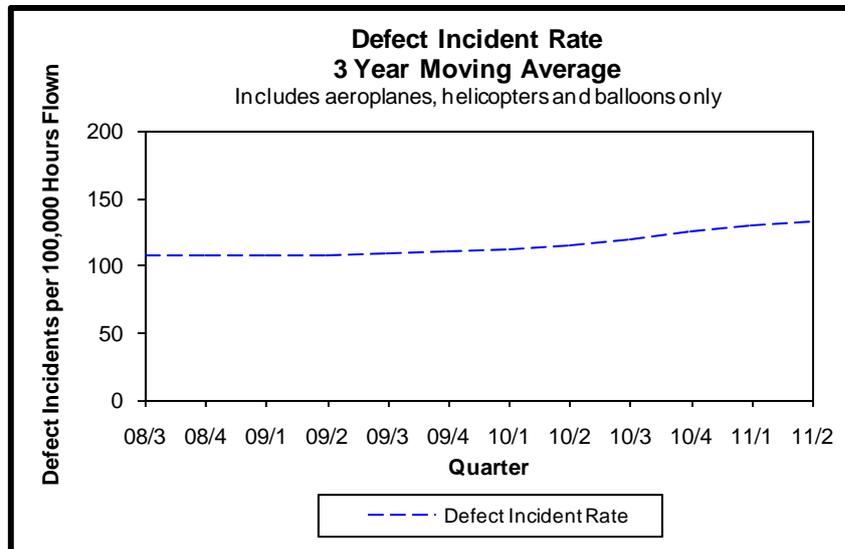




CIVIL AVIATION AUTHORITY
OF NEW ZEALAND

Aviation Safety Summary Report

1 April to 30 June 2011



Introduction

The purpose of this report is to provide readers with a quarterly snapshot of the aviation industry in terms of its size, shape, activity and safety performance. This complements the more detailed six-monthly “Aviation Industry Safety Update”, which is available only on the CAA website.

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

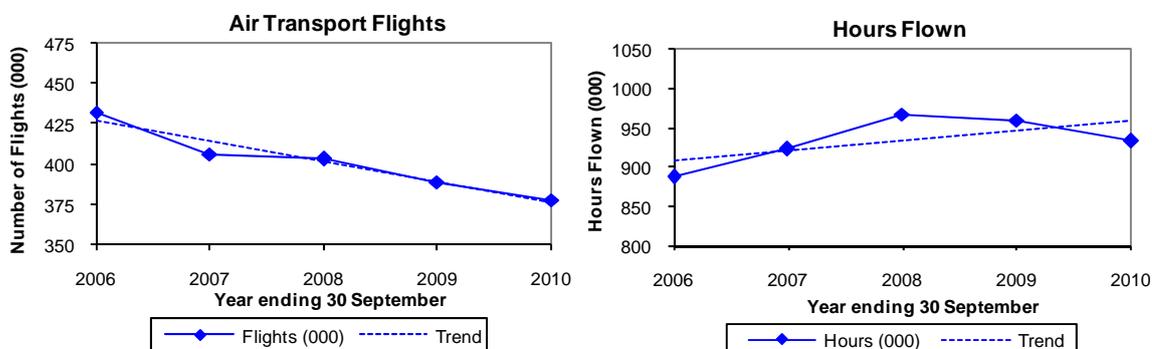
Overview

Activity

Air Transport Flights, Total Hours

Trends

The following graphs show the number of air transport flights and the total number of hours flown (annual data) for the five-year period 1 October 2005 to 30 September 2010 (includes the aircraft classes aeroplane, helicopter and balloon only).



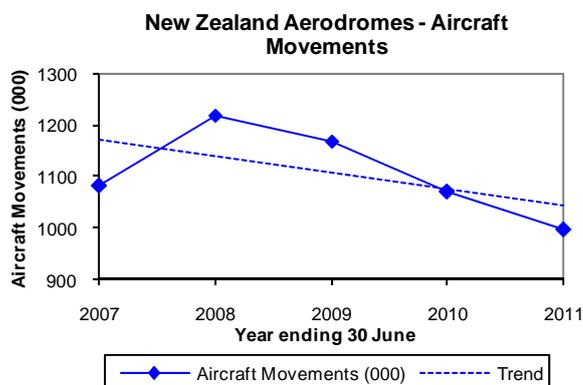
Note that the scales on these graphs do not start at zero.

