

Aviation Industry Safety Update

Introduction	1
Occurrence Statistics	1
Industry Activity Statistics.....	2
Registered Aircraft	2
Licences	2
Certificated Operators	3
Aircraft Movements	4
Long-Term Change in Aircraft Movements	4
Six-Monthly Comparison	4
Air Transport Flights	5
Long-Term Change in Air Transport Flights	5
Six-Monthly Comparison	6
Hours Flown	7
Long-Term Change in Hours Flown	7
Six-Monthly Comparison	8
Industry Size and Shape	10
Aircraft Accidents	11
Occurrence Trend	11
Long-Term Accident Rate	11
Six-Monthly Comparison	12
Severity	13
Safety Outcome Targets for 2010	14
Injury Accidents.....	19
Six-Monthly Comparison	21
Flight Phase	22
Accident Causal Factors by Aircraft Category.....	23
Airspace Incidents.....	28
Occurrence Trend	28
Six-Monthly Comparison	29
Aircraft Incidents.....	30
Occurrence Trend	30
Six-Monthly Comparison	31
Defect Incidents.....	33
Occurrence Trend	33
Six-Monthly Comparison	34
Severity	34
Bird Incident Rates	35
12-Month Moving Average Strike Rate per 10,000 Aircraft Movements	35
CAA Actions	35
Analysis.....	36
Security Incidents	41
Six-Monthly Comparison	41
Severity	41
Occurrences — General.....	41
Definitions.....	42
General.....	42
Accident (ACC)	42
Aerodrome Incident (ADI)	42
Aircraft Incident (INC)	42
Airspace Incident (ASP)	43
Bird Incident (BRD)	43
Dangerous Goods Incident (DGD)	43
Defect Incident (DEF)	43
Facility Malfunction Incident (NIO)	43
Fatal Injury	43
Incident	43
Occurrence	43
Promulgated Information Incident (PIO).....	43
Security Incident (SEC).....	44
Serious Injury	44
Severity	44
Aircraft Statistics Category	45
Safety Target Structure	46
Safety Target Groups	47

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 January 2005 to 31 December 2007. 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 30 June 2008 and 6 months prior:

Aircraft Category	31 Dec 2007		30 Jun 2008		Change	
	Number	Percent	Number	Percent	Number	Percent
Large Aeroplanes	116	2.8%	119	2.8%	3	2.6%
Medium Aeroplanes	82	2.0%	81	1.9%	-1	-1.2%
Small Aeroplanes	1450	34.6%	1472	35.1%	22	1.5%
Helicopters	698	16.6%	725	17.3%	27	3.9%
Sport Aircraft (Aeropl, FB, Helo only)	1723	41.1%	1778	42.4%	55	3.2%
Agricultural Aeroplanes	124	3.0%	126	3.0%	2	1.6%
Total	4193		4301		108	2.6%

Licences

The following table summarises the number of private pilot, commercial pilot, airline transport pilot, air traffic controller, and aircraft maintenance engineer licences on the register at 30 June 2008 and 6 months prior:

Licence Type (Medical Certificate)	31 Dec 2007	30 Jun 2008	Change	
			Number	Percent
PPL (Class 1 & 2)	3819	3856	37	1.0%
CPL (Class 2 only)	1662	1763	101	6.1%
CPL (Class 1)	2155	2162	7	0.3%
ATPL (Class 2 only)	913	847	-66	-7.2%
ATPL (Class 1)	1055	1152	97	9.2%
ATCL (Class 3)	325	332	7	2.2%
LAME (N/A)	2227	2276	49	2.2%
Total Licences	12156	12388	232	1.9%

Note — the statistics above for pilot licences count only those with active class 1 or active class 2 medical certificates. 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 30 June 2008 and 6 months prior.

Rule part	31 Dec 2007	30 Jun 2008	Change	
			Number	Percent
Part 119 Air Operator	177	174	-3	-1.7%
Part 119 Air Operator - Pacific	3	3	0	0.0%
Part 129 Foreign Air Operator	39	38	-1	-2.6%
Part 137 Agricultural Aircraft Operator	114	108	-6	-5.3%
Part 139 Aerodromes	24	25	1	4.2%
Part 140 Aviation Security Service	1	1	0	0.0%
Part 141 Aviation Training Organisation	49	48	-1	-2.0%
Part 141 Restricted Training Organisation	0	0	0	0.0%
Part 145 Aircraft Maintenance Organisation	56	57	1	1.8%
Part 146 Aircraft Design Organisation	12	11	-1	-8.3%
Part 148 Aircraft Manufacturing Organisation	23	22	-1	-4.3%
Part 149 Aviation Recreation Organisation	8	8	0	0.0%
Part 171 Aeronautical Telecommunication Service Organisation	3	3	0	0.0%
Part 172 Air Traffic Service	2	1	-1	-50.0%
Part 174 Meteorological Service Organisation	2	2	0	0.0%
Part 175 Aeronautical Information Service Organisation	2	2	0	0.0%
Part 19 Supply Organisation Certificate of Approval	58	61	3	5.2%
Part 92 Dangerous Goods Packaging Approval	40	40	0	0.0%

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

119 Air Operator	31 Dec 2007	30 Jun 2008	Change	
			Number	Percent
Part 108 Security Programme	21	21	0	0.0%
Part 121 Large Aeroplanes	11	11	0	0.0%
Part 125 Medium Aeroplanes	16	16	0	0.0%
Part 135 Helicopters and Small Aeroplanes	164	161	-3	-1.8%

119 Air Operator Pacific	31 Dec 2007	30 Jun 2008	Change	
			Number	Percent
Part 108 Security Programme	4	3	-1	-25.0%
Part 121 Large Aeroplanes	2	3	1	50.0%
Part 125 Medium Aeroplanes	4	2	-2	-50.0%
Part 135 Helicopters and Small Aeroplanes	3	2	-1	-33.3%

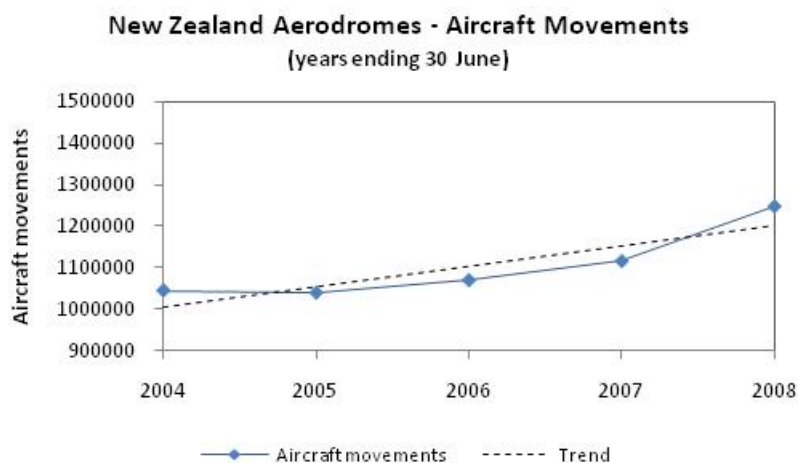
129 Foreign Air Operator	31 Dec 2007	30 Jun 2008	Change	
			Number	Percent
Part 108 Security Programme	31	30	-1	-3.2%

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 July 2003 to 30 June 2008.



The number of aircraft movements increased at an average of 4% each year from the year ended 31 December 2003 until the year ended 30 June 2008 when a high of 1,248,811 was reached.

Six-Monthly Comparison

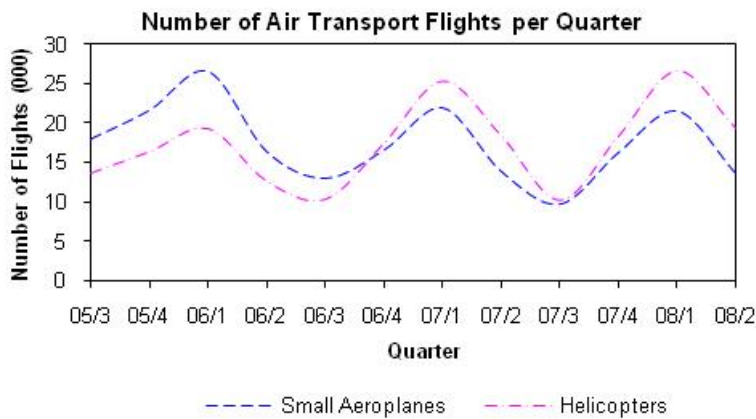
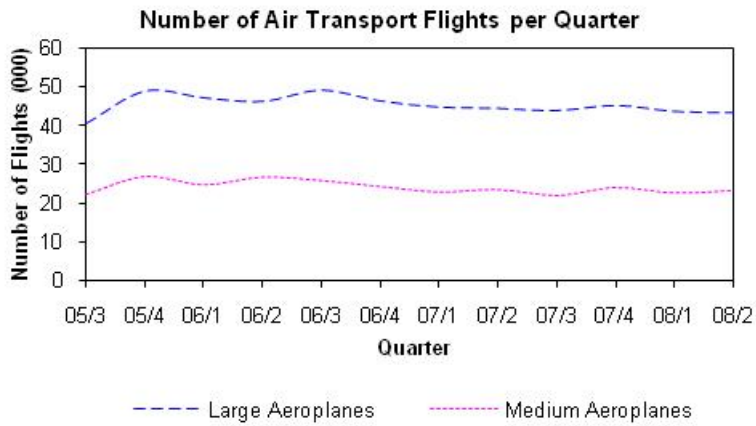
Number of Aircraft Movements

Activity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change	
			Number	Percent
Aircraft Movements	584883	648150	63267	10.8%

Air Transport Flights

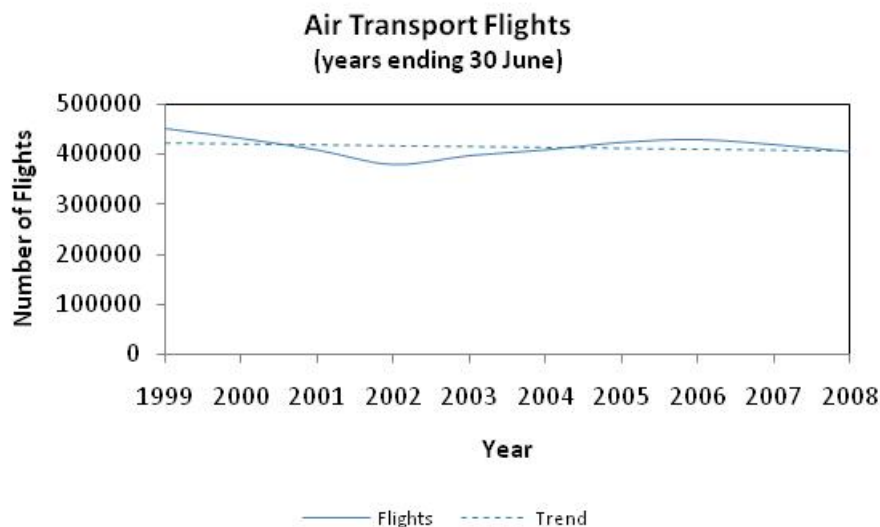
Note that these graphs exclude the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes, and foreign registered aircraft that are operated in New Zealand.

The following graphs show the number of air transport flights per quarter during the three year period 1 July 2005 to 30 June 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 July 1998 to 30 June 2008.



The number of air transport flights decreased at an average of 0.1% each year from 407,906 in the year ended 30 June 2004 to 404,531 in the year ended 30 June 2008.

