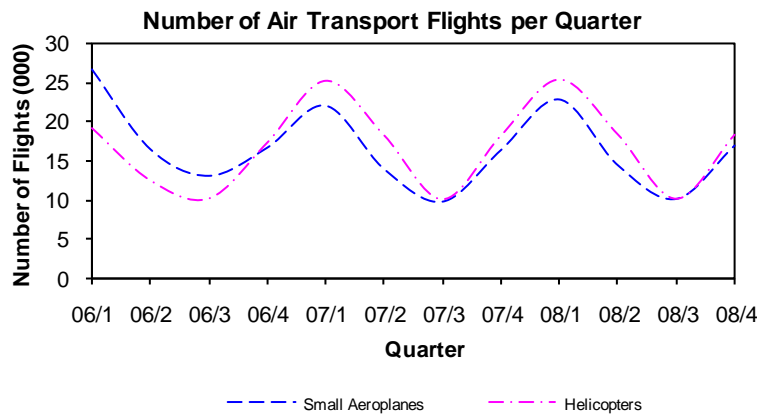
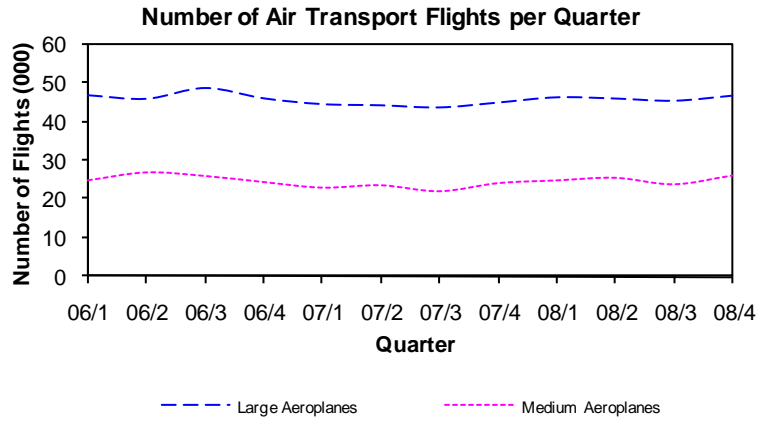
Number of Aircraft Movements

Activity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change	
			Number	Percent
Aircraft Movements	607,701	602,123	- 5,578	- 0.9

Air Transport Flights

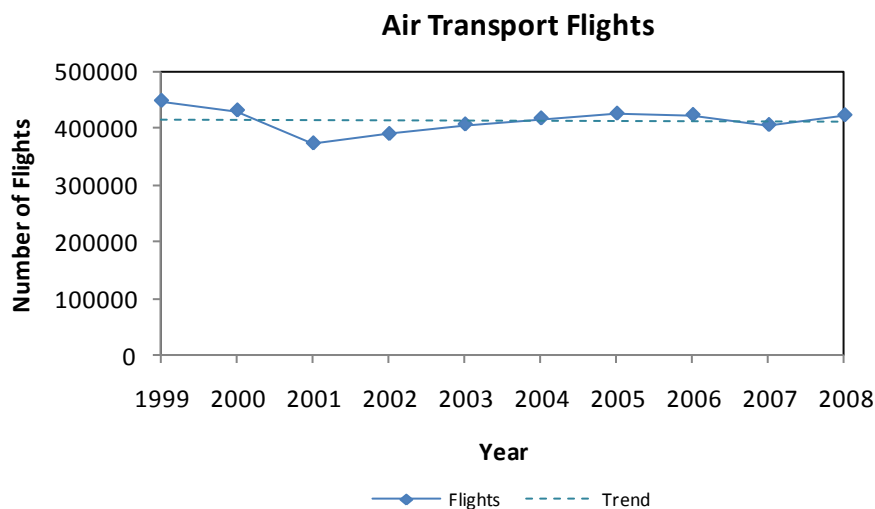
Note that these graphs exclude the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes, and foreign registered aircraft that are operated in New Zealand.

The following graphs show the number of air transport flights per quarter during the three year period 1 January 2006 to 31 December 2008.



Long-Term Change in Air Transport Flights

The following graph shows the number of air transport flights (includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes) for the 10-year period 1 January 1999 to 31 December 2008.



The number of air transport flights increased at an average of 0.3% each year from 417,200 in the year ended 31 December 2004 to 422,775 in the year ended 31 December 2008.

Six-Monthly Comparison

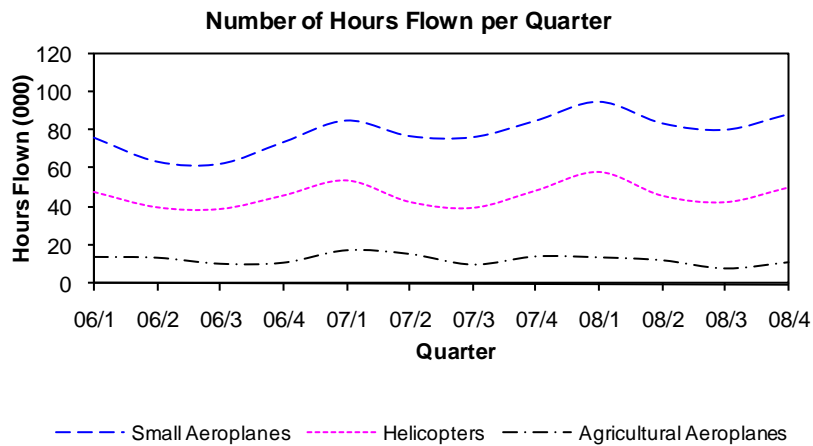
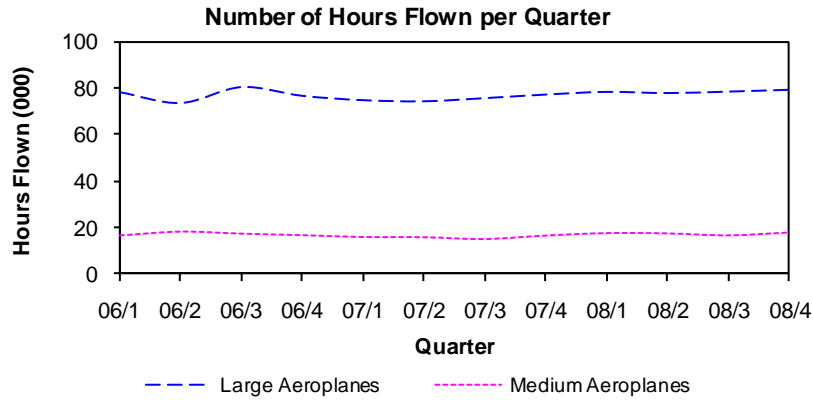
Number of Air Transport Flights

Aircraft Category	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change	
			Number	Percent
Large Aeroplanes	89,212	92,817	3,605	4.0
Medium Aeroplanes	46,258	49,880	3,622	7.8
Small Aeroplanes	25,931	26,865	934	3.6
Helicopters	28,318	28,500	182	0.6
Sport Aircraft (Aeropl, FB, Helo only)	226	230	4	1.7
Total	189,945	198,292	8,347	4.4

Hours Flown

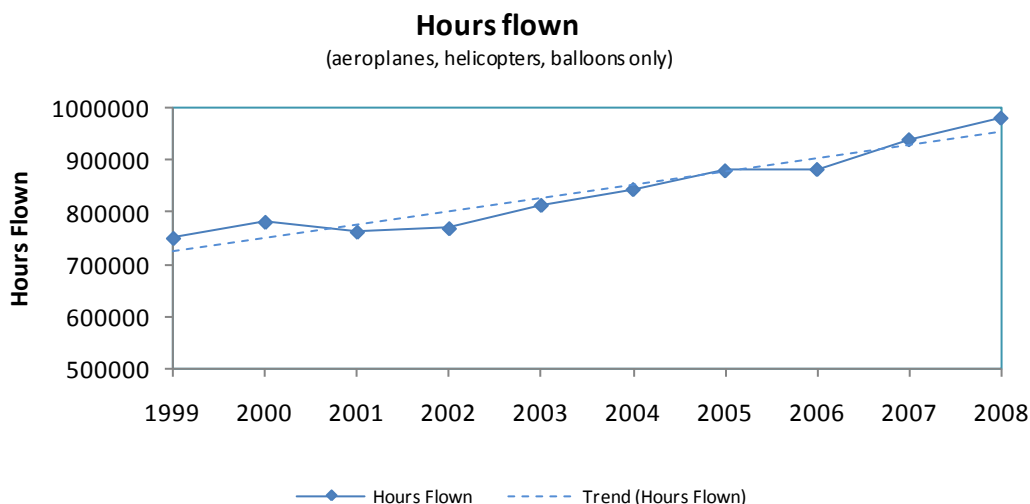
Note that these graphs exclude the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes, and foreign registered aircraft that are operated in New Zealand.

The following graphs show the number of hours flown by aircraft during the three-year period 1 January 2006 to 31 December 2008.



Long-Term Change in Hours Flown

The following graph shows the number of hours flown (includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes) for the 10-year period 1 January 1999 to 31 December 2008.



The total number of hours flown increased at an average of 3.9% each year from 844,937 in the year ended 31 December 2004 to 982,709 in the year ended 31 December 2008.

Six-Monthly Comparison

Number of Hours Flown by Safety Target Group

Aircraft Category	1 Jul - 31 Dec 2007	1 Jul - 31 Dec 2008	Change	
			Number	Percent
Airline Operations - Large Aeroplanes	153,231	158,051	4,820	3.1
Airline Operations - Medium Aeroplanes	31,400	33,943	2,544	8.1
Airline Operations - Small Aeroplanes	22,180	21,612	- 568	- 2.6
Airline Operations - Helicopter	27,034	26,631	- 402	- 1.5
Sport Transport (Aeropl, FB, Helo only)	583	689	107	18.3
Other Commercial Operations - Aeroplane	121,520	128,451	6,931	5.7
Other Commercial Operations - Helicopter	26,982	31,872	4,891	18.1
Agricultural Operations - Aeroplane	22,777	17,222	- 5,555	- 24.4
Agricultural Operations - Helicopter	24,060	22,732	- 1,328	- 5.5
Agricultural Operations - Sport	0	0	0	-
Private Operations - Aeroplane	20,819	22,286	1,467	7.0
Private Operations - Helicopter	10,903	12,403	1,500	13.8
Private Operations - Sport (Aeropl, FB, Helo only)	951	851	- 100	- 10.5
Total	462,438	476,745	14,307	3.1

***Number of Hours Flown by Aircraft Category and Activity Type
1 July to 31 December 2007***

Aircraft Category	Airline/ Transport	Other Commercial	Agricultural	Private	Total
Large Aeroplanes	153,231	0	0	0	153,231
Medium Aeroplanes	31,400	0	0	0	31,400
Small Aeroplanes	22,180	119,609	97	20,669	162,555
Agricultural Aeroplanes	0	1,911	22,680	150	24,740
Helicopters	27,034	26,982	24,060	10,903	88,978
Sport Aircraft (aeroplane, helicopter and balloon only)	583	0	0	951	1,534
Total	234,427	148,502	46,837	32,673	462,438

1 July to 31 December 2008

Aircraft Category	Airline/ Transport	Other Commercial	Agricultural	Private	Total
Large Aeroplanes	158,051	0	0	0	158,051
Medium Aeroplanes	33,943	0	0	0	33,943
Small Aeroplanes	21,612	126,063	41	22,233	169,949
Agricultural Aeroplanes	0	2,388	17,180	53	19,622
Helicopters	26,631	31,872	22,732	12,403	93,639
Sport Aircraft (aeroplane, helicopter and balloon only)	689	0	0	851	1,540
Total	240,928	160,323	39,954	35,540	476,745

Industry Size and Shape

The following table shows the size and shape of the aviation industry as determined from Aircraft Operating Statistics in the relevant 2010 Safety Target Group categories for the period 1 January to 31 December 2008. For each Safety Target Group the total number of hours flown is multiplied by the average number of seats and the appropriate load factor, to give the number of seat hours utilised by the group (person exposure). For Safety Target Groups that are not predominantly passenger carrying a surrogate of 500 kg of aircraft weight is used instead of seat hours.

Aircraft Category	Average No. Of seats	Seat Hours Offered (000's)	Percent seat hours
Airline Operations - Large Aeroplanes	199.00	45702	95.7
Airline Operations - Medium Aeroplanes	20.59	845	1.8
Airline Operations - Small Aeroplanes	3.89	122	0.3
Airline Operations - Helicopter	3.60	142	0.3
Sport Transport *		122	0.3
Other Commercial Operations - Aeroplane	2.00	254	0.5
Other Commercial Operations - Helicopter	3.60	113	0.2
Agricultural Operations - Aeroplane	2.00	46	0.1
Agricultural Operations - Helicopter	3.60	90	0.2
Agricultural Operations - Sport *			
Private Operations - Aeroplane	2.00	67	0.1
Private Operations - Helicopter	3.60	63	0.1
Private Operations - Sport *		206	0.4

* most sport aircraft do not report hours or seats, so a standard estimate of seat hours offered is used as well as reported data for such aircraft in these groups.

Note that the percentages may not sum exactly to 100.0% due to rounding.

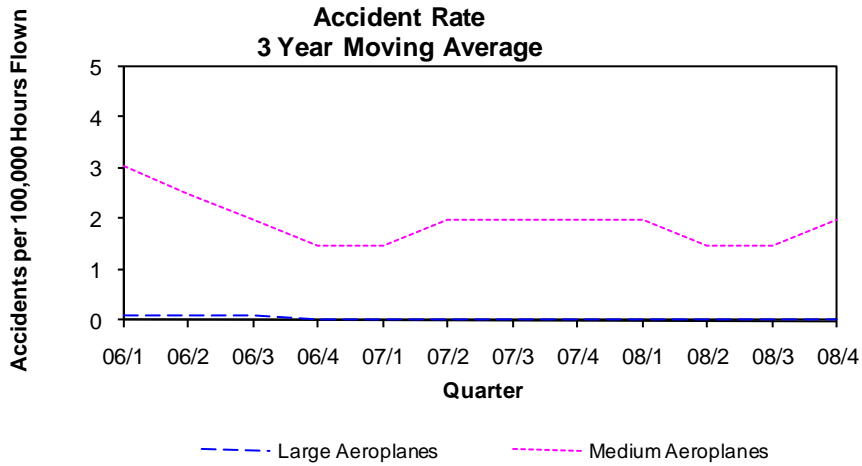
This table shows that around 95.7% of seat hours are offered by the Airline Operations – Large Aeroplanes group, around 1.8% by the Airline Operations – Medium Aeroplanes group, with the remaining 2.5% of seat hours offered being split between the other safety target groups.