Six-Monthly Comparison

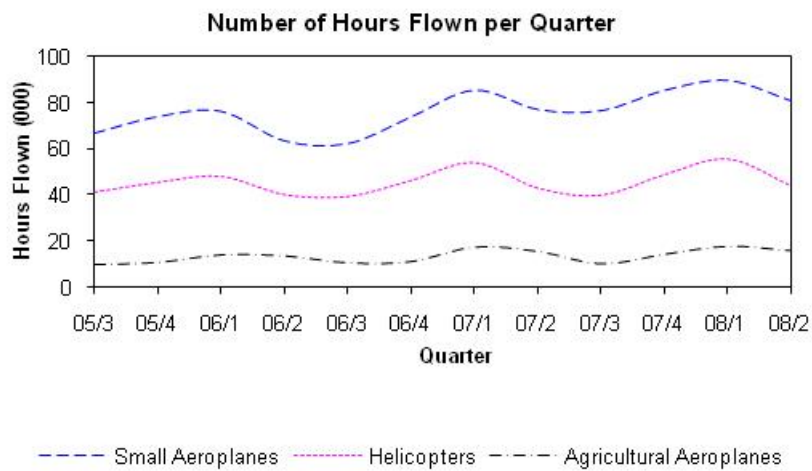
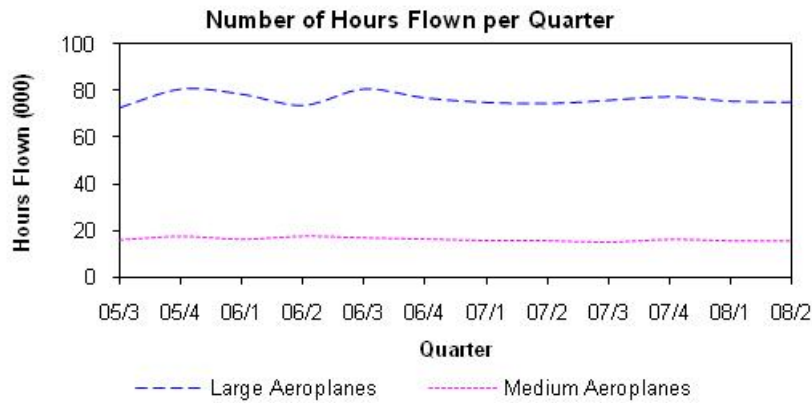
Number of Air Transport Flights

Aircraft Category	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change	
			Number	Percent
Large Aeroplanes	95489	89212	-6277	-6.6%
Medium Aeroplanes	50317	46258	-4059	-8.1%
Small Aeroplanes	29536	25931	-3605	-12.2%
Helicopters	27513	28318	805	2.9%
Sport Aircraft (Aeropl, FB, Helo only)	226	226	0	0.0%
Total	203081	189945	-13136	-6.47%

Hours Flown

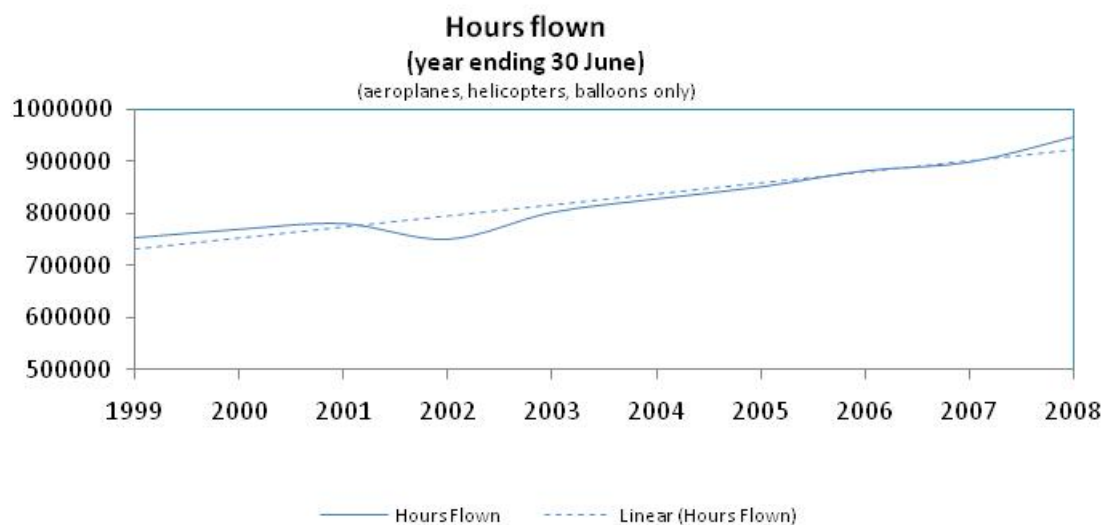
Note that these graphs exclude the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes, and foreign registered aircraft that are operated in New Zealand.

The following graphs show the number of hours flown by aircraft during the three-year period 1 July 2005 to 30 June 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 July 1998 to 30 June 2008.



The total number of hours flown increased at an average of 2.9% each year from 827,713 in the year ended 30 June 2004 to 947,418 in the year ended 30 June 2008.

Six-Monthly Comparison

Number of Hours Flown

Aircraft Category	1 Jan - 30 Jun 2007	1 Jan - 30 Jun 2008	Change	
			Number	Percent
Airline Operations - Large Aeroplanes	149500.4	150533.9	1033.5	1%
Airline Operations - Medium Aeroplanes	31538.0	31243.2	-294.8	-1%
Airline Operations - Small Aeroplanes	31525.5	24402.9	-7122.6	-23%
Airline Operations - Helicopter	39715.0	36778.4	-2936.6	-7%
Sport Transport (Aeropl, FB, Helo only)	913.1	1024.8	111.7	12%
Other Commercial Operations - Aeroplane	109323.7	125847.8	16524.1	15%
Other Commercial Operations - Helicopter	22968.0	28761.9	5793.9	25%
Agricultural Operations - Aeroplane	32210.0	32817.6	607.6	2%
Agricultural Operations - Helicopter	23912.0	23925.0	13.0	0%
Private Operations - Aeroplane	23695.9	22328.5	-1367.4	0%
Private Operations - Helicopter	10936.0	10716.5	-219.5	-2%
Private Operations - Sport (Aeropl, FB, Helo only)	2354.4	2053.9	-300.5	-13%
Total	478592.0	490434.4	11842.4	2.5%

1 July to 30 June 2007

Aircraft Category	Airline/ Transport	Other Commercial	Agricultural	Private	Total
Large Aeroplanes	149,500	0	0	0	149,500
Medium Aeroplanes	31,538	0	0	0	31,538
Small Aeroplanes	31,526	107535.5	481.9	23622.6	163,166
Helicopters	39,715	22968	23912	10936	97,531
Sport Aircraft (aeroplane, helicopter and balloon only)	913	0	0	2354.4	3,268
Agricultural Aeroplanes	0	1788.2	31728.1	73.3	33,590
Total	253,192	132,292	56,122	36,986	478,592

1 July to 30 June 2008

Aircraft Category	Airline/ Transport	Other Commercial	Agricultural	Private	Total
Large Aeroplanes	150,533.9	0.0	0.0	0.0	150,534
Medium Aeroplanes	31,243.2	0.0	0.0	0.0	31,243
Small Aeroplanes	24,402.9	123,705.7	676.7	22,323.8	171,109
Helicopters	36,778.4	28,761.9	23,925.0	10,716.5	100,182
Sport Aircraft (aeroplane, helicopter and balloon only)	1,024.8	0.0	0.0	2,053.9	3,079
Agricultural Aeroplanes	0.0	2,142.1	32,140.9	4.7	34,288
Total	243,983	154,610	56,743	35,099	490,434

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 30 June 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	45023	96.2%
Airline Operations - Medium Aeroplanes	20.59	744	1.6%
Airline Operations - Small Aeroplanes	3.89	130	0.3%
Airline Operations - Helicopter	3.60	155	0.3%
Sport Transport		95*	0.2%
Other Commercial Operations - Aeroplane	2.00	225	0.5%
Other Commercial Operations - Helicopter	3.60	91	0.2%
Agricultural Operations - Aeroplane	2.00	63	0.1%
Agricultural Operations - Helicopter	3.60	94	0.2%
Agricultural Operations – Sport			0.0%
Private Operations - Aeroplane	2.00	62	0.1%
Private Operations - Helicopter	3.60	50	0.1%
Private Operations - Sport		53*	0.1%

* 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.

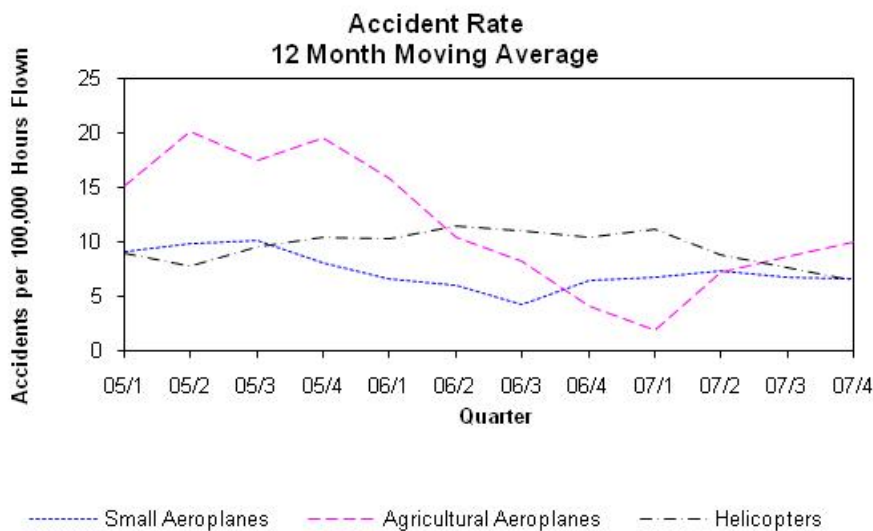
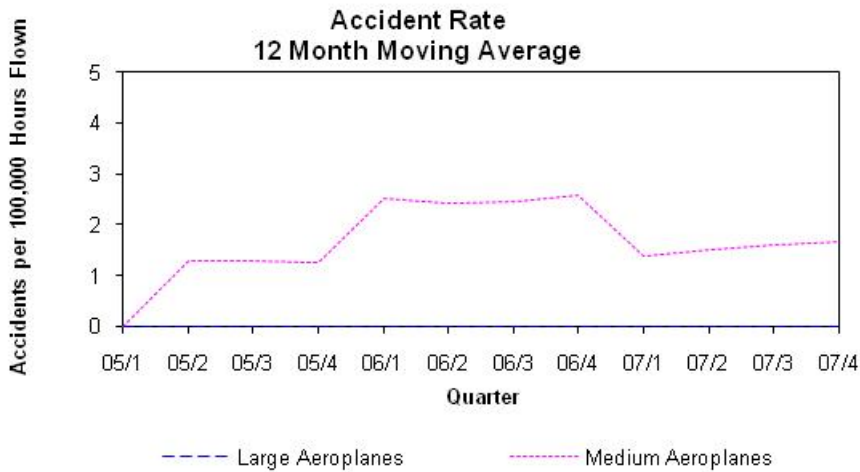
This table shows that around 96.2% of seat hours are offered by the Airline Operations – Large Aeroplanes group, around 1.6% by the Airline Operations – Medium Aeroplanes group, with the remaining 2.5% of seat hours offered being split between the other safety target groups.

Occurrence Statistics

Aircraft Accidents

Occurrence Trend

The following graphs show the aircraft accident rates (accidents per 100,000 hours flown) twelve month moving average for the three-year period 1 January 2005 to 31 December 2007 (excluding the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes).

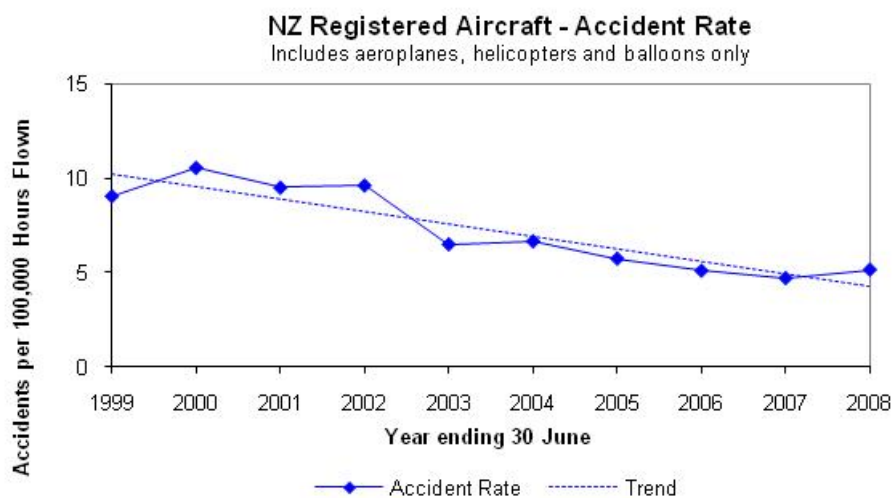


Aircraft Category	Straight Line Trend of 12 month moving Average
Large Aeroplanes	Constant
Medium Aeroplanes	Trending down
Small Aeroplanes	Trending down
Helicopters	Trending down
Sport Aircraft (excluding hanggliders and parachutes)	Trending down
Ag Aeroplanes	Trending down

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 June 1998 to 30 June 2008.



Note that this graph does not show a moving average.

Six-Monthly Comparison

Number of Aircraft Accidents

Activity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	1	0	-1
Small Aeroplanes	12	14	2
Helicopters	6	11	5
Sport Aircraft (excluding hanggliders and parachutes)	18	18	0
Ag Aeroplanes	4	8	4
Hanggliders	5	5	0
Parachutes	5	5	0
Unknown	0	0	0

Severity**Six-Monthly Comparison**

Activity	Severity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
Large Aeroplanes	Critical	0	0	0
	Major	0	0	0
	Minor	0	0	0
Medium Aeroplanes	Critical	1	0	-1
	Major	0	0	0
	Minor	0	0	0
Small Aeroplanes	Critical	0	2	2
	Major	12	3	-9
	Minor	0	9	9
Helicopters	Critical	2	1	-1
	Major	3	7	4
	Minor	1	3	2
Sport Aircraft (excluding hanggliders and parachutes)	Critical	0	4	4
	Major	8	5	-3
	Minor	10	9	-1
Ag Aeroplanes	Critical	0	1	1
	Major	4	3	-1
	Minor	0	4	4
Hanggliders	Critical	1	0	-1
	Major	3	1	-2
	Minor	1	2	1
Parachutes	Critical	1	0	-1
	Major	1	0	-1
	Minor	3	0	-3
Unknown	Critical	0	0	0
	Major	0	0	0
	Minor	0	0	0
Total	Critical	5	8	3
	Major	31	19	-12
	Minor	15	27	12

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			
Airline Operations - Medium Aeroplanes	1	1	
Airline Operations - Small Aeroplanes		2	1
Airline Operations - Helicopter			1
Sport Transport	1		
Other Commercial Operations - Aeroplane	10	12	13
Other Commercial Operations - Helicopter	6	5	5
Agricultural Operations - Aeroplane	2	6	10
Agricultural Operations - Helicopter	6	2	3
Agricultural Operations - Sport aircraft			
Private Operations - Aeroplane	8	6	4
Private Operations - Helicopter	6	5	6
Private Operations - Sport	28	27	20

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

Safety Target Group	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
Airline Operations - Large Aeroplanes			0
Airline Operations - Medium Aeroplanes			0
Airline Operations - Small Aeroplanes		2	-2
Airline Operations - Helicopter			0
Sport Transport	1		1
Other Commercial Operations - Aeroplane	5	6	-1
Other Commercial Operations - Helicopter	4	2	2
Agricultural Operations - Aeroplane		2	-2
Agricultural Operations - Helicopter	2	1	1
Agricultural Operations - Sport			0
Private Operations - Aeroplane	5	1	4
Private Operations - Helicopter	4	3	1
Private Operations - Sport	9	10	-1

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 30 June 2008. Social cost is the cost of fatal, serious and minor injuries, and aircraft destroyed, expressed in 2006 dollars.

Safety Target Group	Social Cost
	\$m
Airline Operations - Large Aeroplanes	0.3
Airline Operations - Medium Aeroplanes	-
Airline Operations - Small Aeroplanes	0.01
Airline Operations - Helicopter	-
Sport Transport	0.01
Other Commercial Operations - Aeroplane	13.58
Other Commercial Operations - Helicopter	8.52
Agricultural Operations - Aeroplane	4.96
Agricultural Operations - Helicopter	-
Agricultural Operations - Sport Aircraft	-
Private Operations - Aeroplane	1.22
Private Operations - Helicopter	0.54
Private Operations - Sport	22.91
Total	52.06

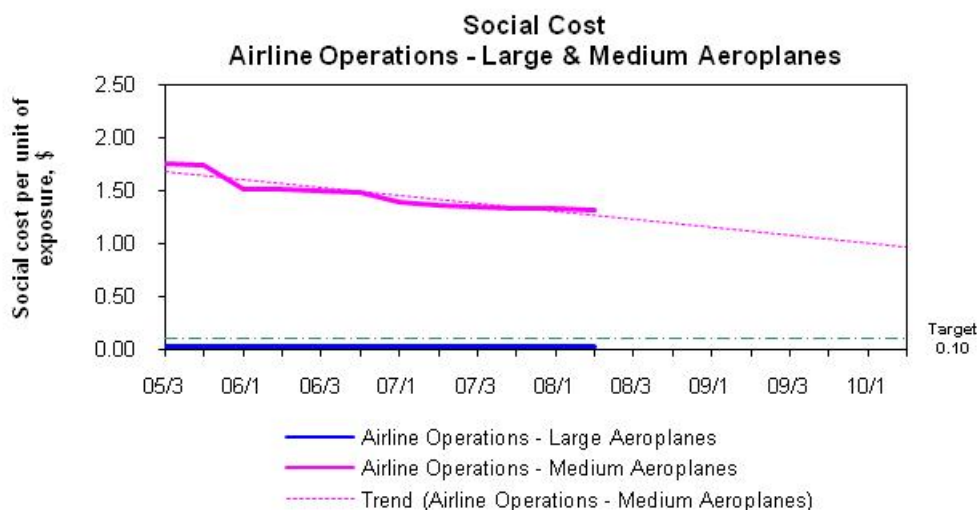
Note that the individual values in the table may not sum exactly to the total shown due to rounding.

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.

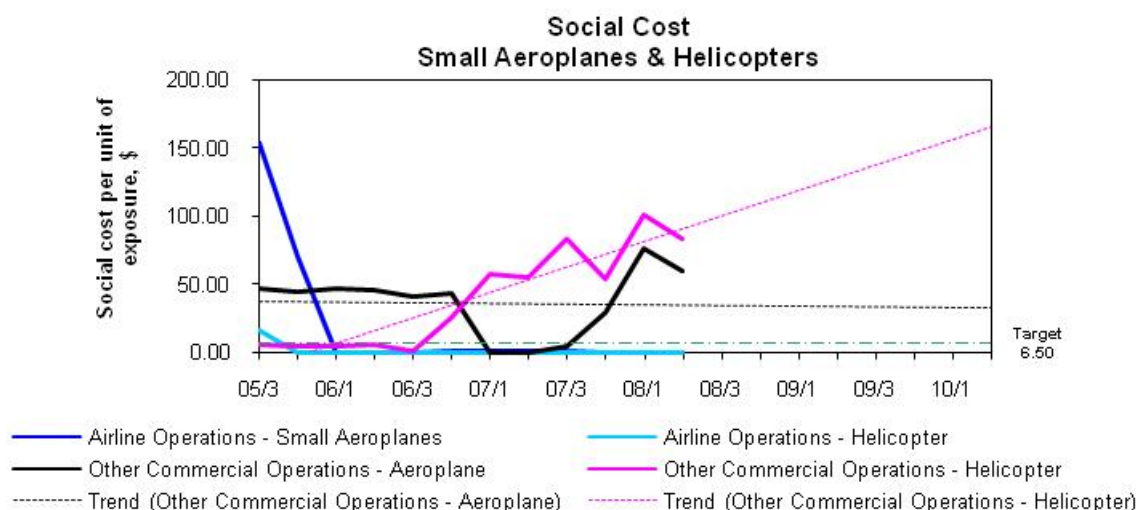
The results for the Airline Operations – Large Aeroplanes and Medium Aeroplanes groups are derived using 10 year averages; all other groups use 12 month averages.

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 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 by a significant margin and although trending down the target will not be achieved until after 2010. This is because of the relatively small exposure associated with this sector.

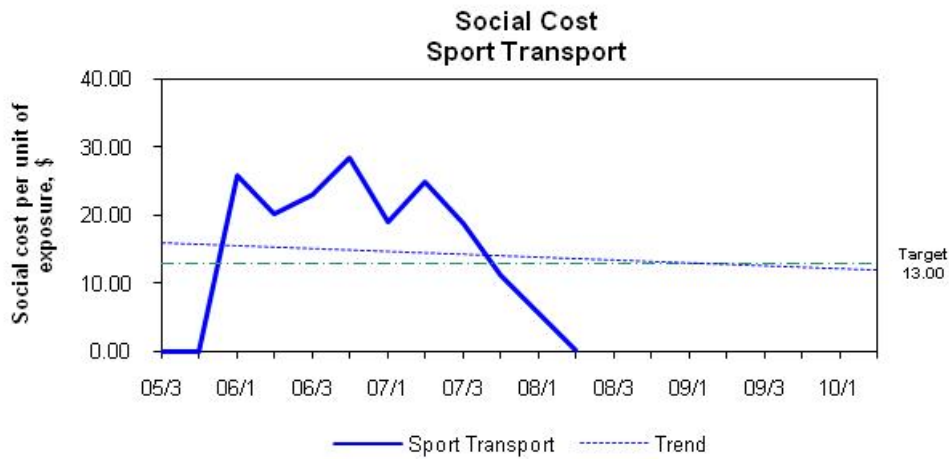


The outcome for Airline Operations – Small Aeroplanes shows a significant long term downward trend from the high starting point of \$147.38 per hour of exposure generated by 6 fatalities and 2 serious injuries in the two quarters Oct 04 to Mar 05. The safety outcome for this group has been below the target level since 2006.

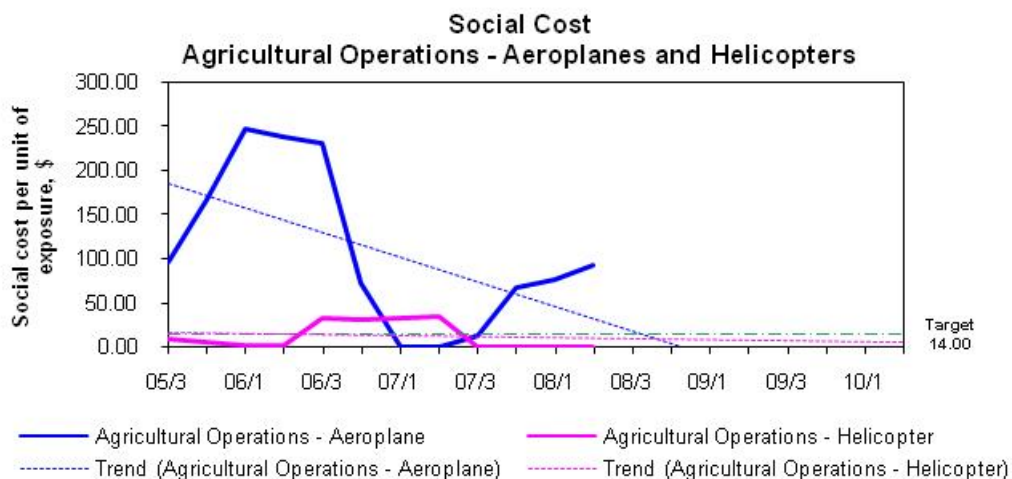
The outcome for Airline Operations – Helicopter remains level on zero as there have been no fatal or serious injuries in this group since 2003.

The outcome for Other Commercial Operations – Aeroplane has risen above the target of \$6.50. During the four quarters July 2007 to June 2008 there have been 4 fatalities, 3 major injuries and 1 minor injury in this group.

The outcome for Other Commercial Operations – Helicopter turned sharply upwards during the fourth quarter of 2006 and is now well above the target level. Two fatalities and 1 minor injury in the four quarters July 2007 to June 2008 contribute to the result.

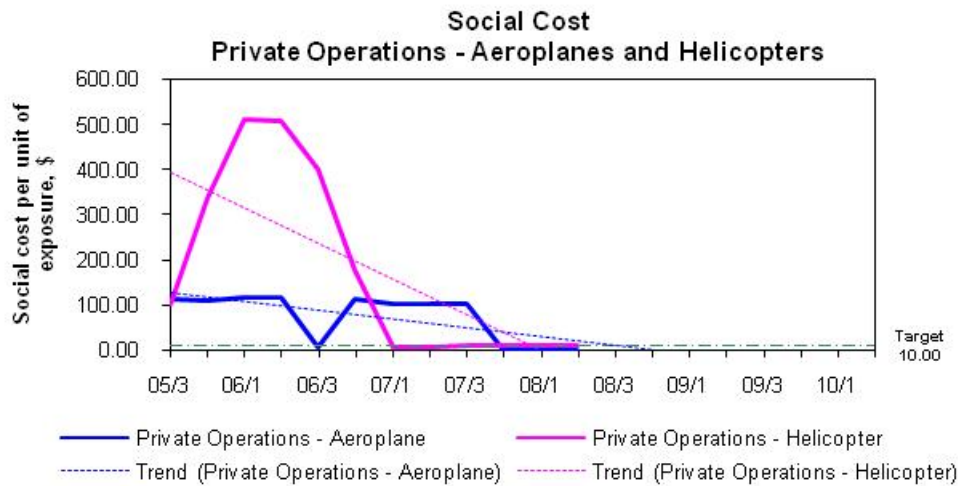


The outcome for Sport Transport peaked in the second quarter of 2007 and has trended downwards in subsequent quarters. There was 1 minor injury in this group in four quarters July 2007 to June 2008.