Occurrence Statistics

Aircraft Accidents

Occurrence Trend

The following graphs show the aircraft accident rates (accidents per 100,000 hours flown) three year moving average for the three-year period 1 January 2006 to 31 December 2008 (excluding the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes).

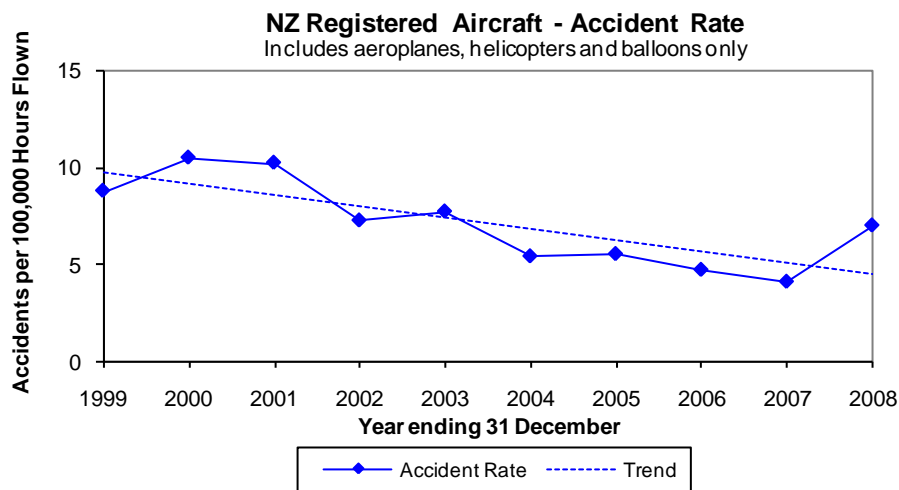


Aircraft Category	Straight Line Trend of 12 month moving Average
Large Aeroplanes	Constant
Medium Aeroplanes	Trending down
Small Aeroplanes	Trending up
Ag Aeroplanes	Trending up
Helicopters	Trending down
Sport Aircraft (excluding hang gliders and parachutes)	Trending up

The slope of the trend lines for ‘Large Aeroplanes’ is zero.

Long-Term Accident Rate

The following graph shows the overall accident rate per 100,000 hours flown (includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes) for the 10-year period 1 January 1999 to 31 December 2008.



Note that this graph does not show a moving average.

Six-Monthly Comparison

Number of Aircraft Accidents

Activity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	1	1
Small Aeroplanes	8	16	8
Ag Aeroplanes	2	5	3
Helicopters	6	12	6
Sport Aircraft (excluding hang gliders and parachutes)	8	18	10
Hang Gliders	6	3	- 3
Parachutes	1	1	0
Unknown	1	1	0
Total	32	57	25

Severity

Activity	Severity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Large Aeroplanes	Critical	0	0	0
	Major	0	0	0
	Minor	0	0	0
Medium Aeroplanes	Critical	0	0	0
	Major	0	1	1
	Minor	0	0	0
Small Aeroplanes	Critical	4	2	-2
	Major	2	12	10
	Minor	2	2	0
Helicopters	Critical	2	3	1
	Major	3	8	5
	Minor	1	1	0
Sport Aircraft (excluding hang gliders and parachutes)	Critical	0	0	0
	Major	1	17	16
	Minor	7	1	-6
Ag Aeroplanes	Critical	1	2	1
	Major	0	1	1
	Minor	1	2	1
Hang Gliders	Critical	0	0	0
	Major	1	0	-1
	Minor	5	1	-4
Parachutes	Critical	0	2	2
	Major	1	1	0
	Minor	0	0	0
Unknown	Critical	1	0	-1
	Major	0	0	0
	Minor	0	1	1
Total	Critical	8	9	1
	Major	8	40	32
	Minor	16	8	-8

Safety Outcome Targets for 2010

Number of Accidents

The following table shows the number of accidents for the years 2006 to 2008.

Safety Target Group	2006	2007	2008
Airline Operations - Large Aeroplanes	0	0	1
Airline Operations - Medium Aeroplanes	1	1	0
Airline Operations - Small Aeroplanes	0	2	3
Airline Operations - Helicopter	0	0	4
Sport Transport	8	5	0
Other Commercial Operations - Aeroplane	10	12	15
Other Commercial Operations - Helicopter	6	5	5
Agricultural Operations - Aeroplane	2	6	14
Agricultural Operations - Helicopter	7	2	7
Private Operations - Aeroplane	8	6	13
Private Operations - Helicopter	6	5	7
Private Operations - Sport	41	39	43
Total	89	83	112

The following table shows the number of accidents in six-monthly periods.

Safety Target Group	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Airline Operations - Large Aeroplanes	0	1	-1
Airline Operations - Medium Aeroplanes	0	0	0
Airline Operations - Small Aeroplanes	1	2	1
Airline Operations - Helicopter	0	3	3
Sport Transport	0	0	0
Other Commercial Operations - Aeroplane	6	5	-1
Other Commercial Operations - Helicopter	2	3	1
Agricultural Operations - Aeroplane	2	5	3
Agricultural Operations - Helicopter	1	4	3
Private Operations - Aeroplane	1	10	9
Private Operations - Helicopter	3	2	-1
Private Operations - Sport	9	18	9

Safety Target Structure

The 2010 Safety Targets have all New Zealand aviation classified under three broad group headings: Public Air Transport, Other Commercial Operations, and Non-commercial Operations.

Thirteen further sub-groups enable differentiation between aeroplanes, helicopters, and sport aircraft, and also allow for different weight groups. A diagram of the grouping is shown in the Definitions section.

The following table displays the social cost for each Safety Target Group for the 6-month period 1 July to 31 December 2008. Social cost is the cost of fatal, serious and minor injuries, and aircraft destroyed.

Safety Outcome Target Group	Social cost \$m
Airline Operations - Large Aeroplanes	0.03
Airline Operations - Medium Aeroplanes	-
Airline Operations - Small Aeroplanes	0.15
Airline Operations - Helicopter	1.87
Sport Transport	-
Other Commercial Operations - Aeroplane	-
Other Commercial Operations - Helicopter	0.03
Agricultural Operations - Aeroplane	4.22
Agricultural Operations - Helicopter	0.93
Agricultural Operations - Sport Aircraft	-
Private Operations - Aeroplane	1.07
Private Operations - Helicopter	3.65
Private Operations - Sport	6.07
Total	18.03

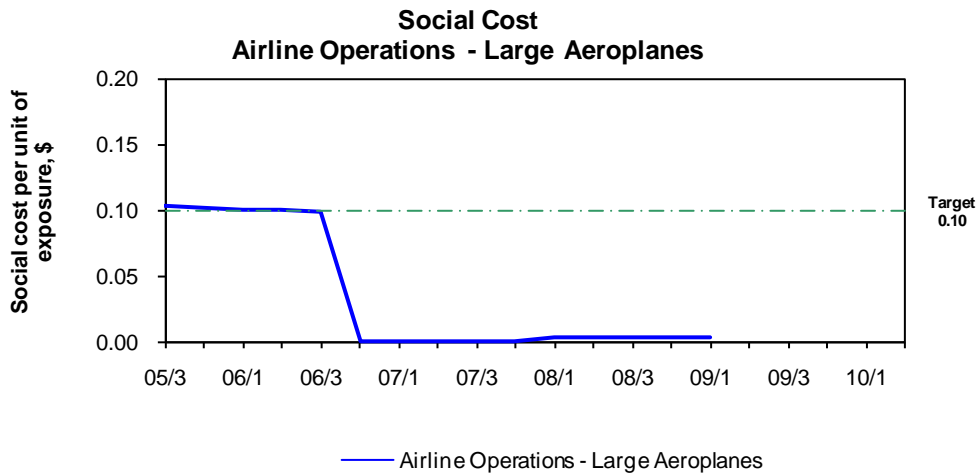
Note that the individual values in the table may not sum exactly to the total shown due to rounding.

Safety Target Graphs

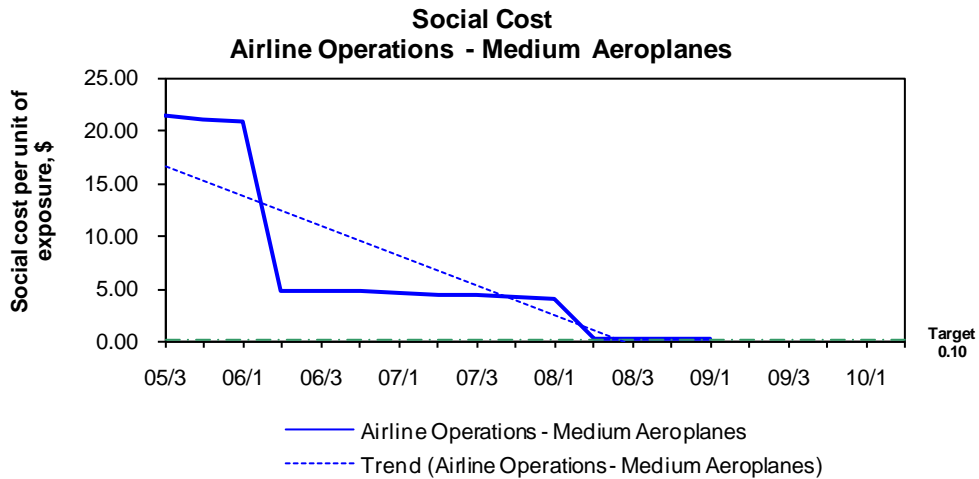
Each Safety Target Group has its own target level expressed as social cost per unit of person exposure, the unit being “one seat hour”. For Safety Target Groups that are not predominantly passenger carrying a surrogate of 500 kg of aircraft weight is used instead of person exposure. These outcomes represent the maximum level of social cost considered acceptable for each group.

The results for the Airline Operations – Large Aeroplanes and Medium Aeroplanes groups are derived using 10 year averages; all other groups use 12 month averages.

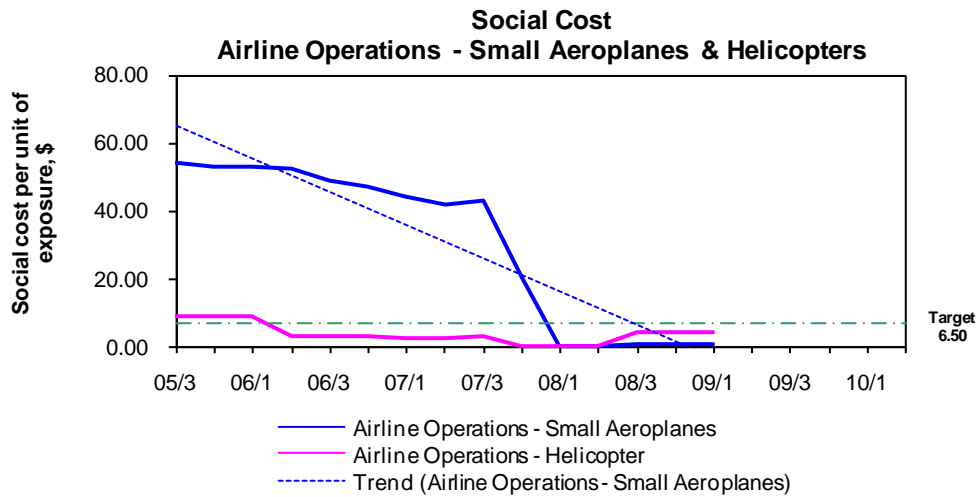
Graphs displaying the Safety Outcome Targets and the progress over each quarter are shown on the following pages.



The outcome for Airline Operations – Large Aeroplanes has remained well below the target level of \$0.10 per seat hour of exposure since the target regime was established in 2005. There is no discernable trend either up or down.

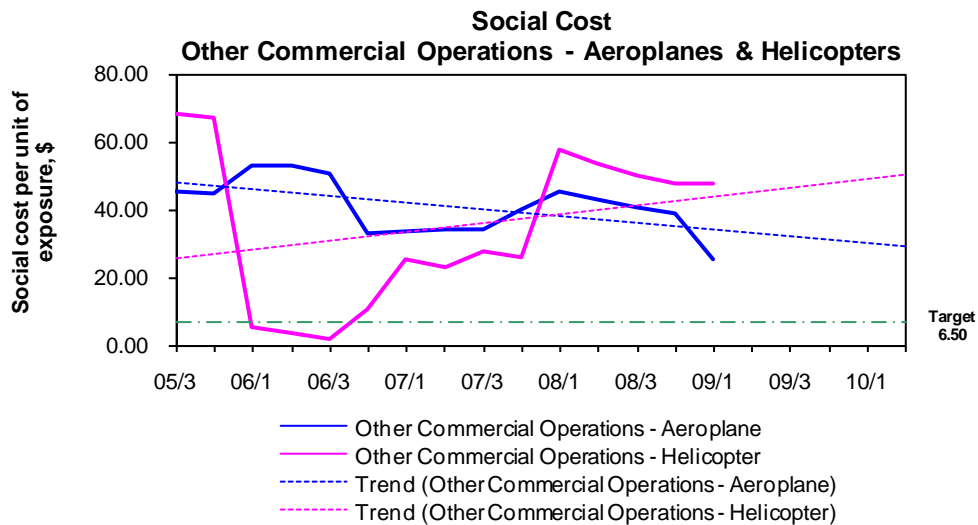


The outcome for Airline Operations – Medium Aeroplanes exceeds the target but is trending down and it is possible that the target may be achieved in 2010 (the data point at 09/1 is \$0.25 per hour of exposure). The exposure (1.8% of total seat hours) associated with this sector is relatively small. There have been no injuries in this group during the period Jul 2005 to Dec 2008.