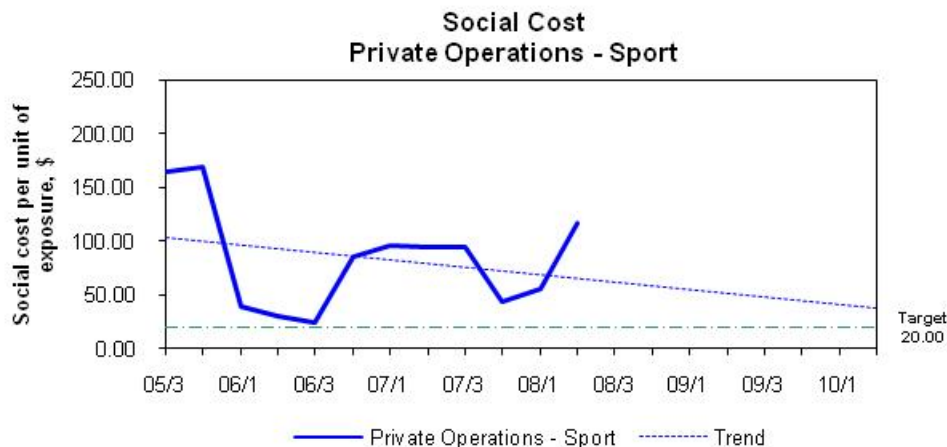
The outcome for Agricultural Operations – Aeroplanes was below the desired target for 3 quarters of 2007, but has now risen above it again. There was 1 fatality and 1 serious injury in this group in the 4 quarters from July 2007 to June 2008. The long term trend line is still downwards.

The outcome for Agricultural Operations – Helicopter turned sharply upwards during the third quarter of 2006 and remained above the target level until the 3rd quarter of 2007. There were no injuries in this group in the 4 quarters from July 2007 to June 2008.



The outcome for Private Operations – Aeroplane remained around \$100.00 for the first four quarters of the new regime and again for 4 quarters from September 2006 to October 2007. There was 1 minor injury in the 4 quarters from July 2007 to June 2008.

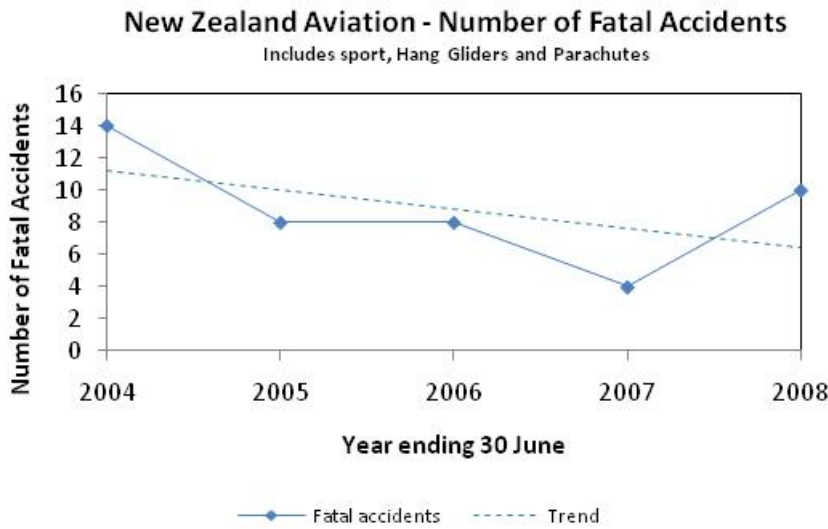
The outcome for Private Operations – Helicopters, having rapidly trended up in the last half of 2005 and down since mid 2006, is now around the required target level. There were 2 minor injuries in the 4 quarters from July 2007 to June 2008.



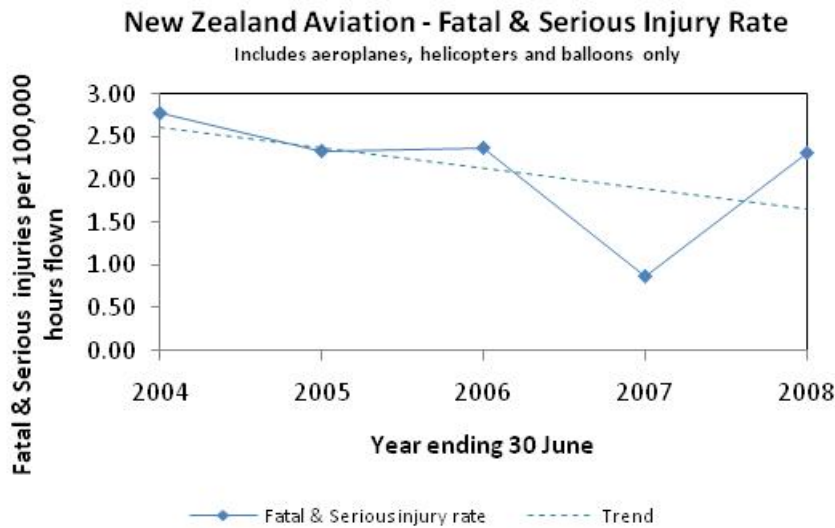
The outcome for Private Operations – Sport, which had been trending down since late 2005, reversed significantly in the Oct to Dec 06 quarter, and there were 7 fatalities, 4 serious and 6 minor injuries in the 4 quarters from July 2007 to June 2008. The long term (10 year) trend for this group is downward but this group will not make its target unless it improves.

Injury Accidents

The following graph shows the number of fatal accidents in the 5-year period to 30 June 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 30 June 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 30 June 2008.



Since 2003 the long-term trends of the number of fatal injuries and the number of fatal accidents are downward.

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

Activity	1 Jan to 30 Jun 2007		1 Jan to 30 Jun 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	0	0	2	3	2	3
Helicopters	0	0	1	2	1	2
Sport Aircraft	0	0	4	6	4	6
Ag Aeroplanes	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Hanggliders	0	0	0	0	0	0
Parachutes	1	1	0	0	-1	-1
Total	1	1	7	11	6	10

Number of Serious Injuries

Activity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	0	0
Small Aeroplanes	0	0	0
Helicopters	0	0	0
Sport Aircraft	1	0	-1
Ag Aeroplanes	0	1	1
Unknown	0	0	0
Hanggliders	4	1	-3
Parachutes	3	0	-3
Total	8	2	-6

Number of Minor Injuries

Activity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	0	0
Small Aeroplanes	1	0	-1
Helicopters	3	0	-3
Sport Aircraft	4	1	-3
Ag Aeroplanes	0	0	0
Unknown	0	0	0
Hanggliders	1	3	2
Parachutes	0	0	0
Total	9	4	-5

Flight Phase

The following table shows the flight phase recorded for accidents.

Flight Phase	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
AGRICULTURAL MANOEUVRES	1	1	0
APPROACH	2	1	-1
CIRCUIT	0	1	1
CLIMB	5	2	-3
CRUISE	9	8	-1
DESCENT	2	0	-2
HOLDING	0	1	1
HOVER	1	2	1
LANDING	33	17	-16
PARKED	1	2	
TAKEOFF	6	0	-6
TAXIING	2	4	2
Total	59	36	-24

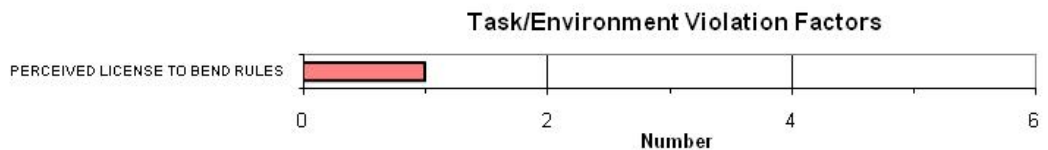
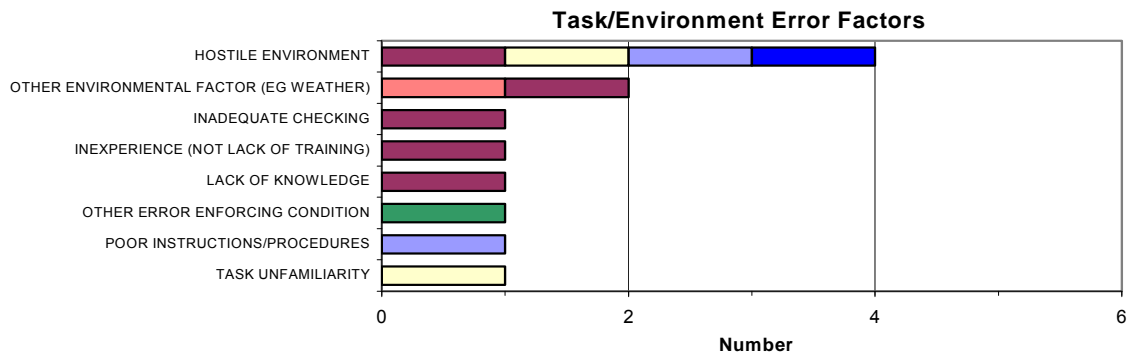
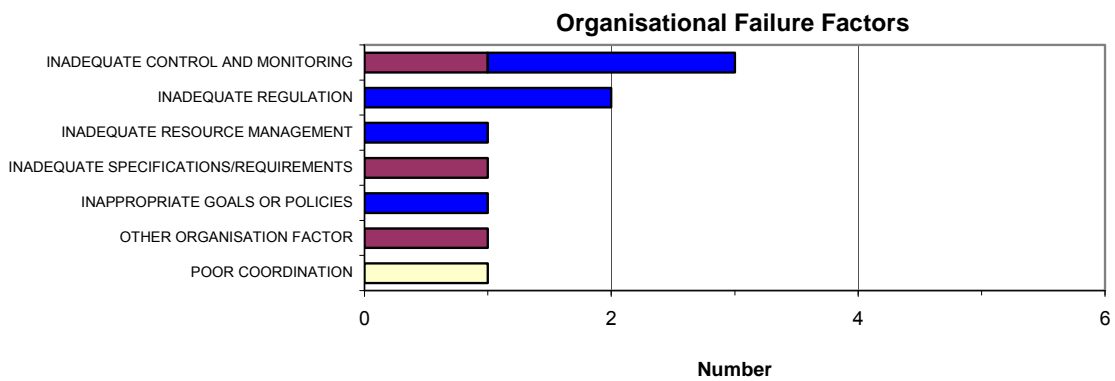
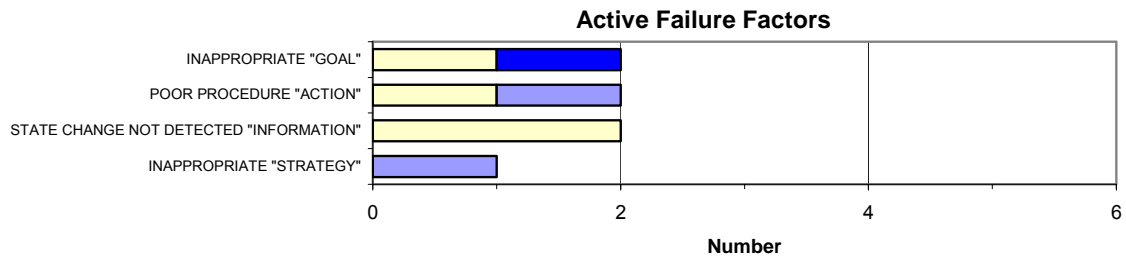
Accidents in the period 1 July to 30 June 2008 were most common during the Landing phase (47%).

Analysis of recorded occurrence descriptors for Landing phase accidents in the 1 January to 30 June 2007 period shows that the most common descriptor is “hard landing (18%).

Analysis of recorded causes for Landing phase accidents shows that the most common causes are Organisational Factors – Inadequate Defences (33%), Active Failure – Actions Inconsistent With Procedures (33%) and Active Failure – Poor Procedure “Action” (33%).

Accident Causal Factors by Aircraft Category

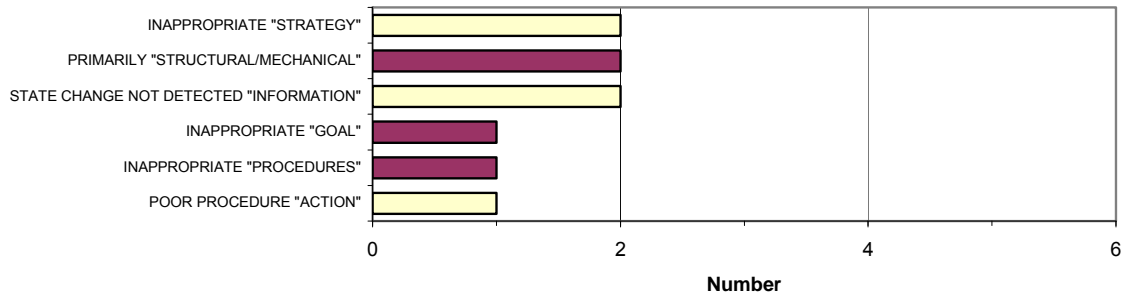
The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 January to 30 June 2006 for the various aircraft statistics categories. Causal factors have been assigned to 19 (39%) of the 49 accidents.



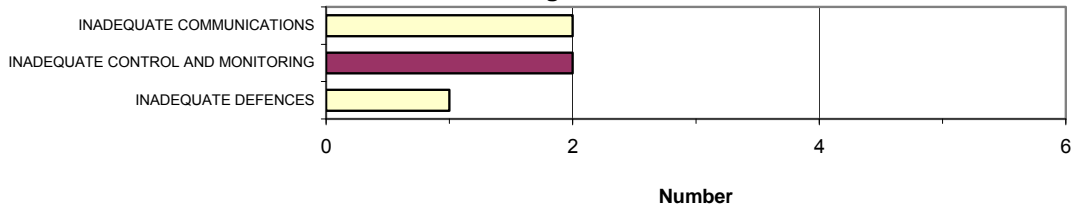
- Large Aeroplanes
 Medium Aeroplanes
 Small Aeroplanes
 Agricultural Aeroplanes
- Helicopters
 Sport Aircraft
 Hang Gliders and Parachutes

The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 July to 31 December 2006 for the various aircraft statistics categories. Causal factors have been assigned to 11 (28%) of the 39 accidents.

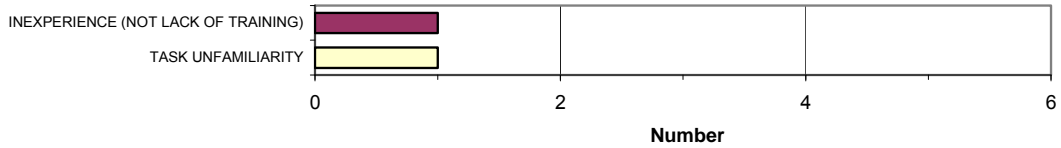
Active Failure Factors



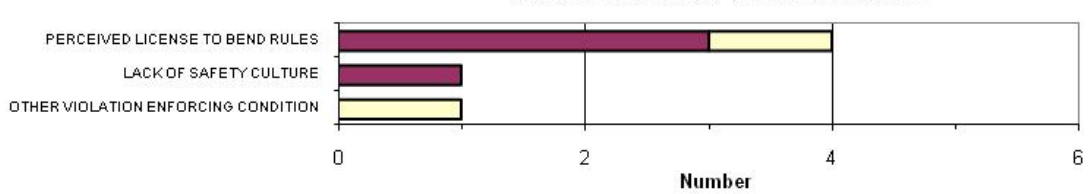
Organisational Failure Factors



Task/Environment Error Factors

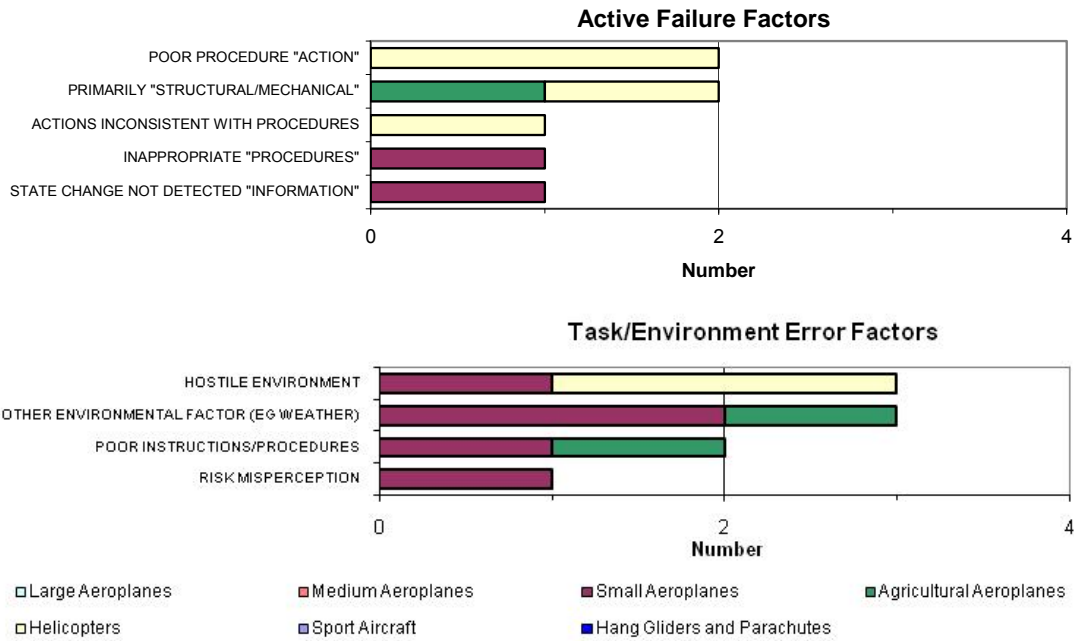


Task/Environment Violation Factors

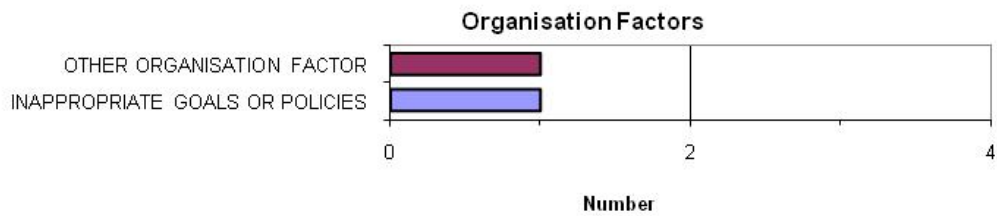
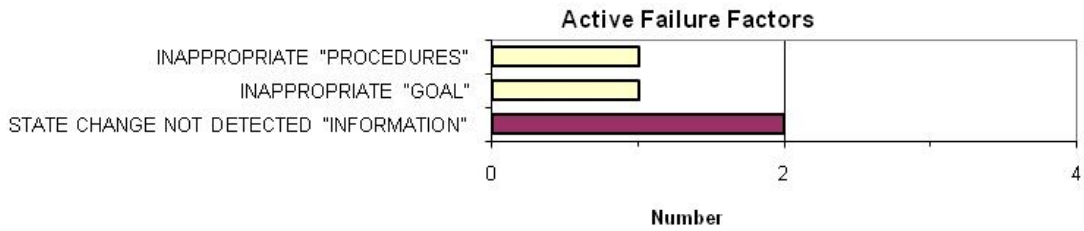


- Large Aeroplanes ■ Medium Aeroplanes ■ Small Aeroplanes ■ Agricultural Aeroplanes
- Helicopters ■ Sport Aircraft ■ Hang Gliders and Parachutes

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

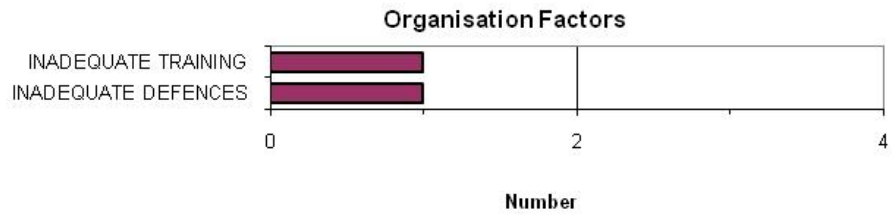
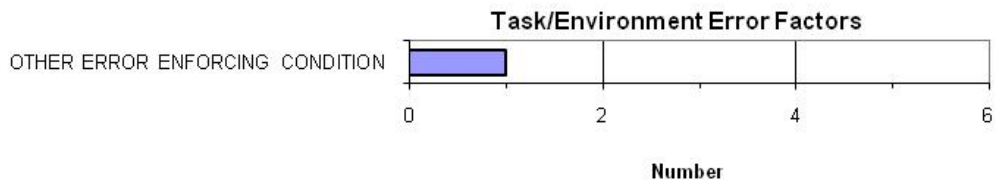
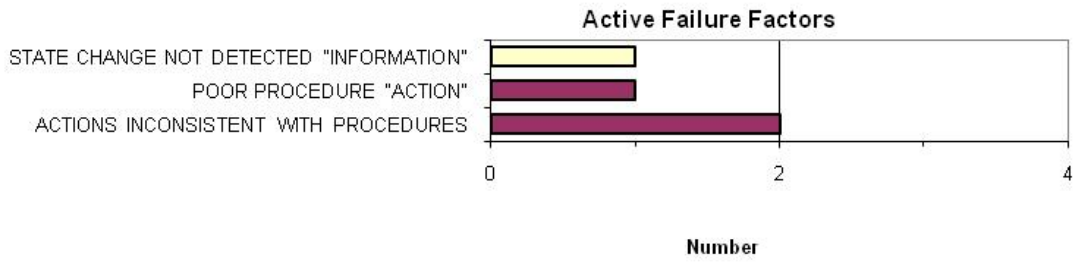


The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 July to 31 December 2007 for the various aircraft statistics categories. Causal factors have been assigned to 6 (18.75%) of the 32 accidents.



- Large Aeroplanes
- Medium Aeroplanes
- Small Aeroplanes
- Agricultural Aeroplanes
- Helicopters
- Sport Aircraft
- 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.

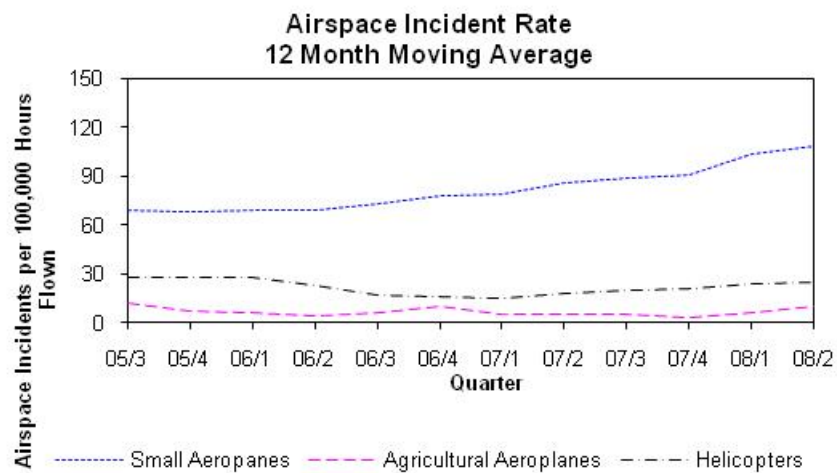
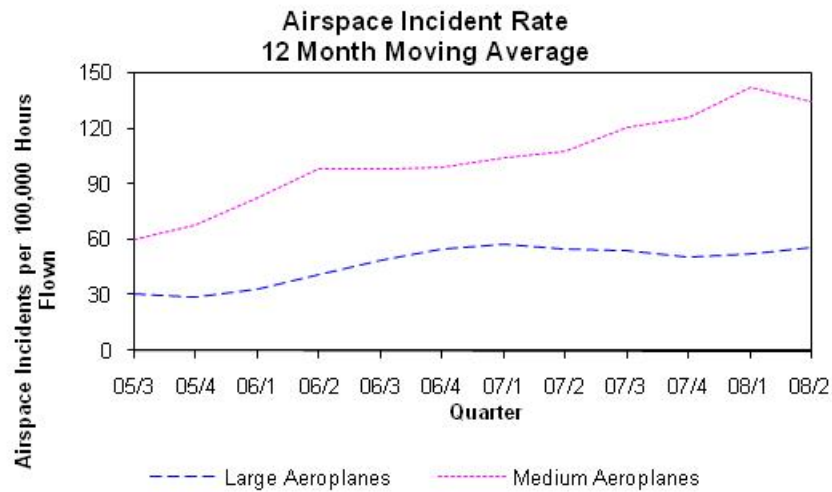


- | | | | |
|--|---|---|--|
| ■ Large Aeroplanes | ■ Medium Aeroplanes | ■ Small Aeroplanes | ■ Agricultural Aeroplanes |
| ■ Helicopters | ■ Sport Aircraft | ■ Hang Gliders and Parachutes | |

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 July 2005 to 30 June 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 down
Agricultural Aeroplanes	Trending down

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

Aircraft Category	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change	
			Number	Percent
Large Aeroplanes	73	90	17	23.3%
Medium Aeroplanes	41	46	5	12.2%
Small Aeroplanes	147	212	65	44.2%
Agricultural Aeroplanes	0	4	4	
Helicopters	22	29	7	31.8%
Sport Aircraft	23	15	-8	-34.8%
Unknown	160	149	-11	-6.9%
Total	466	545	79	17.0%