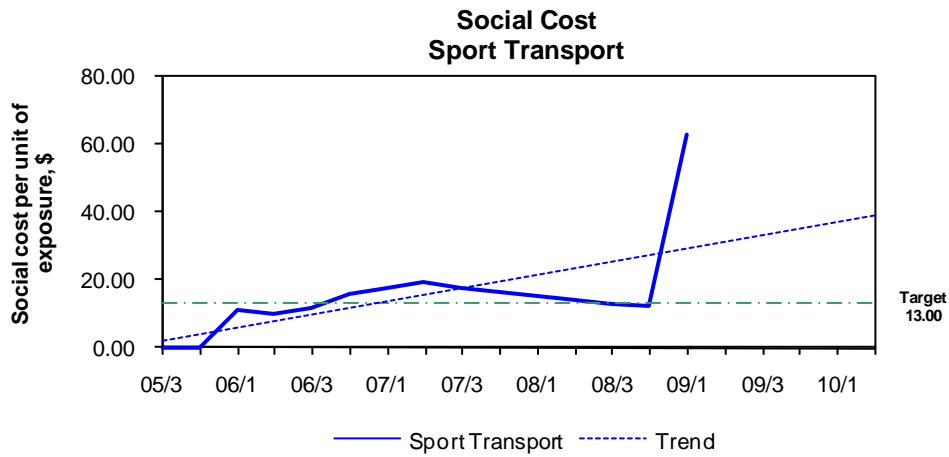
The outcome for Airline Operations – Small Aeroplanes shows a significant long term downward trend from the high starting point of \$54.08 per hour of exposure generated by 6 fatalities, 2 serious injuries and 1 minor injury in the three years Oct 02 to Sep 05. The safety outcome for this group has been below the target level since the Jan to Mar 2008 quarter.

The outcome for Airline Operations – Helicopter remains below the target level where it has been since the second quarter of 2006. A small downward trend is evident.



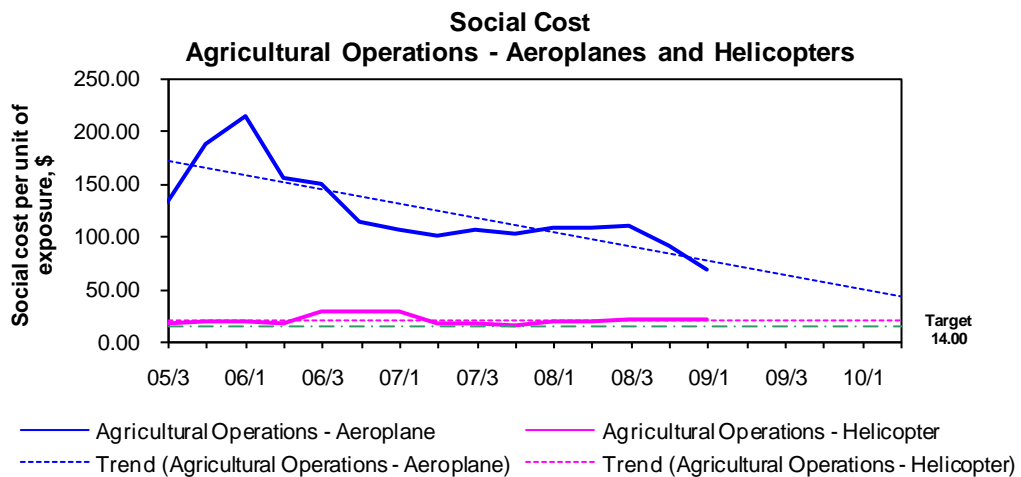
The outcome for Other Commercial Operations – Aeroplane remains above the target of \$6.50. During the four quarters Jan to Dec 08 there were 3 fatalities in this group. The steady downward trend is small and suggests that the target will not be met by 2010.

The outcome for Other Commercial Operations – Helicopter turned sharply upwards during the fourth quarter of 2006 and is well above the target level. Two fatal and two minor injuries in the four quarters Jan to Dec 08 contribute to the continuing upward trend.

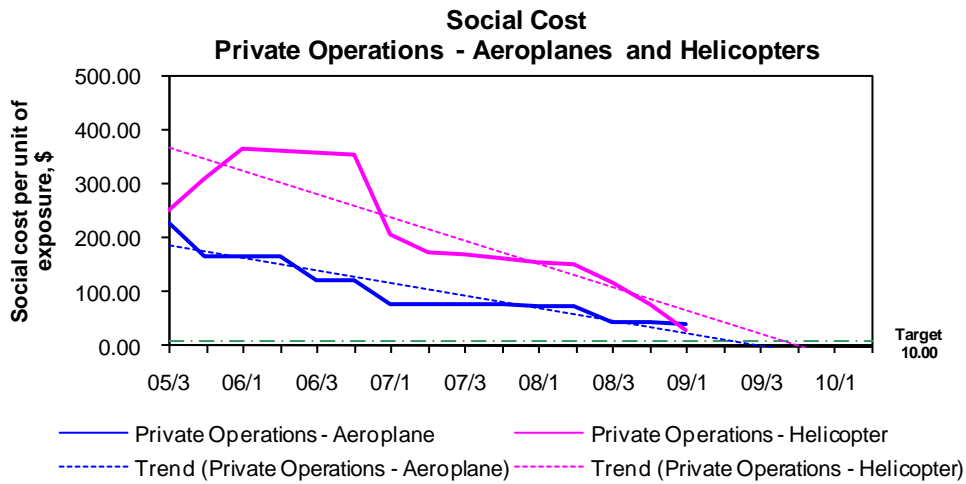


Two hang glider fatalities, two microlight fatalities and one glider fatality during the first quarter of 2009 have contributed to a significant increase in the upward trend displayed by this group. The probability of achieving the 2010 target is now low.

Note that this group includes hang gliders and parachutes used on transport operations.

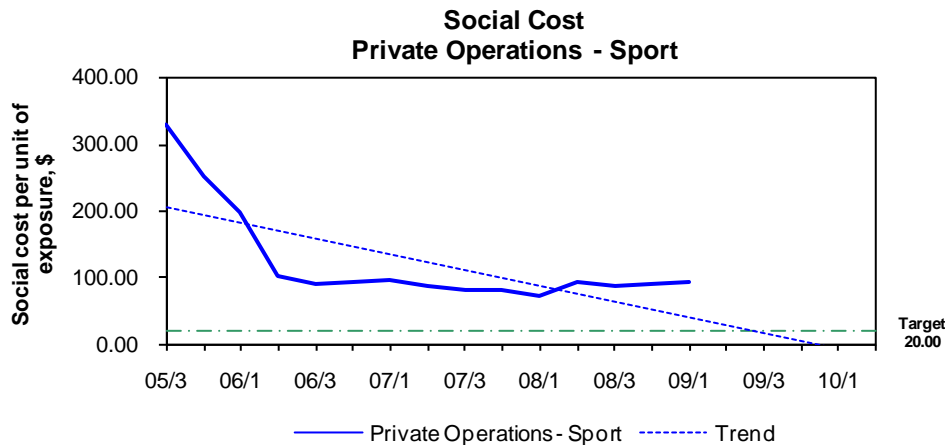


The outcome for Agricultural Operations – Aeroplanes is well above the target level of \$14.00. During the three years Jan 06 to Dec 08 there have been 3 fatal injuries and 1 serious injury in this group.



The outcome for Private Operations – Aeroplanes has been trending down since late 2005. There have been 2 fatal, 3 serious and 3 minor injuries in the three years Jan 06 to Dec 08. The long term trend line for the group falls below the target line in 2009.

The outcome for Private Operations – Helicopters has been trending down since early 2006. There have been 3 fatal and 9 minor injuries in the three years Jan 06 to Dec 08.

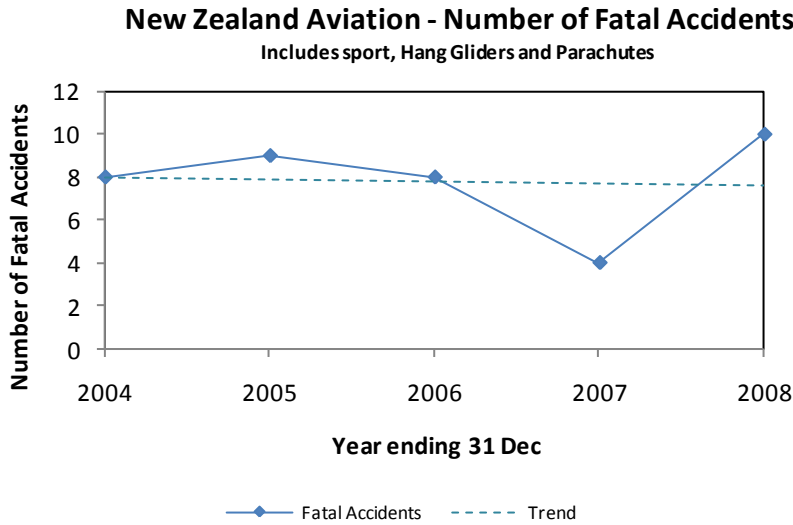


The outcome for Private Operations – Sport has been trending down since late 2005. There have been 13 fatal, 25 serious and 24 minor injuries in the three years Jan 06 to Dec 08.

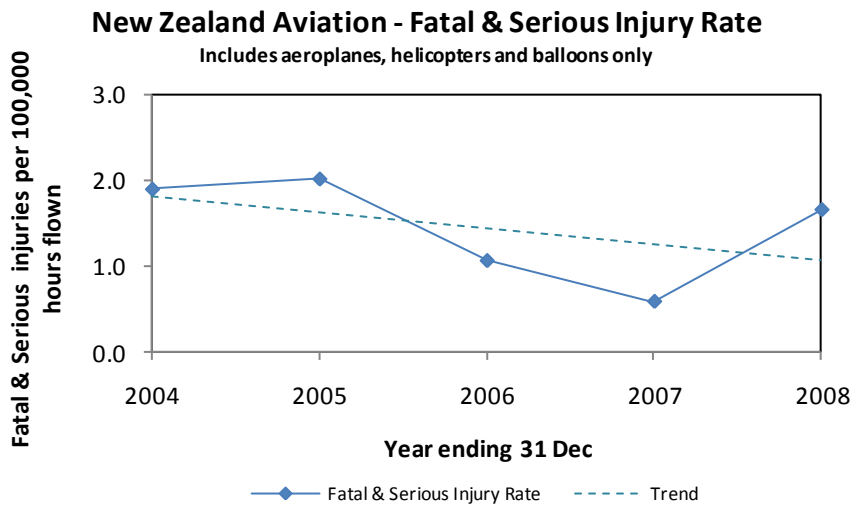
Note that this group includes hang gliders and parachutes used on private operations.

Injury Accidents

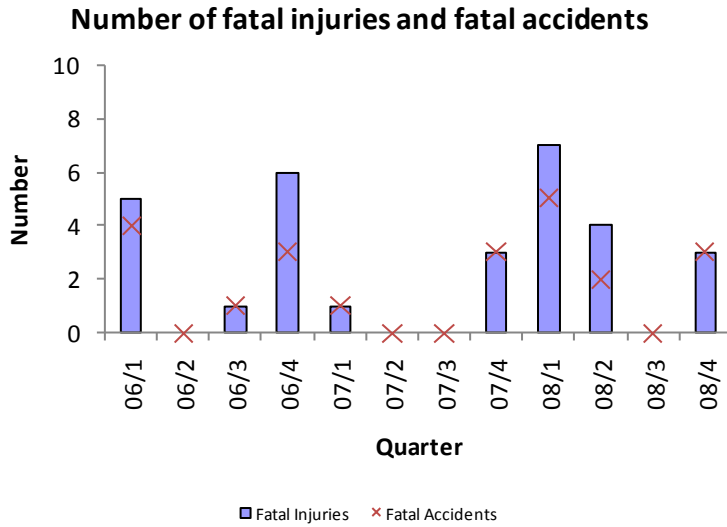
The following graph shows the number of fatal accidents in the 5-year period to 31 December 2008 (including the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes).



The following graph shows the overall fatal and serious injury rate per 100,000 hours flown (includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes) for the 5-year period to 31 December 2008.



The following graph shows the number of fatal injuries and fatal accidents (including the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes) for the three-year period to 31 December 2008.



Since 2004 the long-term trends of the number of fatal injuries and the number of fatal accidents are downward but this trend may be reversing since when measured from 2006 it becomes a small upward trend.

Six-Monthly Comparison***Number of Fatal Accidents and Number of Fatal Injuries***

Activity	1 Jul to 31 Dec 2007		1 Jul to 31 Dec 2008		Change	
	Accidents	Fatalities	Accidents	Fatalities	Accidents	Fatalities
Large Aeroplanes	0	0	0	0	0	0
Medium Aeroplanes	0	0	0	0	0	0
Small Aeroplanes	1	1	0	0	- 1	- 1
Helicopters	0	0	1	1	1	1
Sport Aircraft	0	0	0	0	0	0
Ag Aeroplanes	1	1	1	1	0	0
Unknown	1	1	0	0	- 1	- 1
Hang Gliders	0	0	1	1	1	1
Parachutes	0	0	0	0	0	0
Total	3	3	3	3	0	0

Number of Serious Injuries

Activity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	0	0
Small Aeroplanes	3	3	0
Helicopters	0	3	3
Sport Aircraft	0	5	5
Ag Aeroplanes	0	0	0
Unknown	0	0	0
Hanggliders	3	1	- 2
Parachutes	0	1	1
Total	6	13	7

Number of Minor Injuries

Activity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	0	0
Small Aeroplanes	3	1	- 2
Helicopters	3	5	2
Sport Aircraft	1	2	1
Ag Aeroplanes	0	0	0
Unknown	0	0	0
Hanggliders	0	1	1
Parachutes	0	0	0
Total	7	9	2

Flight Phase

The following table shows the flight phase recorded for accidents.

Flight Phase	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Agricultural Manoeuvres	1	1	0
Approach	1	4	3
Circuit	0	1	1
Climb	3	4	1
Cruise	4	7	3
Descent	2	1	- 1
Hover	1	1	0
Landing	10	23	13
Parked	1	4	3
Takeoff	5	7	2
Taxiing	1	1	0
Unknown	0	1	1
Unrecorded	2	0	- 2
Total	31	55	24

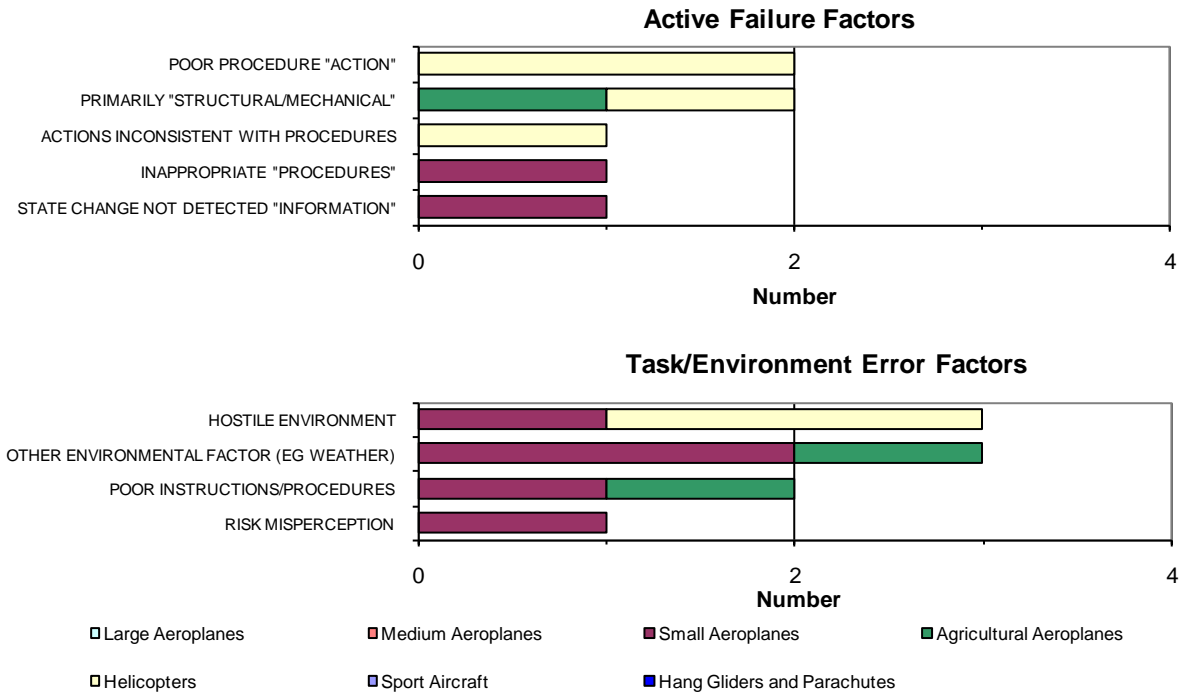
Accidents in the period 1 July to 31 December 2008 were most common during the Landing phase (42%).

The most common group of occurrence descriptors recorded for Landing phase accidents in the 1 July to 31 December 2008 period is 'Landing Occurrence' (39%). More specifically the descriptors used are Landing Occurrence – no detail (1), Nose Down/overturnd (2), Overrun (1), Landing Beside Runway (2), Hard Landing (2) & Undershoot (1).

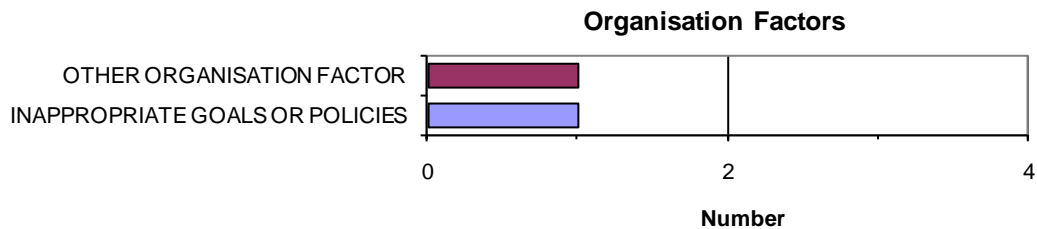
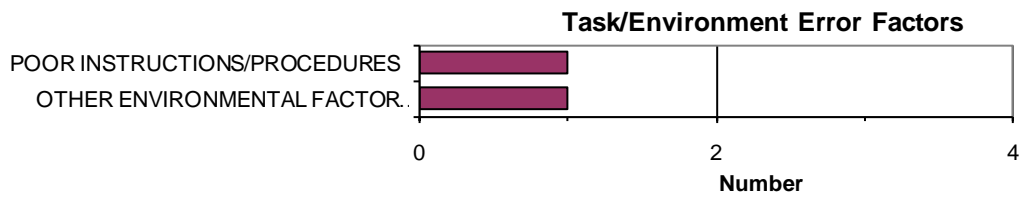
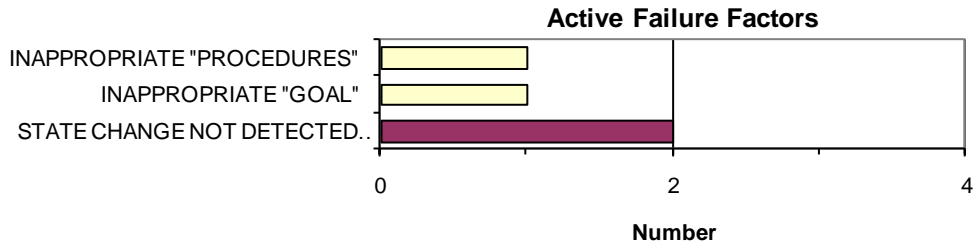
Analysis of recorded causes for Landing phase accidents shows that the most common cause is Local Error Factors – Task Unfamiliarity (25%).

Accident Causal Factors by Aircraft Category

The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 January to 30 June 2007 for the various aircraft statistics categories. Causal factors have been assigned to 14 (27%) of the 51 accidents.

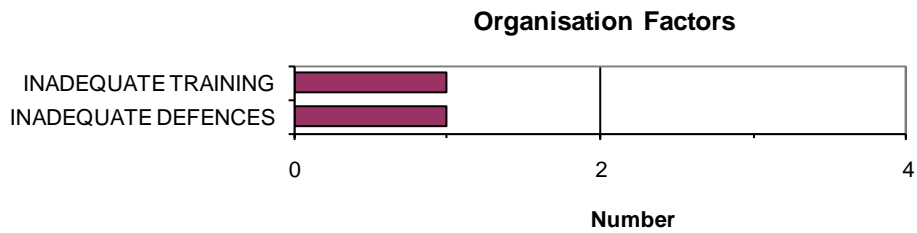
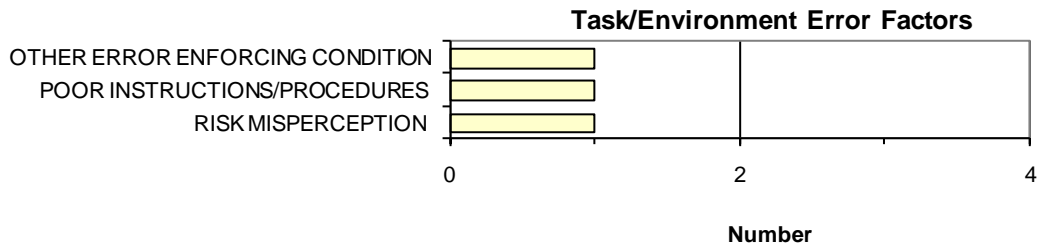
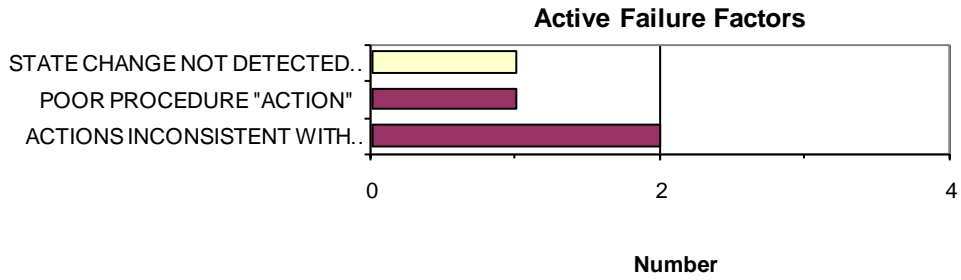


The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 July to 31 December 2007 for the various aircraft statistics categories. Causal factors have been assigned to 6 (19%) of the 32 accidents.



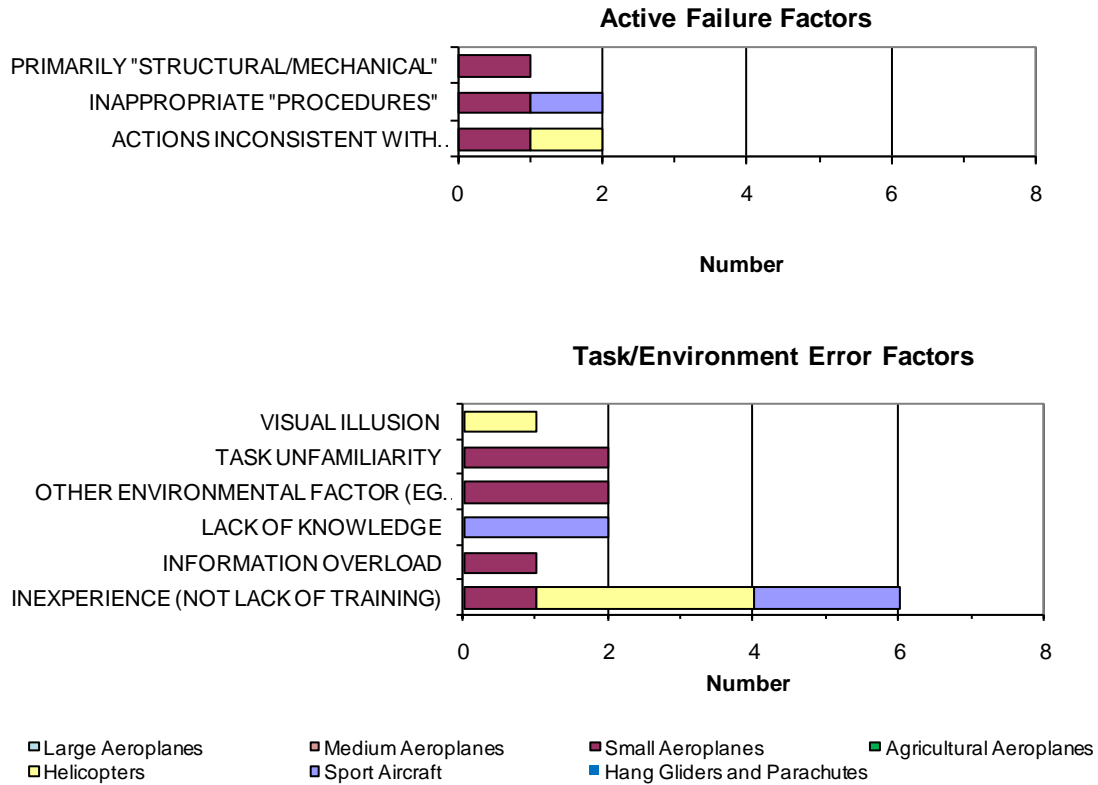
- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Large Aeroplanes | <input type="checkbox"/> Medium Aeroplanes | <input type="checkbox"/> Small Aeroplanes | <input type="checkbox"/> Agricultural Aeroplanes |
| <input type="checkbox"/> Helicopters | <input type="checkbox"/> Sport Aircraft | <input type="checkbox"/> Hang Gliders and Parachutes | |

The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 January to 30 June 2008 for the various aircraft statistics categories. Causal factors have been assigned to 6 (11%) of the 55 accidents.



- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Large Aeroplanes | <input type="checkbox"/> Medium Aeroplanes | <input type="checkbox"/> Small Aeroplanes | <input type="checkbox"/> Agricultural Aeroplanes |
| <input type="checkbox"/> Helicopters | <input type="checkbox"/> Sport Aircraft | <input type="checkbox"/> Hang Gliders and Parachutes | |

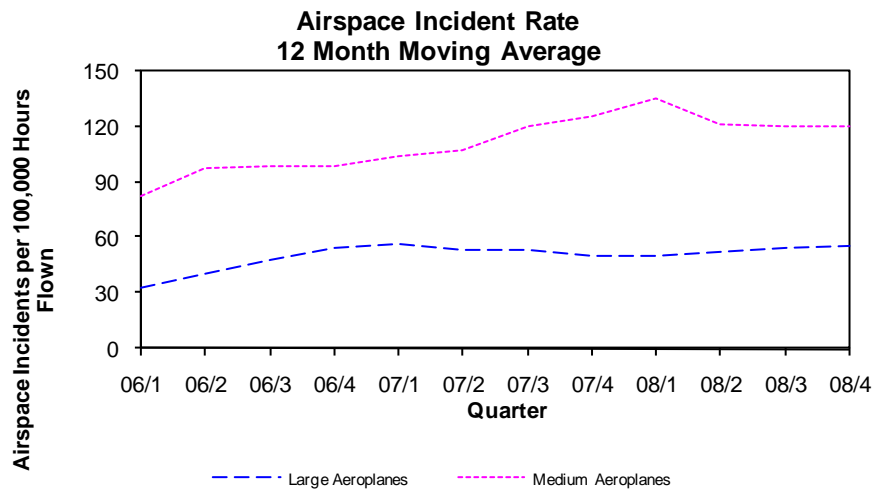
The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 July to 31 December 2008 for the various aircraft statistics categories. Causal factors have been assigned to 12 (21%) of the 57 accidents.