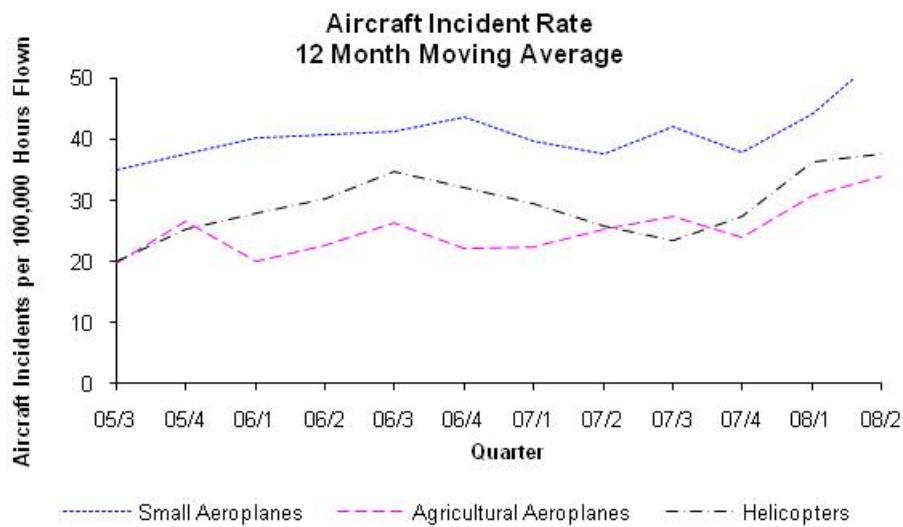
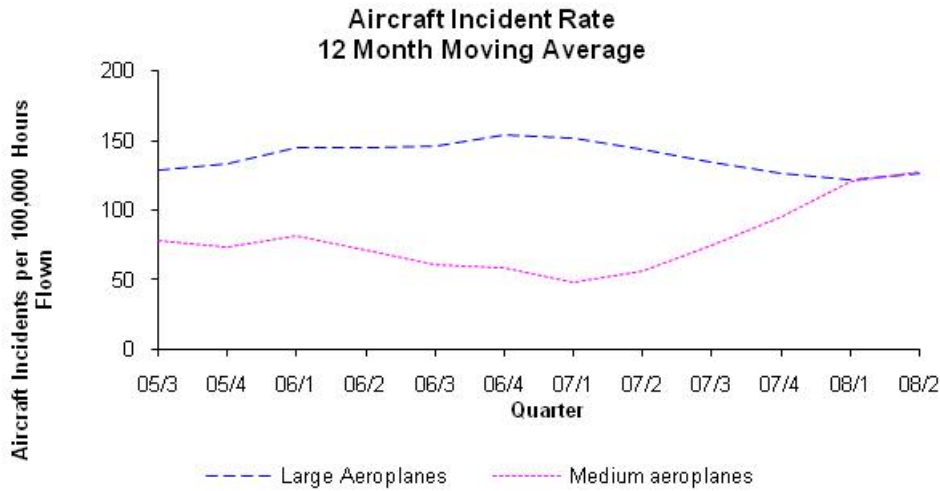
Six-Monthly Comparison

Activity	Severity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
Large aeroplanes	Critical	1	0	-1
	Major	1	3	2
	Minor	71	87	16
Medium Aeroplanes	Critical	0	0	0
	Major	3	2	-1
	Minor	38	44	6
Small Aeroplanes	Critical	0	0	0
	Major	8	7	-1
	Minor	139	205	66
Helicopters	Critical	0	0	0
	Major	0	1	1
	Minor	22	28	6
Sport Aircraft	Critical	0	0	0
	Major	1	2	1
	Minor	22	13	-9
Agricultural Aeroplanes	Critical	0	0	0
	Major	0	0	0
	Minor	0	4	4
Unknown	Critical	1	0	-1
	Major	19	10	-9
	Minor	140	139	-1
Total	Critical	2	0	-2
	Major	32	25	-7
	Minor	432	520	88

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 July 2005 to 30 June 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 for the Small aeroplane and helicopter groups to the respective number of reported accidents continue to be low.

Six-Monthly Comparison

Number of Aircraft Incidents

Aircraft Category	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change	
			Number	Percent
Large Aeroplanes	183	187	4	2.2
Medium Aeroplanes	23	43	20	87.0
Small Aeroplanes	56	113	57	101.8
Helicopters	19	39	20	105.3
Sport Aircraft	19	24	5	26.3
Agricultural Aeroplanes	9	15	6	66.7
Unknown	30	49	19	63.3
Total	339	470	131	38.6

Severity

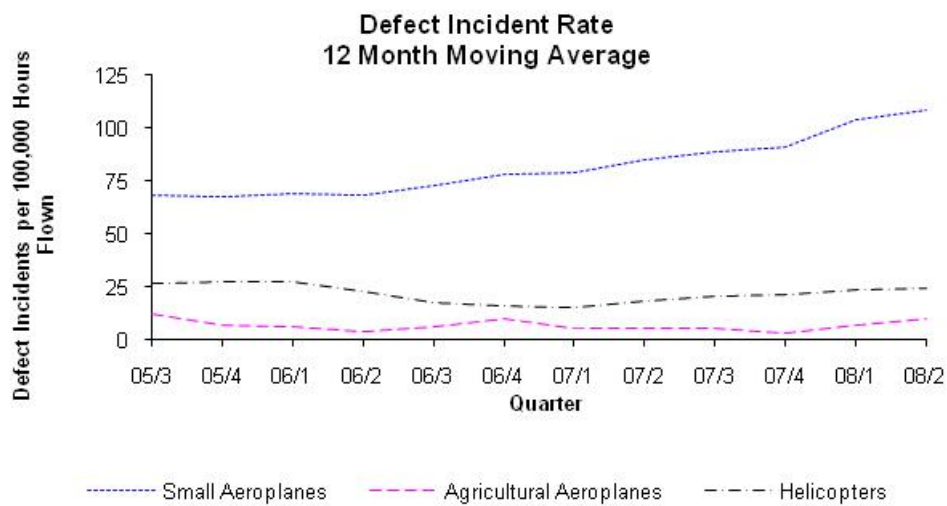
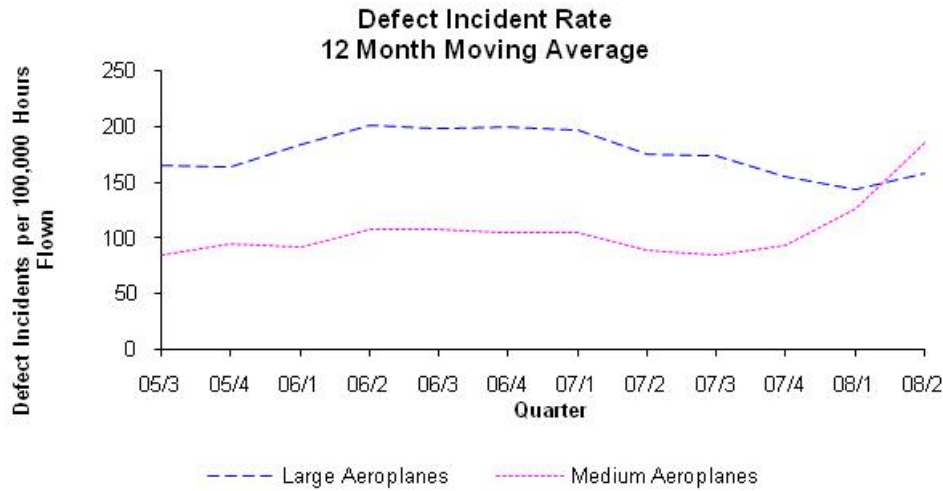
Six-Monthly Comparison

Activity	Severity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
Large Aeroplanes	Critical	0	3	3
	Major	10	25	15
	Minor	173	159	-14
Medium Aeroplanes	Critical	0	0	0
	Major	4	0	-4
	Minor	19	43	24
Small Aeroplanes	Critical	0	0	0
	Major	6	7	1
	Minor	50	106	56
Helicopters	Critical	0	0	0
	Major	4	2	-2
	Minor	15	37	22
Sport Aircraft	Critical	0	0	0
	Major	1	1	0
	Minor	18	23	5
Agricultural Aeroplanes	Critical	0	0	0
	Major	2	0	-2
	Minor	7	15	8
Unknown	Critical	0	0	0
	Major	3	0	-3
	Minor	27	49	22
Total	Critical	0	3	3
	Major	30	35	5
	Minor	309	432	123

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 July 2005 to 30 June 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 down
Agricultural Aeroplanes	Trending down

Six-Monthly Comparison

Number of Defect Incidents

Aircraft Category	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change	
			Number	Percent
Large Aeroplanes	256	265	9	3.5%
Medium Aeroplanes	22	80	58	263.6%
Small Aeroplanes	92	83	-9	-9.8%
Helicopters	73	63	-10	-13.7%
Sport Aircraft	9	4	-5	-55.6%
Ag Aeroplanes	25	33	8	32.0%
Unknown	16	17	1	6.3%
Total	493	545	52	10.5%

Severity

Six-Monthly Comparison

Activity	Severity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change
Large Aeroplanes	Critical	0	4	4
	Major	22	41	19
	Minor	234	220	-14
Medium Aeroplanes	Critical	0	0	0
	Major	4	1	-3
	Minor	18	79	61
Small Aeroplanes	Critical	0	0	0
	Major	9	11	2
	Minor	83	72	-11
Helicopters	Critical	0	0	0
	Major	7	4	-3
	Minor	66	59	-7
Sport Aircraft	Critical	0	0	0
	Major	1	0	-1
	Minor	8	4	-4
Agricultural Aeroplanes	Critical	0	0	0
	Major	5	8	3
	Minor	20	25	5
Unknown	Critical	0	0	0
	Major	3	2	-1
	Minor	13	15	2
Total	Critical	0	4	4
	Major	51	67	16
	Minor	442	474	32

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 the three years ending June 2008.

Aerodrome	05/3	05/4	06/1	06/2	06/3	06/4	07/1	07/2	07/3	07/4	08/1	08/2
Auckland	3.2	3.0	2.7	2.7	2.5	2.5	2.3	2.5	3.0	2.9	3.0	3.4
Christchurch	3.4	3.7	4.0	4.5	3.5	3.5	3.8	3.2	3.5	3.5	2.9	3.3
Dunedin	5.9	7.5	5.2	4.7	4.5	3.4	3.9	3.1	3.3	2.9	2.0	2.8
Gisborne	11.6	10.1	10.1	11.5	8.8	10.0	11.3	7.9	7.4	6.7	6.1	11.2
Hamilton	2.5	3.0	3.8	4.5	5.1	4.5	4.0	3.0	2.3	2.0	1.8	2.2
Invercargill	7.5	9.3	10.4	11.4	11.7	7.6	6.2	6.6	7.1	8.1	9.4	8.1
Napier	7.3	7.2	6.7	7.5	7.2	7.7	7.9	5.4	6.6	4.5	5.6	6.9
Nelson	0.9	0.8	1.1	1.9	2.5	3.5	3.4	2.9	2.7	1.9	1.6	2.2
New Plymouth	7.9	7.6	6.0	5.8	6.7	5.9	5.4	5.0	3.6	3.0	2.1	2.6
Ohakea	4.4	4.3	3.2	2.3	2.4	1.8	2.0	2.0	1.4	1.4	2.2	2.0
Palmerston North	3.3	3.8	3.4	3.9	4.6	4.7	4.2	4.0	3.5	3.0	3.1	3.2
Queenstown	3.5	3.6	3.5	2.8	3.0	2.7	2.4	3.5	3.3	3.9	3.7	3.8
Rotorua	9.0	9.4	10.3	9.8	8.7	8.0	7.4	7.7	7.9	7.1	6.1	5.2
Taupo	1.0	1.5	1.8	1.8	1.6	1.4	1.5	1.2	1.8	2.1	1.8	2.1
Tauranga	2.2	2.9	3.2	3.3	3.3	2.8	2.1	2.0	2.0	1.7	1.6	1.4
Wellington	2.4	2.1	2.2	1.6	1.6	1.7	1.6	1.5	1.7	1.2	1.2	1.5
Whenuapai	4.1	3.4	4.8	6.0	5.0	4.7	5.8	8.3	9.6	10.3	13.6	11.5
Woodbourne	7.6	6.5	4.9	5.2	5.3	5.4	6.6	6.6	6.4	6.6	4.1	4.1