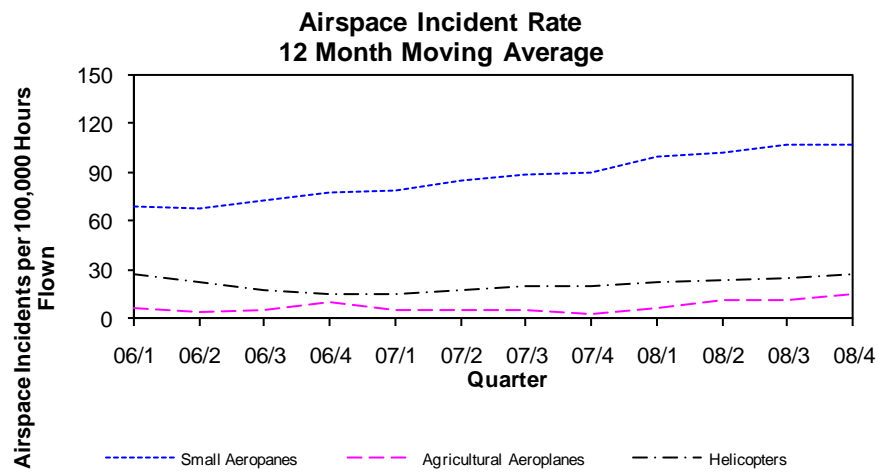


Airspace Incidents

Occurrence Trend

The following graphs show the airspace incident rates (incidents per 100,000 hours flown) twelve month moving average for the three-year period 1 January 2006 to 31 December 2008 (excluding Sport). The graphs do not differentiate between incidents that are pilot or ATS attributable.





Aircraft Category	Straight line trend of 12 month moving average
Large aeroplanes	Trending up
Medium Aeroplanes	Trending up
Small Aeroplanes	Trending up
Helicopters	Trending up
Agricultural aeroplanes	Trending up

Six-Monthly Comparison

Number of Airspace Incidents

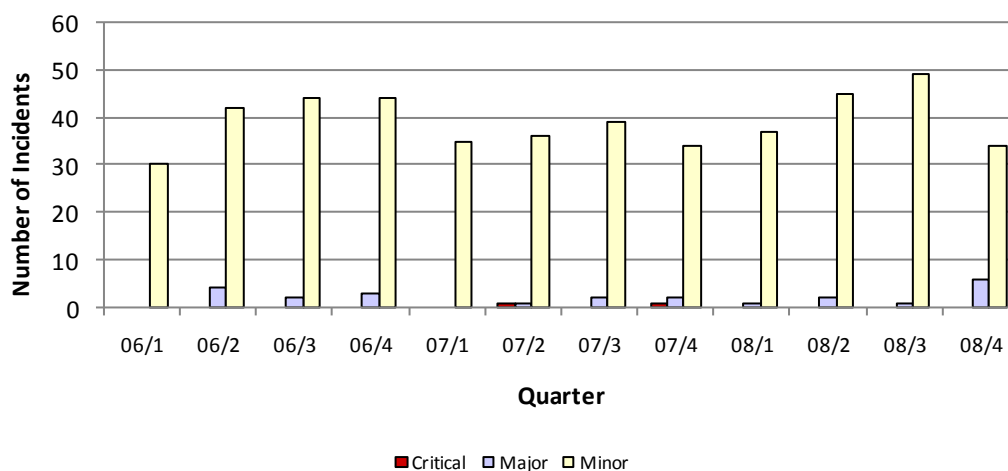
Aircraft Category	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change	
			Number	Percent
Large Aeroplanes	78	90	12	15.4
Medium Aeroplanes	38	40	2	5.3
Small Aeroplanes	146	167	21	14.4
Agricultural Aeroplanes	2	3	1	50.0
Helicopters	16	24	8	50.0
Sport Aircraft	17	13	- 4	- 23.5
Unknown	138	167	29	21.0
Total	435	504	69	15.9

Severity

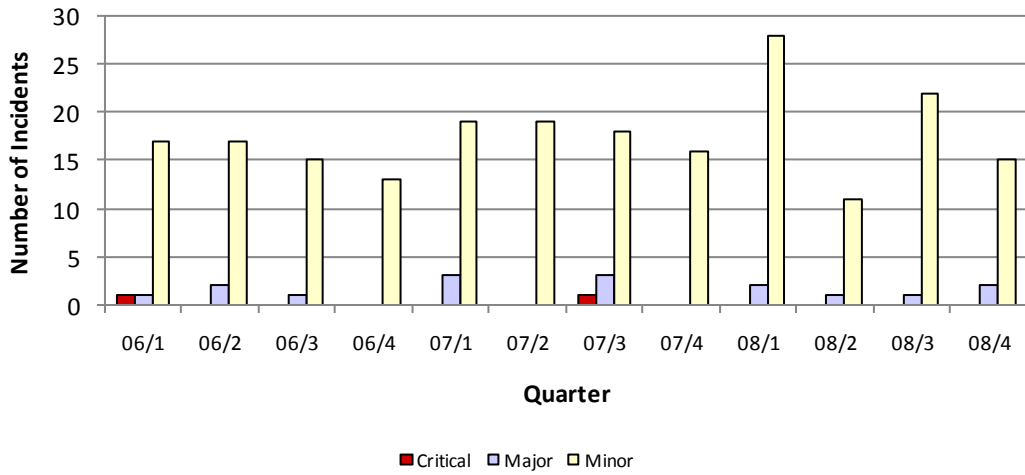
Activity	Severity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Large aeroplanes	Critical	1	0	- 1
	Major	4	7	3
	Minor	73	83	10
Medium Aeroplanes	Critical	1	0	- 1
	Major	3	3	0
	Minor	34	37	3
Small Aeroplanes	Critical	0	1	1
	Major	4	21	17
	Minor	142	145	3
Helicopters	Critical	0	1	1
	Major	0	0	0
	Minor	16	23	7
Sport Aircraft	Critical	0	0	0
	Major	0	1	1
	Minor	17	12	- 5
Agricultural Aeroplanes	Critical	0	0	0
	Major	0	1	1
	Minor	2	2	0
Unknown	Critical	0	0	0
	Major	11	14	3
	Minor	127	153	26
Total	Critical	2	2	0
	Major	22	47	25
	Minor	411	455	44

The following graphs show the severity of airspace incidents recorded over the period 1 January 2006 to 31 December 2008.

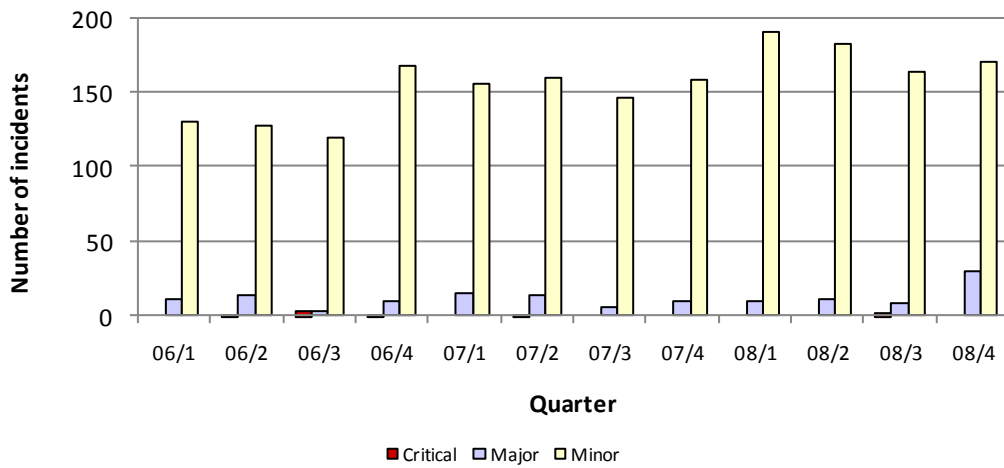
**Airspace incident severity -
Large Aeroplanes**



Airspace incident severity - Medium Aeroplanes



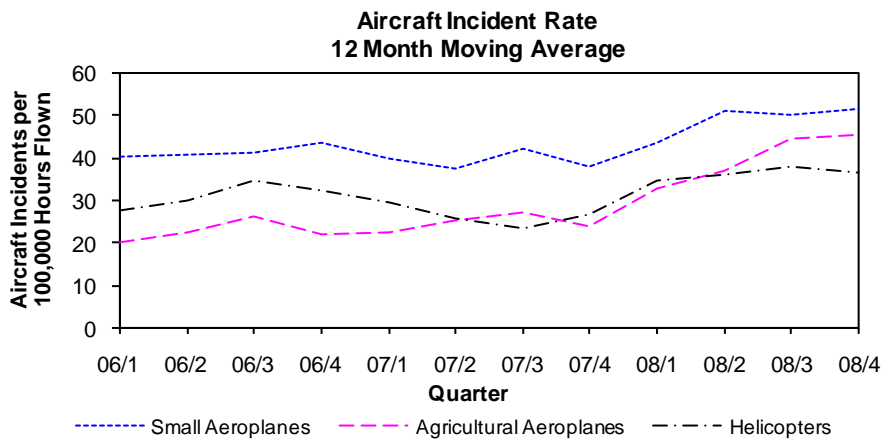
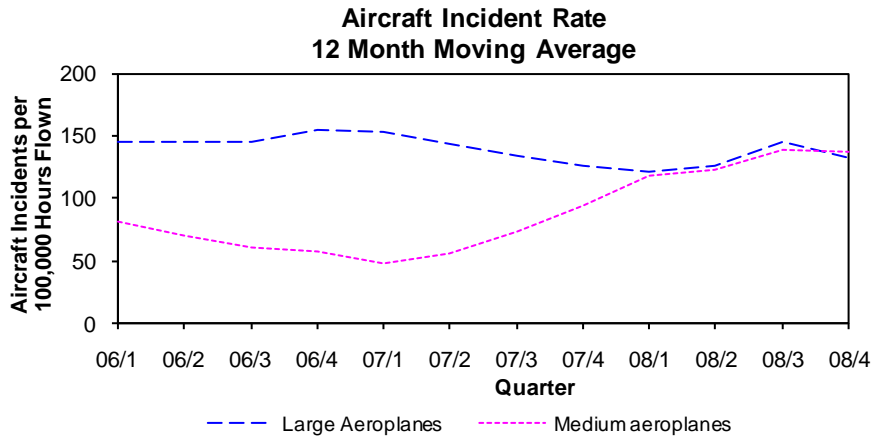
Airspace incident severity - all other aeroplanes, helicopters, sport and 'unknown'



Aircraft Incidents

Occurrence Trend

The following graphs show the aircraft incident rates (incidents per 100,000 hours flown) twelve month moving average for the three-year period 1 January 2006 to 31 December 2008 (excluding Sport).



Aircraft Category	Straight line trend of 12 month moving average
Large Aeroplanes	Trending down
Medium Aeroplanes	Trending up
Small Aeroplanes	Trending up
Helicopters	Trending up
Ag Aeroplanes	Trending up

The ratios of reported aircraft incidents to reported accidents continue to be much lower for the small, sport, agricultural and helicopter groups than for the large and medium aircraft groups.

Six-Monthly Comparison

Number of Aircraft Incidents

Aircraft Category	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change	
			Number	Percent
Large Aeroplanes	199	226	27.0	13.6
Medium Aeroplanes	35	49	14.0	40.0
Small Aeroplanes	68	73	5.0	7.4
Helicopters	29	34	5.0	17.2
Sport Aircraft	17	4	- 13.0	- 76.5
Agricultural Aeroplanes	5	7	2.0	40.0
Unknown	53	36	- 17.0	- 32.1
Total	406	429	23.0	5.7

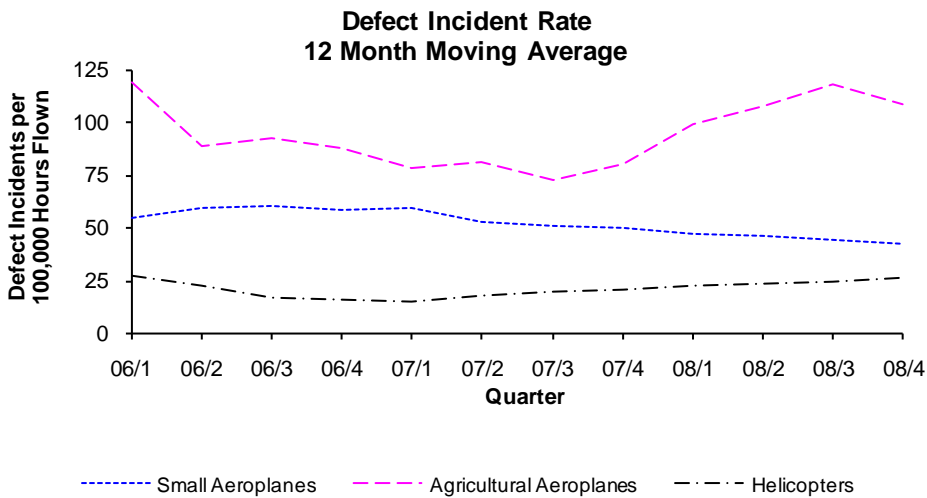
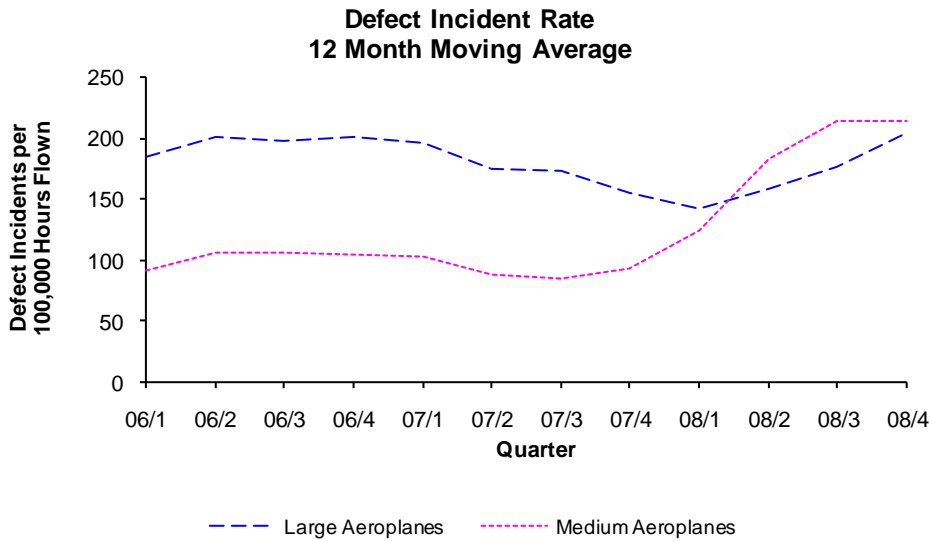
Severity

Activity	Severity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Large Aeroplanes	Critical	1	0	-1
	Major	26	27	1
	Minor	172	199	27
Medium Aeroplanes	Critical	0	0	0
	Major	4	4	0
	Minor	31	45	14
Small Aeroplanes	Critical	0	0	0
	Major	2	6	4
	Minor	66	67	1
Helicopters	Critical	0	0	0
	Major	3	8	5
	Minor	26	26	0
Sport Aircraft	Critical	0	0	0
	Major	1	0	-1
	Minor	16	4	-12
Agricultural Aeroplanes	Critical	0	0	0
	Major	0	0	0
	Minor	5	7	2
Unknown	Critical	0	1	1
	Major	4	3	-1
	Minor	49	32	-17
Total	Critical	1	1	0
	Major	40	48	8
	Minor	365	380	15

Defect Incidents

Occurrence Trend

The following graphs show the aircraft defect incident rates (incidents per 100,000 hours flown) twelve month moving average for the three-year period 1 January 2006 to 31 December 2008 (excluding Sport).