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

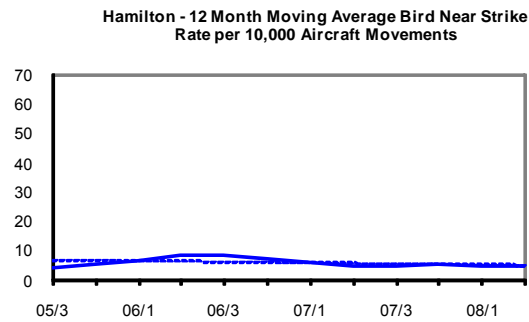
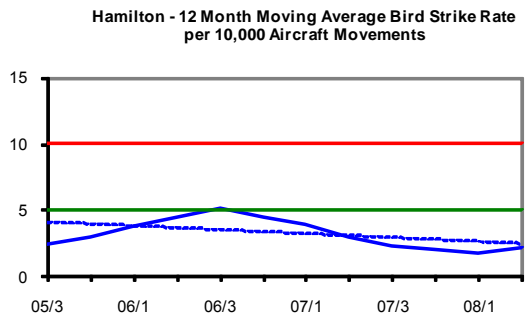
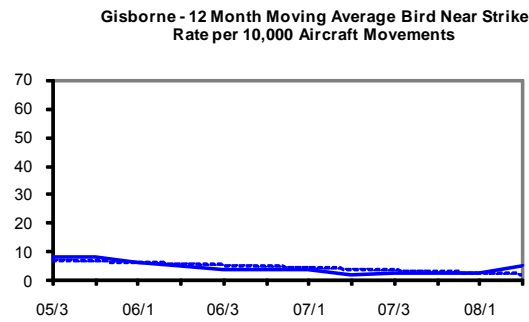
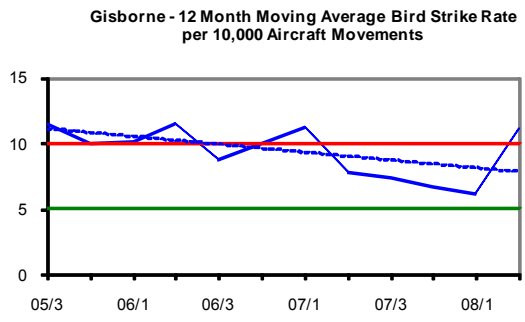
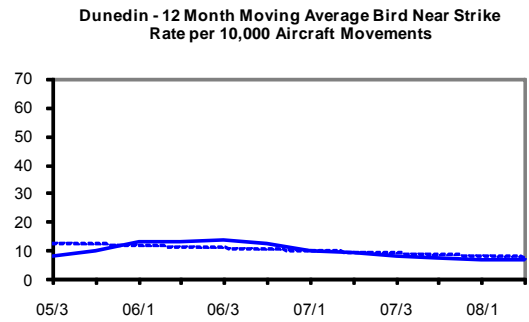
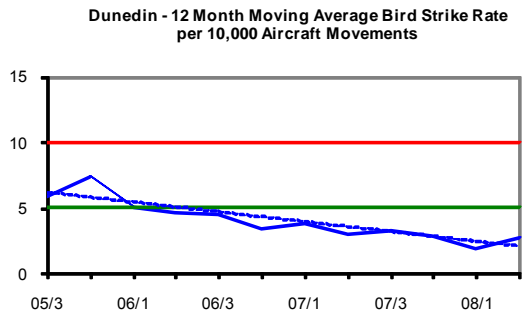
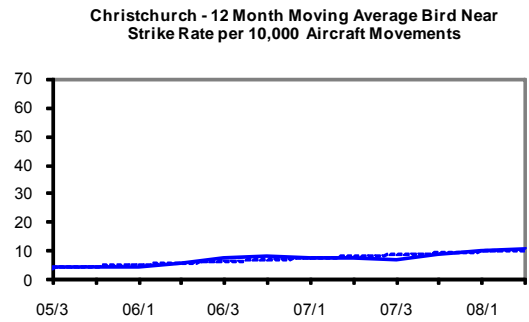
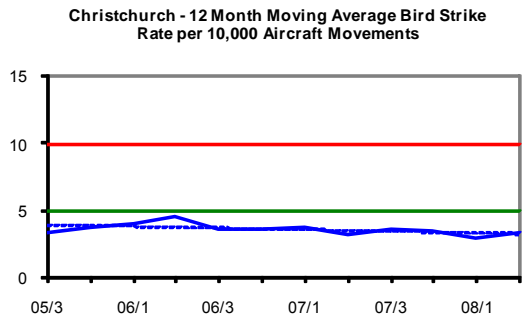
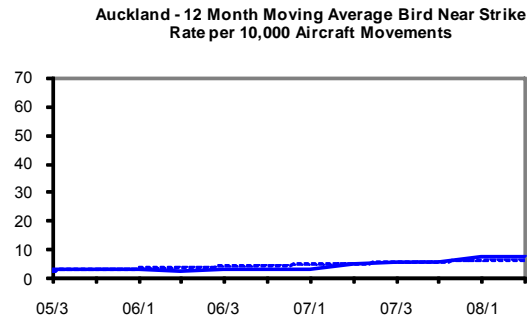
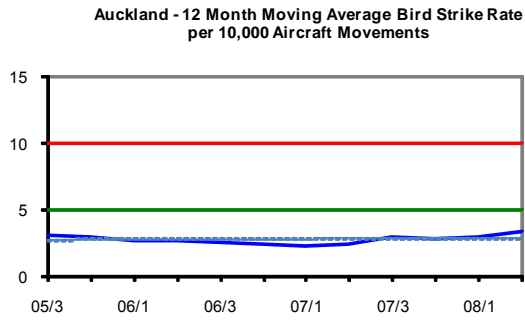
Analysis

Analysis shows that four aerodromes have bird strike rates above the “trigger level” for CAA Action. Details were forwarded to Manager Aeronautical Services on 04 August 2008

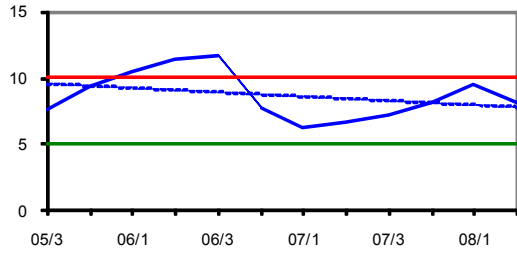
Two aerodromes had strike rates in the high risk category of the CAA standard (above 10.0 bird strikes per 10,000 aircraft movements), one having a long-term upward trend and the other a long-term downward trend. Three aerodromes had strike rates in the medium risk category (5.0 to 10.0 per 10,000 movements), all having long-term downward trends. Thirteen aerodromes had strike rates in the low risk category (below 5.0 per 10,000 movements) with one of these having a long-term upward trend.

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

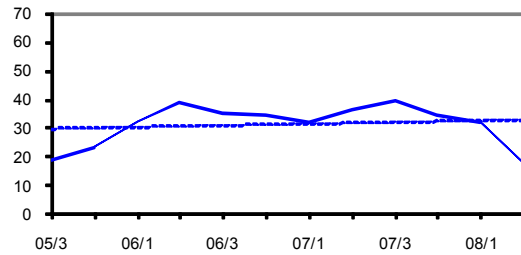
Aerodrome	Risk Category	Trend	CAA Action
Auckland	Low	Constant	Monitor
Christchurch	Low	Trending down	Monitor
Dunedin	Low	Trending down	Monitor
Gisborne	High	Trending down	Advise Aerodrome Operator
Hamilton	Low	Trending down	Monitor
Invercargill	Medium	Trending down	Monitor
Napier	Medium	Trending down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



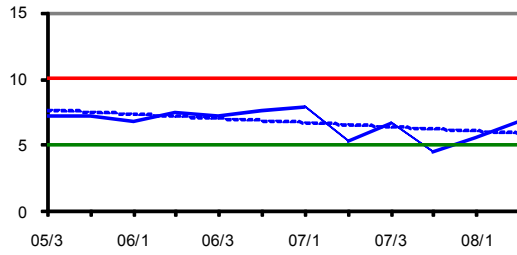
Invercargill - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



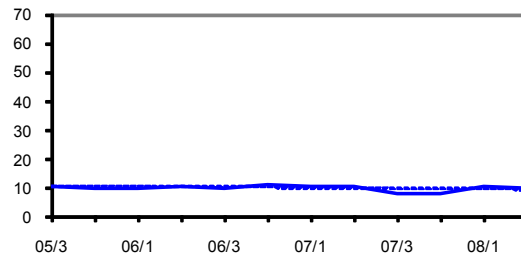
Invercargill - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



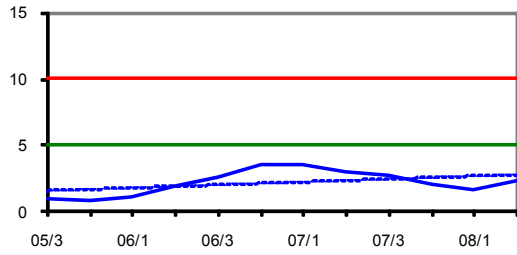
Napier - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



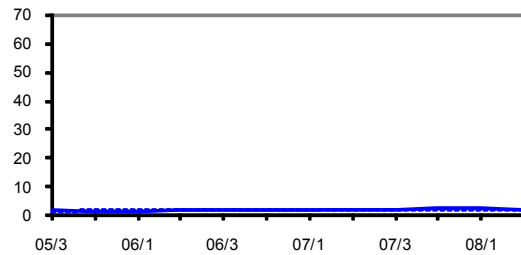
Napier - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



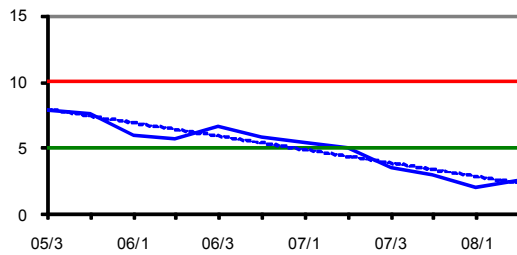
Nelson - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



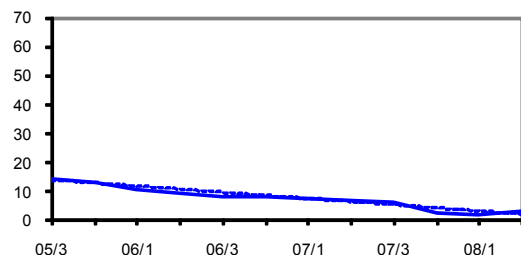
Nelson - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



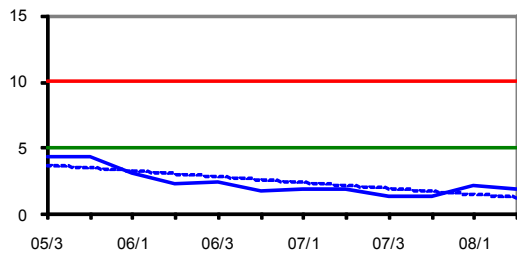
New Plymouth - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



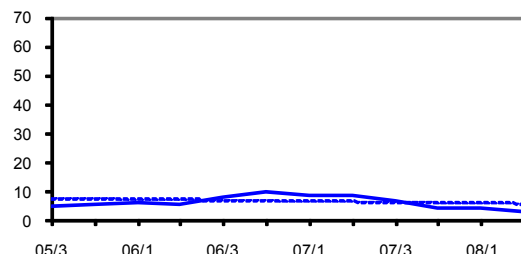
New Plymouth - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements

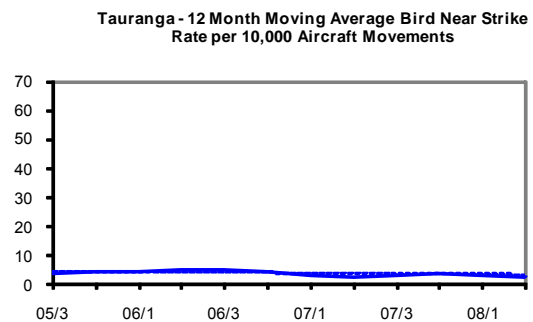
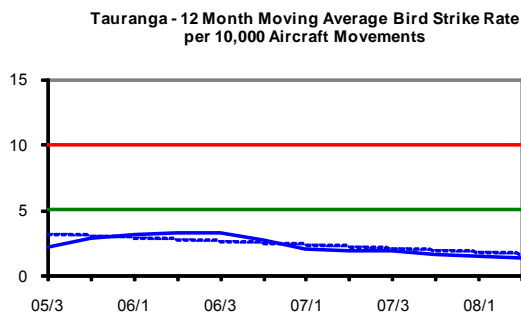
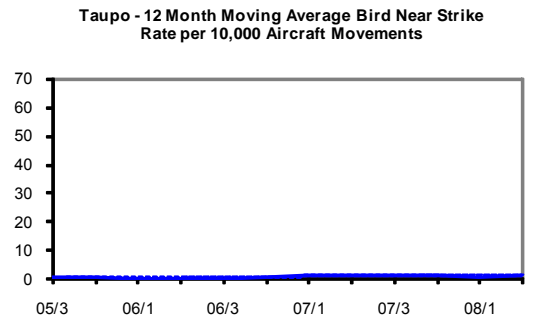
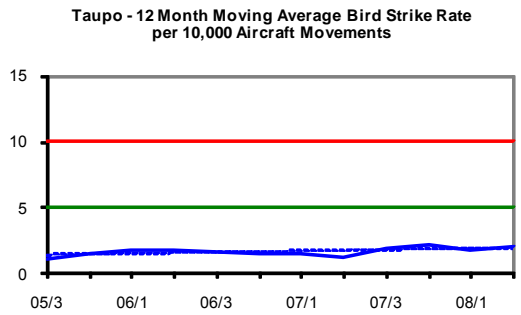
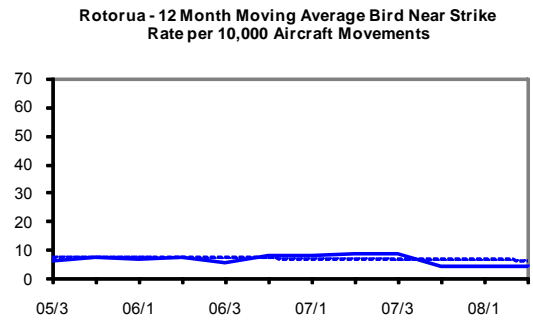
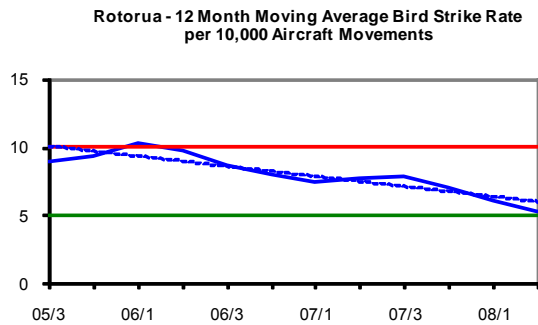
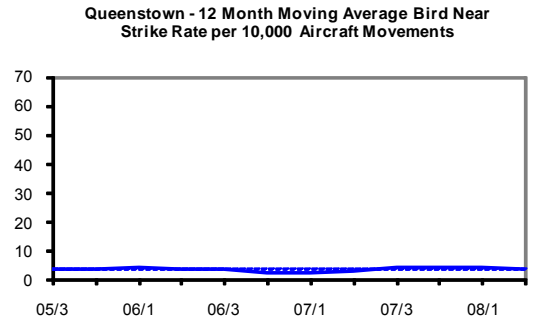
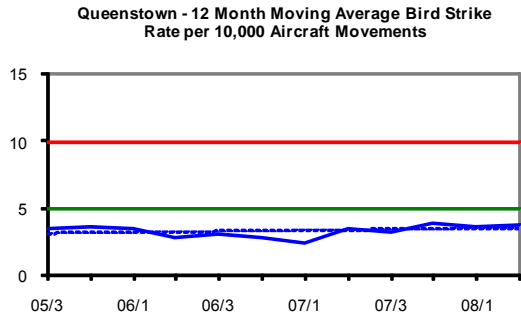
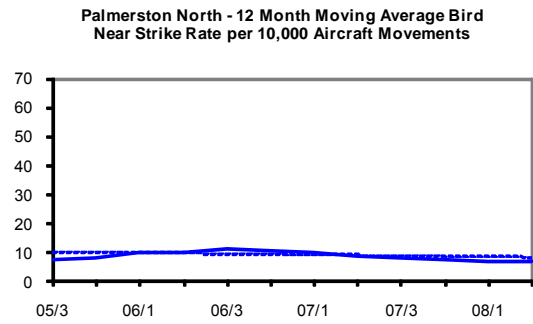
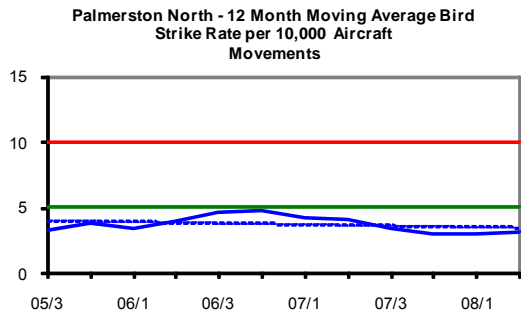


Ohakea - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements

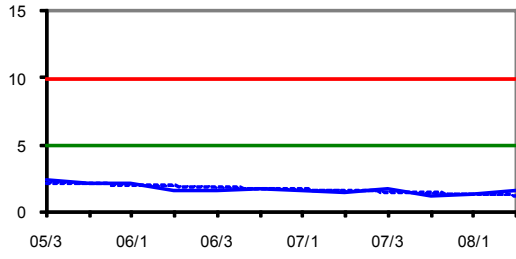


Ohakea - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements

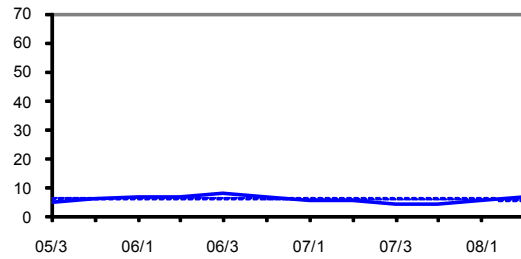




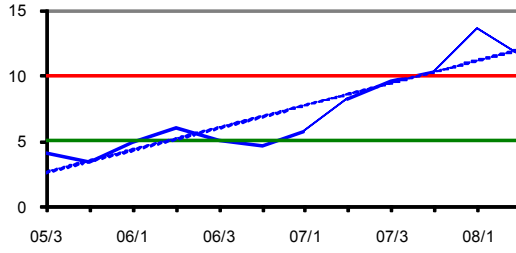
Wellington - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



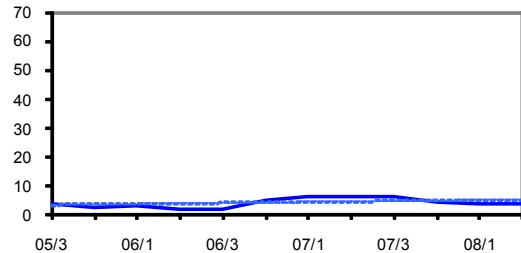
Wellington - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



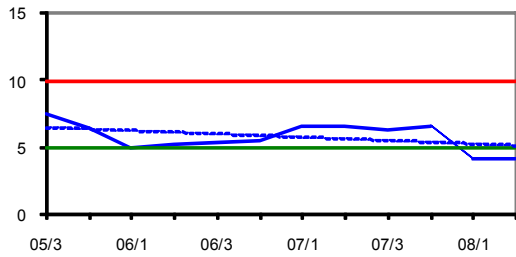
Whenuapai - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



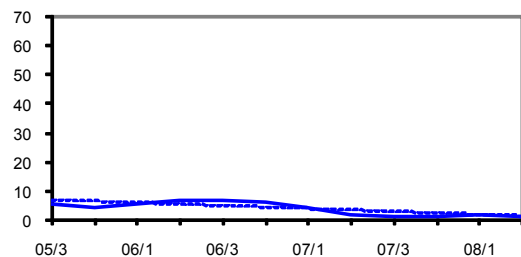
Whenuapai - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



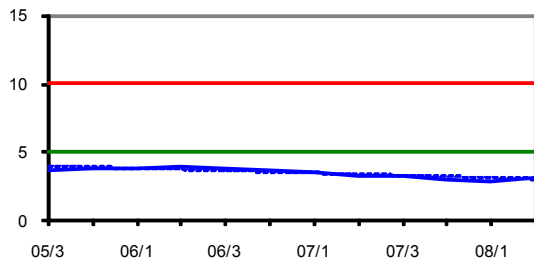
Woodbourne - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



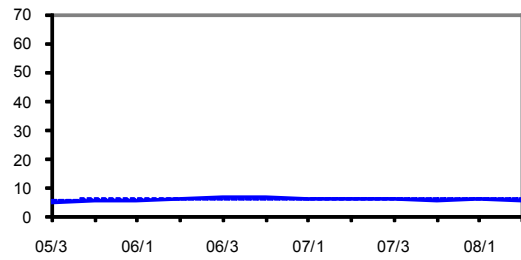
Woodbourne - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



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 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change	
			Number	Percent
Large Aeroplanes	35	20	-15	-42.9%
Medium Aeroplanes	2	2	0	0.0%
Small Aeroplanes	0	0	0	0.0%
Helicopters	0	0	0	0.0%
Sport Aircraft	0	0	0	0.0%
Ag Aeroplanes	0	0	0	0.0%
Unknown	59	88	29	49.2%
Total	96	110	14	14.6%

Severity

Severity	1 Jan to 30 Jun 2007	1 Jan to 30 Jun 2008	Change	
			Number	Percent
Critical	0	1	1	0.0%
Major	3	1	-2	-66.7%
Minor	86	132	46	0.0%
Total	89	134	45	50.6%

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.

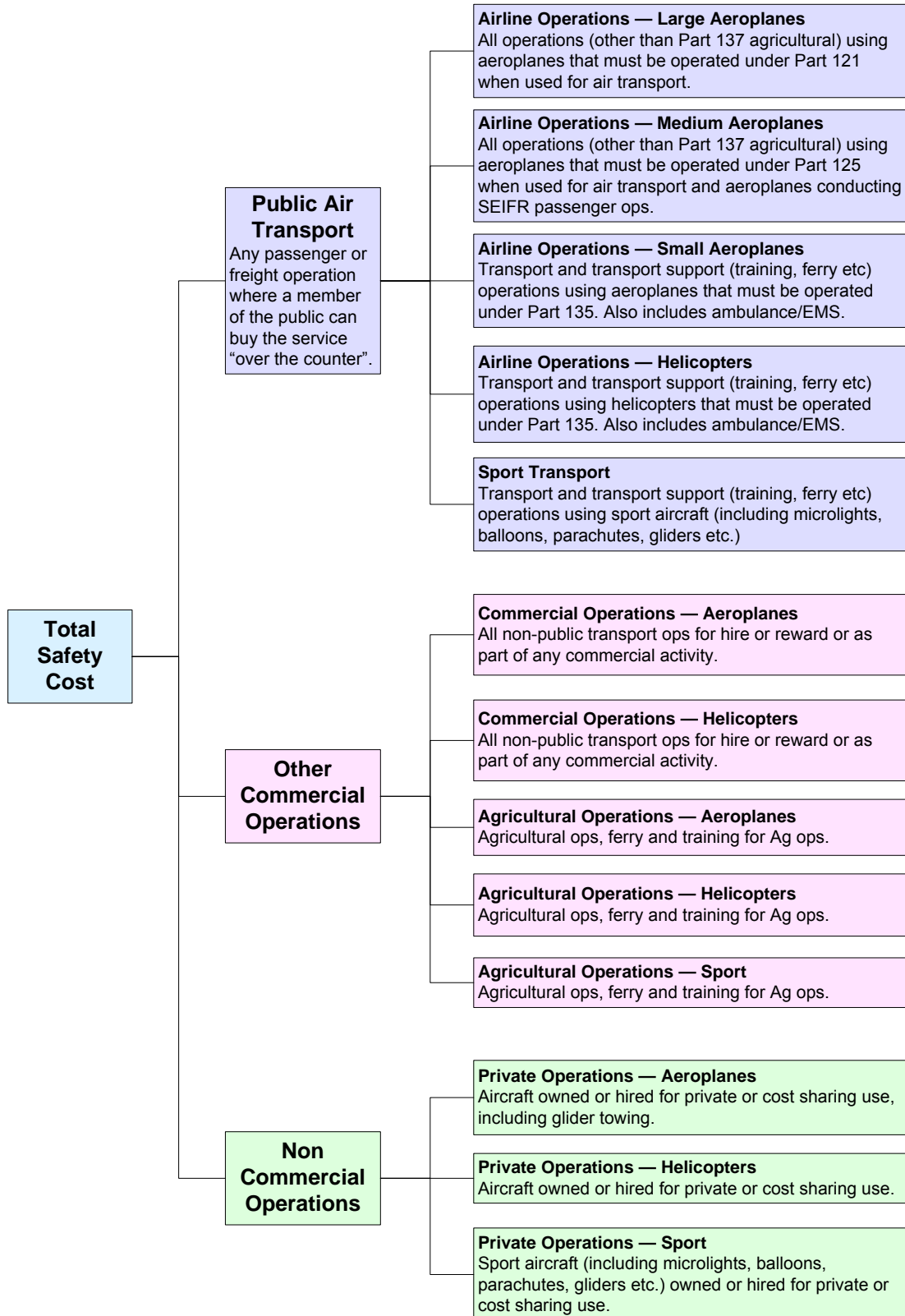
Severity Factor		Definition
CR	Critical	An occurrence or deficiency that caused, or on its own had the potential to cause, loss of life or limb;
MA	Major	An occurrence or deficiency involving a major system that caused, or had the potential to cause, significant problems to the function or effectiveness 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