Aircraft Category	Straight line trend of 12 month moving average
Large Aeroplanes	Trending down
Medium Aeroplanes	Trending up
Small Aeroplanes	Trending down
Helicopters	Trending up
Agricultural Aeroplanes	Trending up

Six-Monthly Comparison***Number of Defect Incidents***

Aircraft Category	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change	
			Number	Percent
Large Aeroplanes	215	367	152.0	0.7
Medium Aeroplanes	37	62	25.0	0.7
Small Aeroplanes	71	61	- 10.0	- 0.1
Agricultural Aeroplanes	22	17	- 5.0	- 0.2
Helicopters	56	62	6.0	0.1
Sport Aircraft	4	6	2.0	0.5
Unknown	17	16	- 1.0	- 0.1
Total	422	591	169.0	0.4

Severity

Activity	Severity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change
Large Aeroplanes	Critical	0	0	0
	Major	39	55	16
	Minor	176	312	136
Medium Aeroplanes	Critical	1	0	-1
	Major	3	8	5
	Minor	33	54	21
Small Aeroplanes	Critical	0	0	0
	Major	2	4	2
	Minor	69	57	-12
Helicopters	Critical	0	0	0
	Major	15	11	-4
	Minor	41	51	10
Sport Aircraft	Critical	0	0	0
	Major	0	2	2
	Minor	4	4	0
Agricultural Aeroplanes	Critical	0	0	0
	Major	2	2	0
	Minor	20	15	-5
Unknown	Critical	0	0	0
	Major	2	3	1
	Minor	15	13	-2
Total	Critical	1	0	-1
	Major	63	85	22
	Minor	358	506	148

Bird Incident Rates

12-Month Moving Average Strike Rate per 10,000 Aircraft Movements

The following table shows the 12-month moving average strike rates for identified aerodromes for each quarter of the three years ending December 2008.

Aerodrome	06/1	06/2	06/3	06/4	07/1	07/2	07/3	07/4	08/1	08/2	08/3	08/4
Auckland	2.7	2.7	2.5	2.5	2.3	2.5	3.0	2.9	2.9	3.4	3.2	3.0
Christchurch	4.0	4.5	3.5	3.5	3.8	3.2	3.5	3.5	2.9	3.4	3.1	3.4
Dunedin	5.2	4.7	4.5	3.4	3.9	3.1	3.3	2.9	2.0	3.0	2.8	3.1
Gisborne	10.1	11.5	8.8	10.0	11.3	7.9	7.4	6.7	6.1	11.2	10.3	11.1
Hamilton	3.8	4.5	5.1	4.5	4.0	3.0	2.3	2.0	1.8	2.2	2.5	3.1
Invercargill	10.4	11.4	11.7	7.6	6.2	6.6	7.1	8.1	9.4	8.1	8.4	10.7
Napier	6.7	7.5	7.2	7.7	7.9	5.4	6.6	4.5	5.6	6.9	5.5	6.4
Nelson	1.1	1.9	2.5	3.5	3.4	2.9	2.7	1.9	1.6	2.2	2.5	2.1
New Plymouth	6.0	5.8	6.7	5.9	5.4	5.0	3.6	3.0	2.1	2.8	3.0	3.7
Ohakea	3.2	2.3	2.4	1.8	2.0	2.0	1.4	1.4	2.2	2.0	2.5	3.0
Palmerston North	3.4	3.9	4.6	4.7	4.2	4.0	3.5	3.0	3.1	3.1	3.0	3.0
Queenstown	3.5	2.8	3.0	2.7	2.4	3.5	3.3	3.9	3.7	3.8	3.6	2.2
Rotorua	10.3	9.8	8.7	8.0	7.4	7.7	7.9	7.1	6.1	5.2	4.7	4.0
Taupo	1.8	1.8	1.6	1.4	1.5	1.2	1.8	2.1	1.8	2.1	2.3	2.0
Tauranga	3.2	3.3	3.3	2.8	2.1	2.0	2.0	1.7	1.6	1.4	1.8	2.1
Wellington	2.2	1.6	1.6	1.7	1.6	1.5	1.7	1.2	1.2	1.5	1.7	2.0
Whenuapai	4.8	6.0	5.0	4.7	5.8	8.3	9.6	10.3	13.6	12.2	12.7	12.1
Woodbourne	4.9	5.2	5.3	5.4	6.6	6.6	6.4	6.6	4.1	4.1	3.5	3.1

Bird occurrence rates are measured monthly, quarterly or annually by aerodrome. This is achieved by querying the database for the number of strikes at aerodromes over a period of time summarising by month, quarter or year. The results of this query are then divided by the aircraft movements at each aerodrome and multiplied by 10,000 to achieve strikes per 10,000 aircraft movements. Aircraft movements at aerodromes are obtained from the ACNZ, and, where available, from individual airport companies.

CAA Actions

The CAA uses the following criteria for assessing actions to be taken with regard to identified trends in bird strike rates.

Bird strikes per 10,000 aircraft movements	Risk Category	Trending Down	Constant	Trending Up
≥ 0.0 and < 5.0	Low	Monitor	Monitor	Advise Aerodrome Operator
≥ 5.0 and < 10.0	Medium	Monitor	Advise Aerodrome Operator	Advise Aerodrome Operator, Request Rectification Action
≥ 10.0	High	Advise Aerodrome Operator	Advise Aerodrome Operator, Request Rectification Action	Advise Aerodrome Operator, Request Rectification Action

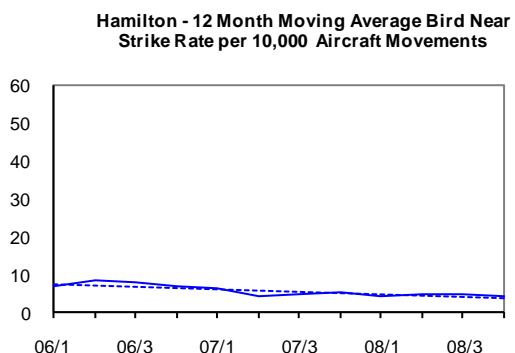
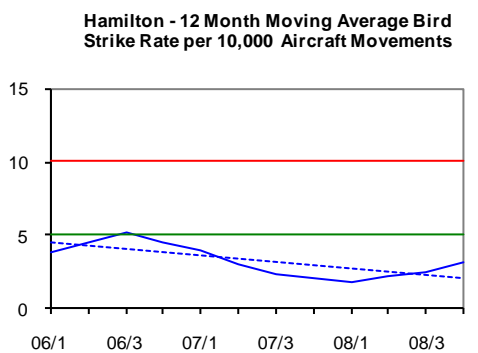
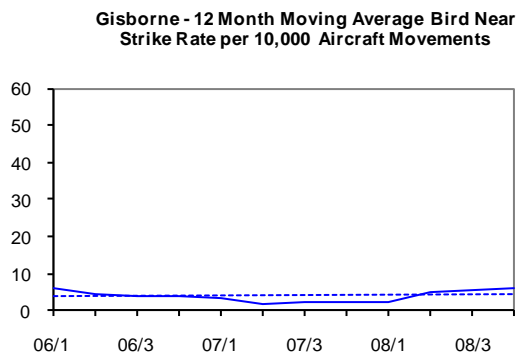
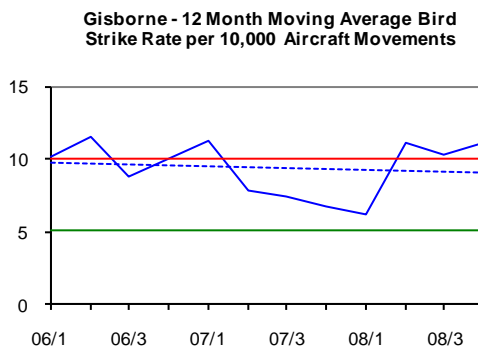
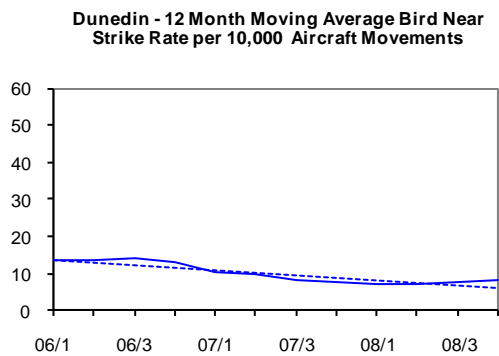
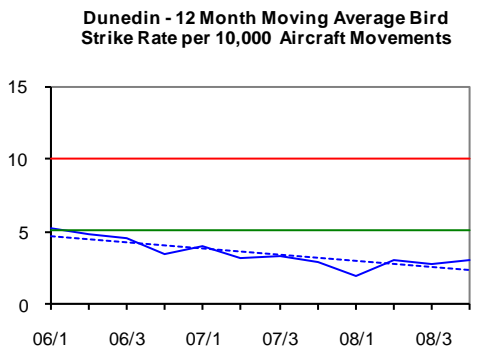
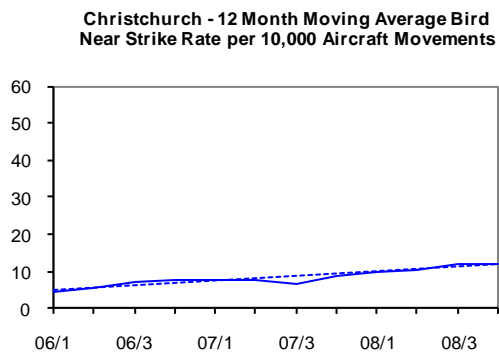
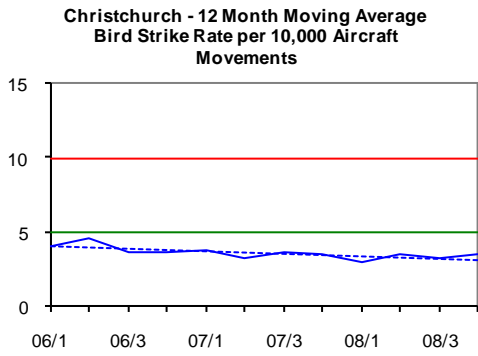
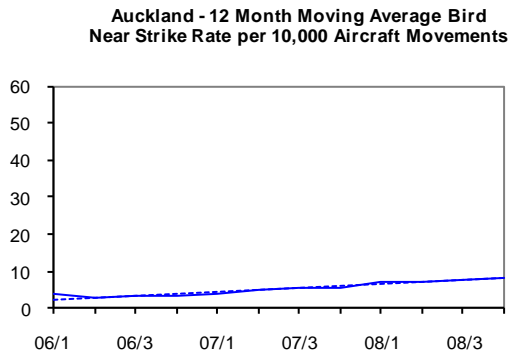
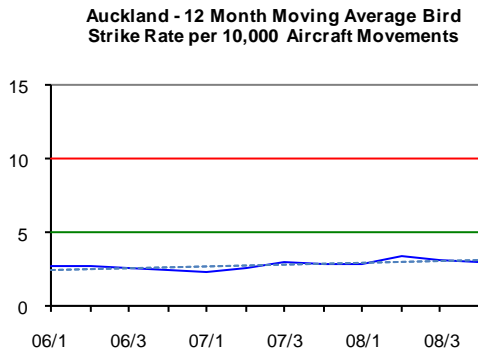
Analysis

Analysis shows that three aerodromes have bird strike rates above the “trigger level” for CAA Action. Details were forwarded to Manager Aeronautical Services on 23 February 09

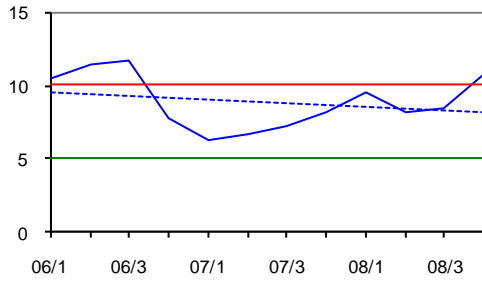
Three aerodromes had strike rates in the high risk category of the CAA standard (above 10.0 bird strikes per 10,000 aircraft movements), one having a long-term upward trend and the other 2 a long-term downward trend. One aerodrome had a strike rate in the medium risk category (5.0 to 10.0 per 10,000 movements), it had a long-term downward trend. Fourteen aerodromes had strike rates in the low risk category (below 5.0 per 10,000 movements) with none of these having a long-term upward trend.

Aerodrome	Risk Category	Trend	CAA Action
Auckland	Low	Constant	Monitor
Christchurch	Low	Trending down	Monitor
Dunedin	Low	Trending down	Monitor
Gisborne	High	Trending down	Advise Aerodrome Operator
Hamilton	Low	Trending down	Monitor
Invercargill	High	Trending down	Advise Aerodrome Operator
Napier	Medium	Trending down	Monitor
Nelson	Low	Constant	Monitor
New Plymouth	Low	Trending down	Monitor
Ohakea	Low	Constant	Monitor
Palmerston North	Low	Trending down	Monitor
Queenstown	Low	Constant	Monitor
Rotorua	Low	Trending down	Monitor
Taupo	Low	Constant	Monitor
Tauranga	Low	Trending down	Monitor
Wellington	Low	Constant	Monitor
Whenuapai	High	Trending up	Advise Aerodrome Operator, Request Rectification Action
Woodbourne	Low	Trending down	Monitor

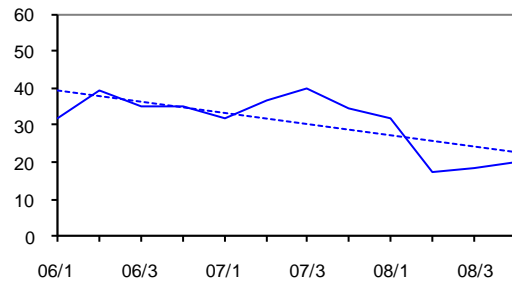
The top line on the strike rate graphs below shows the High risk category. The next line shows the Medium risk category.



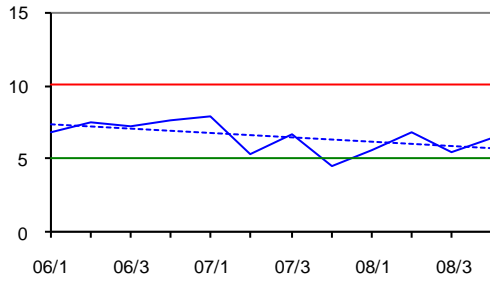
Invercargill - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



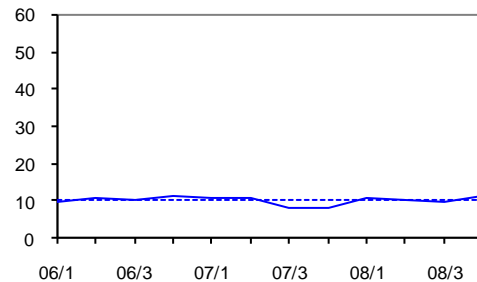
Invercargill - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



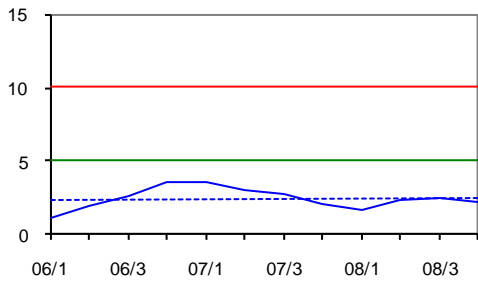
Napier - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



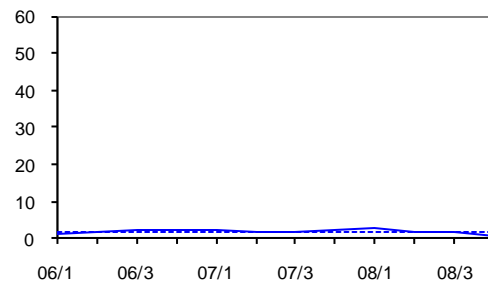
Napier - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



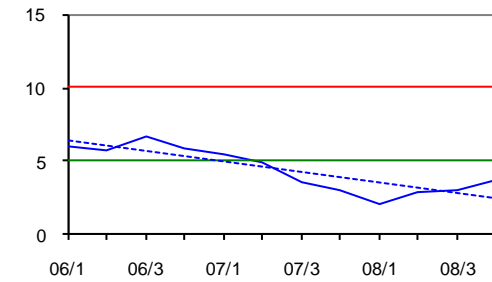
Nelson - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



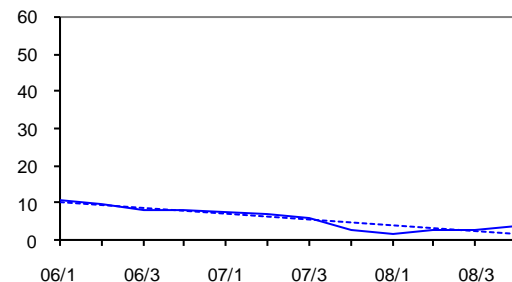
Nelson - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



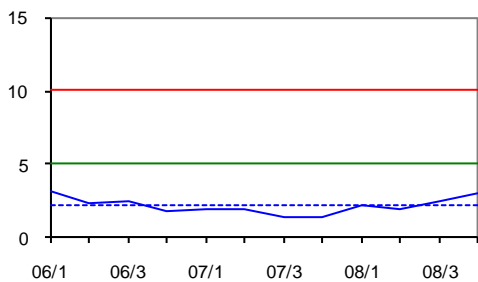
New Plymouth - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



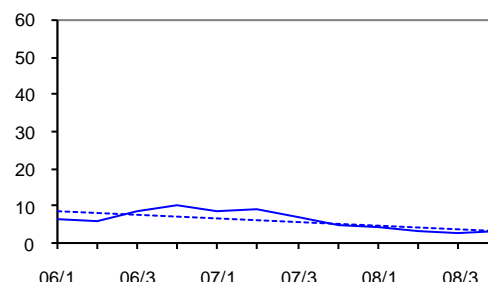
New Plymouth - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements

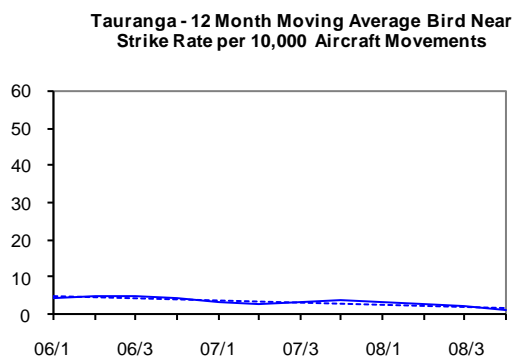
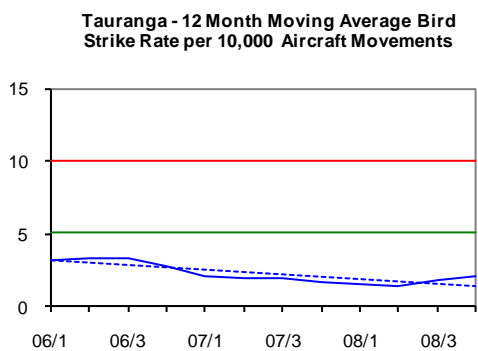
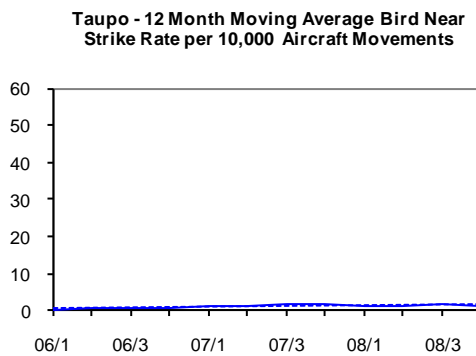
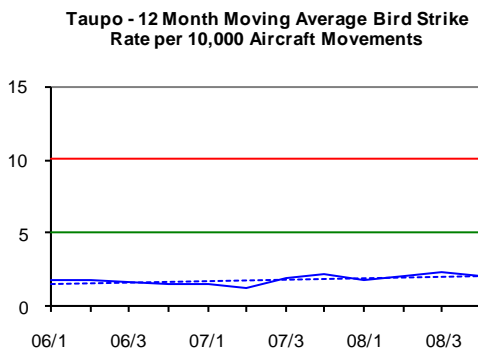
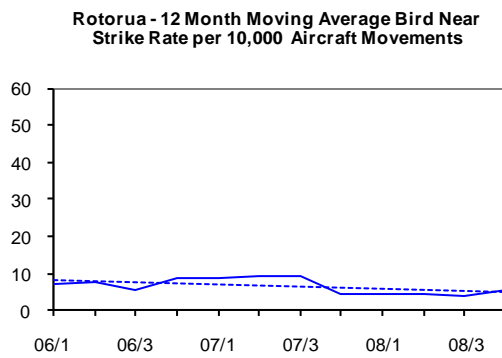
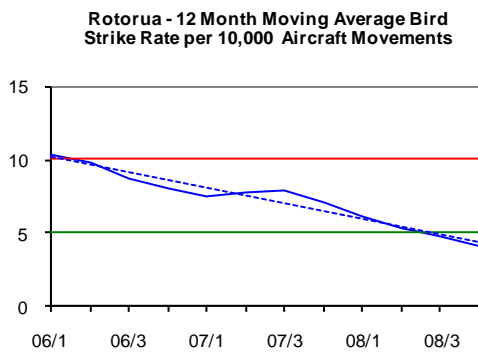
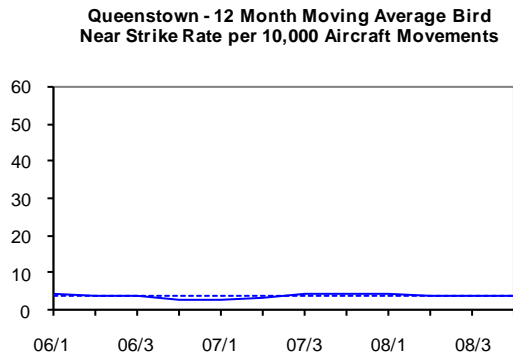
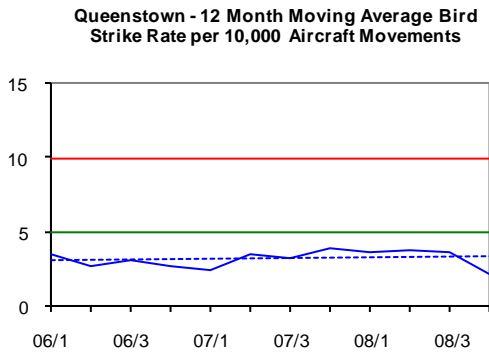
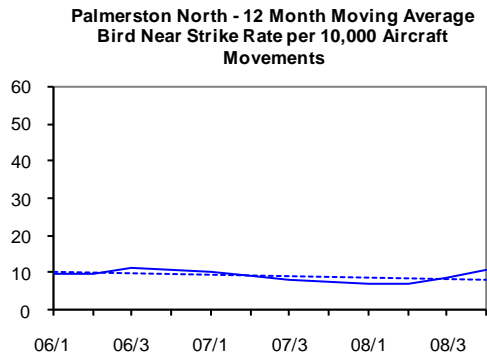
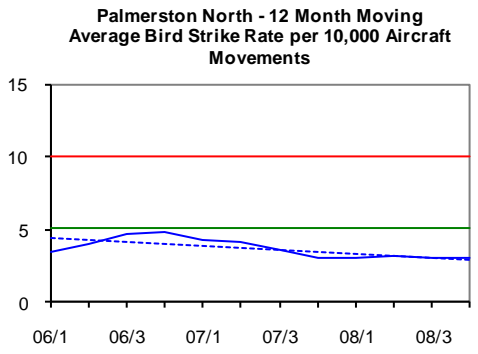


Ohakea - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements

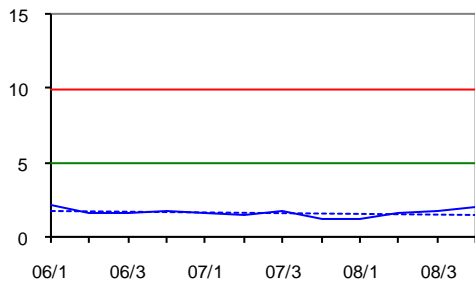


Ohakea - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements

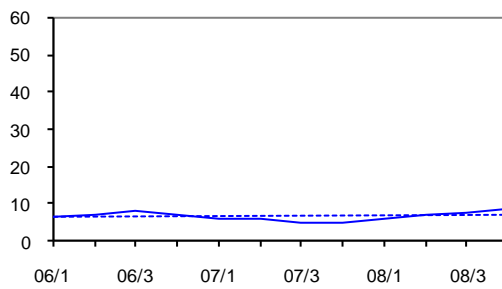




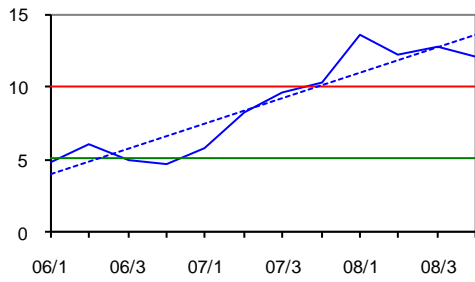
Wellington - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



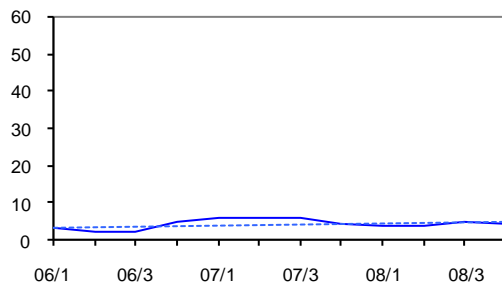
Wellington - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



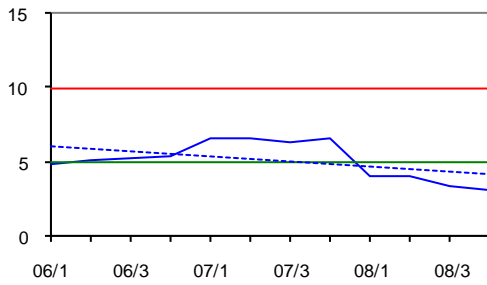
Whenuapai - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



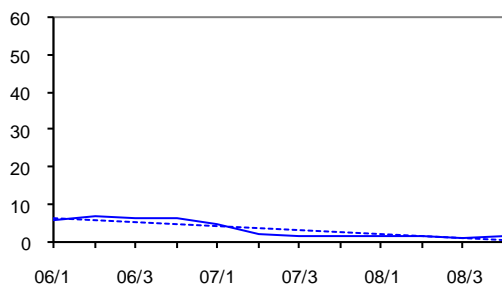
Whenuapai - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



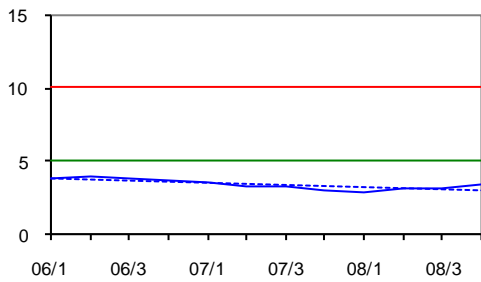
Woodbourne - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



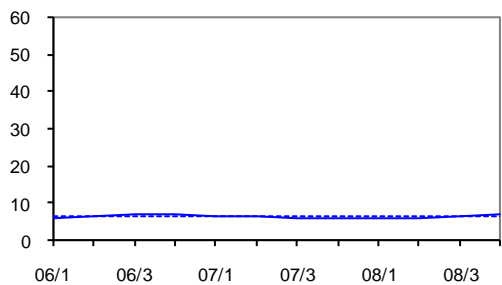
Woodbourne - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



Overall - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



Overall - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



Security Incidents

Six-Monthly Comparison

Number of Security Incidents

Aircraft Category	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change	
			Number	Percent
Large Aeroplanes	24	29	5	20.8
Medium Aeroplanes	1	7	6	600.0
Small Aeroplanes	0	0	0	0
Agricultural Aeroplanes	0	0	0	0
Helicopters	0	0	0	0
Sport Aircraft	0	0	0	0
Unknown	118	93	- 25	- 21.2
Total	143	129	- 14	- 9.8

Severity

Severity	1 Jul to 31 Dec 2007	1 Jul to 31 Dec 2008	Change	
			Number	Percent
Critical	1	2	1.0	100.0
Major	11	16	5.0	45.5
Minor	131	111	- 20.0	- 15.3
Total	143	129	- 14.0	- 9.8

Occurrences — General

The following table shows the number of occurrences (excluding Non Reportable Occurrences) that were registered on the CAA database during each of the six months of the reporting period.

Month	ACC	ADI	ARC	ASP	BRD	DEF	DGD	HGA	INC	NIO	PAA	PIO	SEC	Total
01	13	19	25	100	130	92	8	1	111	7			36	542
02	9	6	24	78	105	75	10		86	5			29	427
03	9	6	46	111	132	106	3		76	7			146	642
04	12	4	40	83	145	76	7	2	65	3		3	45	485
05	6	11	24	89	123	117	1		87	2		2	8	470
06	3	10	15	88	104	80	2		57	3		3	18	383
Total	52	56	174	549	739	546	31	3	482	27	0	8	282	2949

ACC	Accident	HGA	Hang Glider Accident
ADI	Aerodrome Incident	INC	Aircraft Incident
ARC	Aviation Related Concern	NIO	Facility Malfunction Incident
ASP	Airspace Incident	PAA	Parachute Accident
BRD	Bird Incident	PIO	Promulgated Information Incident
DEF	Defect Incident	SEC	Security Incident
DGD	Dangerous Goods Incident		

Definitions

General

Accident (ACC)

Means an occurrence that is associated with the operation of an aircraft and takes place between the time any person boards the aircraft with the intention of flight and such time as all such persons have disembarked and the engine or any propellers or rotors come to rest, being an occurrence in which–

- (1) a person is fatally or seriously injured as a result of–
 - (i) being in the aircraft; or
 - (ii) direct contact with any part of the aircraft, including any part that has become detached from the aircraft; or
 - (iii) direct exposure to jet blast–

except when the injuries are self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to passengers and crew; or
- (2) the aircraft sustains damage or structural failure that–
 - (i) adversely affects the structural strength, performance or flight characteristics of the aircraft; and
 - (ii) would normally require major repair or replacement of the affected component–

except engine failure or damage that is limited to the engine, its cowlings, or accessories, or damage limited to propellers, wing tips, rotors, antennas, tyres, brakes, fairings, small dents, or puncture holes in the aircraft skin; or
- (3) the aircraft is missing or is completely inaccessible.

Aerodrome Incident (ADI)

Means an incident involving an aircraft operation and–

- (1) an obstruction either on the aerodrome operational area or protruding into the aerodrome obstacle limitation surfaces; or
- (2) a defective visual aid; or
- (3) a defective surface of a manoeuvring area; or
- (4) any other defective aerodrome facility.

Aircraft Incident (INC)

Means any incident, not otherwise classified, associated with the operation of an aircraft.

Airspace Incident (ASP)

Means an incident involving deviation from, or shortcomings of, the procedures or rules for–

- (1) avoiding a collision between aircraft; or
- (2) avoiding a collision between aircraft and other obstacles when an aircraft is being provided with an Air Traffic Service.

Bird Incident (BRD)

Means an incident where–

- (1) there is a collision between an aircraft and one or more birds; or
- (2) when one or more birds pass sufficiently close to an aircraft in flight to cause alarm to the pilot.

Dangerous Goods Incident (DGD)

Means an incident associated with and related to the carriage of dangerous goods by air after acceptance by the operator, that–

- (1) results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation, or other evidence that the integrity of the packaging has not been maintained; or
- (2) involves dangerous goods incorrectly declared, packaged, labelled, marked, or documented.

Defect Incident (DEF)

Means an incident that involves failure or malfunction of an aircraft or aircraft component, whether found in flight or on the ground.

Facility Malfunction Incident (NIO)

Means an incident that involves an aeronautical facility.

Fatal Injury

Means any injury which results in death within 30 days of the accident.

Incident

Means any occurrence, other than an accident, that is associated with the operation of an aircraft and affects or could affect the safety of operation.

Note: Incident has many sub-categories.

Occurrence

Means an accident or incident.

Promulgated Information Incident (PIO)

Means an incident that involves significantly incorrect, inadequate, or misleading information promulgated in any aeronautical information publication, map, or chart.

Security Incident (SEC)

Means an incident that involves unlawful interference.

Serious Injury

Means any injury that is sustained by a person in an accident and that–

- (1) requires hospitalisation for more than 48 hours, commencing within 7 days from the date the injury was received; or
- (2) results in a fracture of any bone, except simple fractures of fingers, toes, or nose; or
- (3) involves lacerations which cause severe haemorrhage, nerve, muscle, or tendon damage; or
- (4) involves injury to an internal organ; or
- (5) involves second or third degree burns, or any burns affecting more than 5% of the body surface; or
- (6) involves verified exposure to infectious substances or injurious radiation.

Severity

The following definitions apply to the severity accorded to occurrences and to findings as the result of investigation of occurrences.

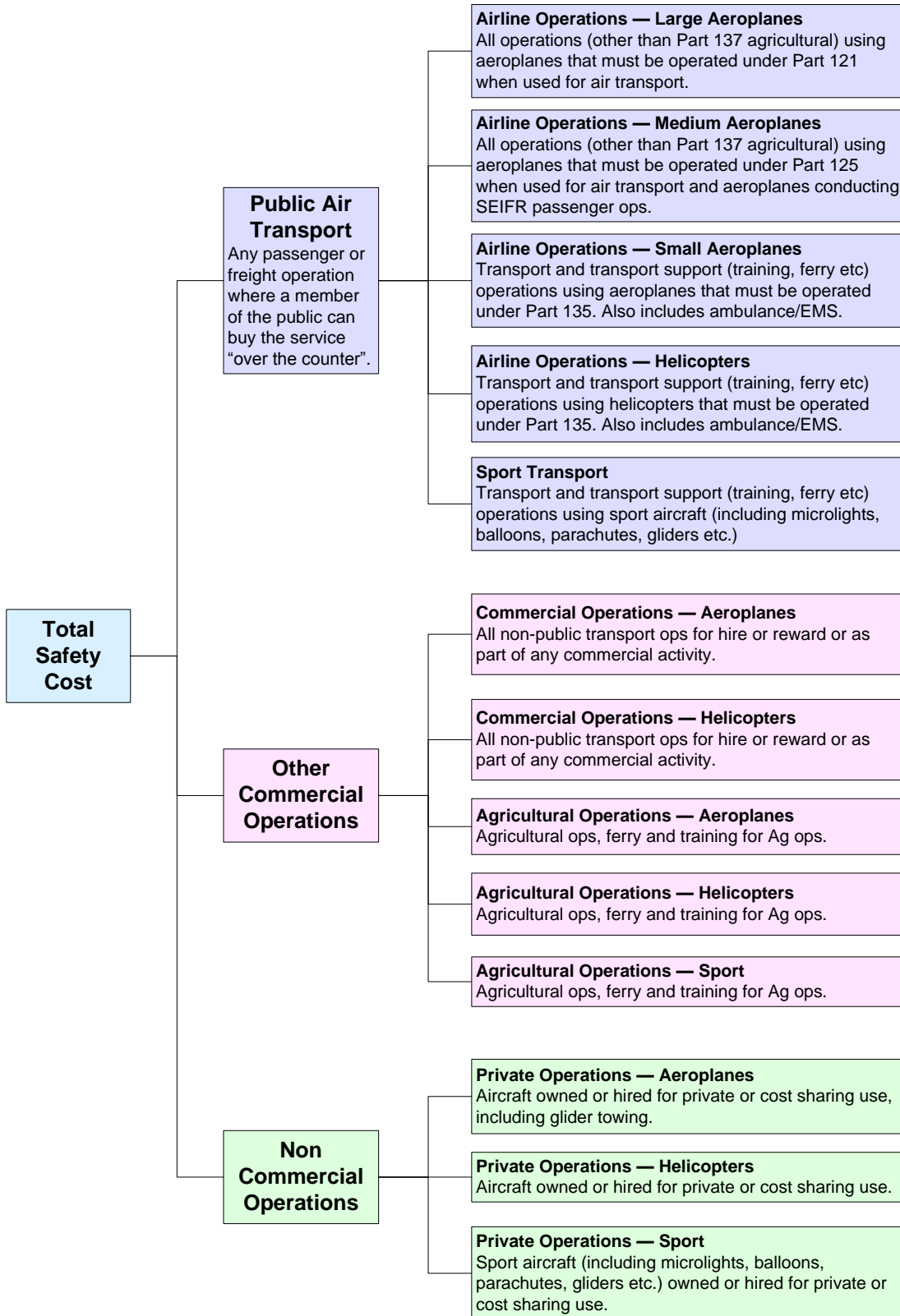
Severity Factor		Definition
CR	Critical	An occurrence or deficiency that caused, or on its own had the potential to cause, loss of life or limb;
MA	Major	An occurrence or deficiency involving a major system that caused, or had the potential to cause, significant problems to the function or effectiveness of that system;
MI	Minor	An isolated occurrence or deficiency not indicative of a significant system problem.

Aircraft Statistics Category

The following table shows the definition of each aircraft statistics category and the aircraft classes included.

Aircraft Statistics Category	Definition	Aircraft Class
Large Aeroplanes	Aeroplanes that must be operated under Part 121 when used for air transport	Aeroplane
Medium Aeroplanes	Aeroplanes that must be operated under Part 125 when used for air transport, except for those required to operate under Part 125 solely due to operating SEIFR	Aeroplane
Small Aeroplanes	Other Aeroplanes with Standard Category Certificates of Airworthiness	Aeroplane
Agricultural Aeroplanes	Aeroplanes with Restricted Category Certificates of Airworthiness limited to agricultural operations	Aeroplane
Helicopters	Helicopters with Standard or Restricted Category Certificates of Airworthiness	Helicopter
Sport Aircraft	All aircraft not included in the groups above	Aeroplane, Amateur Built Aeroplane, Amateur Built Glider, Amateur Built Helicopter, Balloon, Glider, Gyroplane, Helicopter, Microlight Class 1, Microlight Class 2, Power Glider

Safety Target Structure



Safety Target Groups

Target group name	General description	Includes	Excludes
Airline Operation - Large Aeroplanes	All operations using large passenger and freight aeroplanes that are operated under part 121	Ferry, test, training, passenger and freight, domestic and international, Part 91 operations, and commercial operations other than Part 137 agricultural operations. Includes all aeroplanes that have a passenger seating configuration of 30 seats or more, or a payload capacity of more than 3410kg.	Part 137 agricultural operations
Airline Operation - Medium aeroplanes	All operations using medium passenger and freight aeroplanes that are operated under part 125.	Ferry, test, training, passenger and freight, domestic and international, Part 91 operations, and commercial operations other than Part 137 agricultural operations. Aeroplanes that have a seating configuration of 10 to 30 seats, excluding any required crew member seats, or a payload capacity of 3410 kg or less and a MCTOW of greater than 5700 kg, and any aeroplanes conducting SEIFR passenger operations.	Part 137 agricultural operations
Airline Operation - Small aeroplanes	All operations by 119 certificate holders using other aeroplanes.	Ferry, test, passenger and freight, domestic and international, training in support of Part 135 operations, Ambulance/EMS	Part 137 agricultural operations, Part 91 operations, and commercial operations. SEIFR under Part 125
Airline Operation - Helicopters	All operations by 119 certificate holders using helicopters	Ferry, test, passenger and freight, domestic and international, training in support of Part 135 operations, Ambulance/EMS	Part 137 agricultural operations, Part 91 operations, and commercial operations. SEIFR under Part 125
Commercial Operations - Aeroplane	Other commercial operations Aeroplane (all non-public transport ops for hire or reward or as part of any commercial activity)	Positioning, ferrying flights, training (dual and solo), "Commercial non-certified", Business and Executive	Public transport ops, Ag ops & training for Ag ops, non-commercial ops
Commercial Operations - Helicopter	Other commercial operations Helicopter (all non-public transport ops for hire or reward or as part of any commercial activity)	Positioning, ferrying flights, training (dual and solo), "Commercial non-certified", Business and Executive	Ag ops & trg for ag ops, public transport, non-commercial ops.
Agricultural Operations - Aeroplane	Agricultural operations using aeroplanes	Agricultural ops, ferry & training for Ag ops.	Everything else.
Agricultural Operations - Helicopters	Agricultural operations using helicopters	Agricultural ops, ferry & training for Ag ops.	Everything else
Agricultural Operations - Sport Aircraft	Agricultural operations using sport aircraft	Agricultural ops, ferry & training for Ag ops.	Everything else
Private Aeroplane	Private operations in aeroplanes	Cost sharing, aircraft hired from schools and clubs for private or cost sharing use, glider towing	Airline, commercial, agricultural operations, sport aircraft, balloons, training (dual and solo)
Private Helicopter	Private operations in helicopters	Cost sharing, aircraft hired from schools and clubs for private or cost sharing use	Airline, commercial, agricultural operations, sport aircraft, balloons, training, ferry/positioning flights by commercial operators
Sport Transport	All public transport ops by sport aircraft	Ferry, test, passenger and freight, domestic and international, training for such ops. And balloons	Agricultural operations.
Sport Private	Private operations using sport aircraft	Cost sharing, aircraft hired from schools and clubs for private or cost sharing use, training, gliders, power gliders, hang gliders, parachutes and all forms of inflatable wing. Balloons	Airline, commercial, agricultural operations, and training for these activities