Note that these assessments include the aircraft classes aeroplane, helicopter and balloon only and exclude other aircraft classes such as hang gliders and parachutes, and foreign registered aircraft that are operated in New Zealand. These assessments are based on Aircraft Operating Statistics for periods up to the quarter ended 30 September 2010 (the most recent quarter for which these data are available).

Aircraft Movements

Trends

The following graph shows the number of aircraft movements at certificated aerodromes (annual data) for the five-year period 1 July 2006 to 30 June 2011.



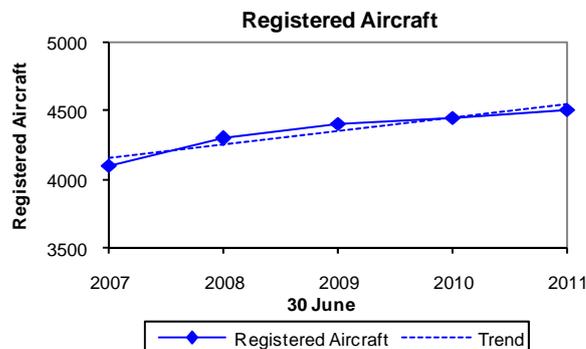
Note that the scale on this graph does not start at zero.

Note that this covers certificated aerodromes only. Includes Auckland, Christchurch, Dunedin, Gisborne, Hamilton, Invercargill, Napier, Nelson, New Plymouth, Ohakea, Palmerston North, Queenstown, Rotorua, Taupo, Tauranga, Wellington and Woodbourne. Excludes Chatham Islands/Tuuta Airport, Hokitika (certificated from Apr 2010), Kerikeri/Bay of Islands, Mount Cook (certificated until Sep 2009), Paraparaumu (certificated from Apr 2009), Te Anau/Manapouri, Timaru, Wanganui, Westport, Whangarei and Wigram (certificated until Sep 2006).

Registered Aircraft

Trends

The following graph shows the number of registered aircraft at 30 June for each of the five-years 2007 to 2011.



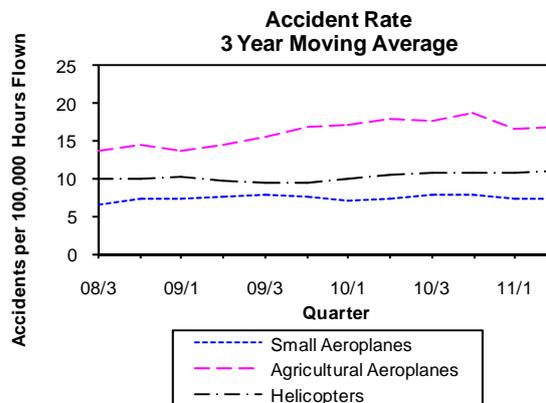
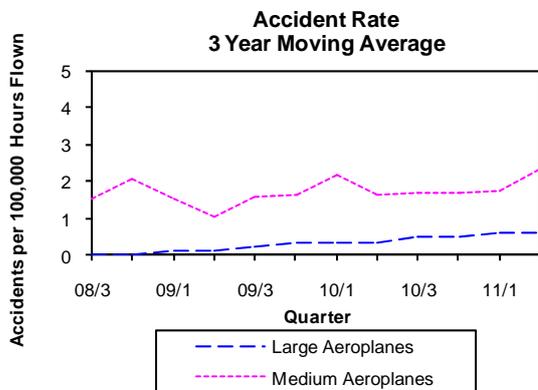
Note that the scale on this graph does not start at zero.

Note that these figures include the sport aircraft statistics category and exclude hang gliders and parachutes.

Accidents

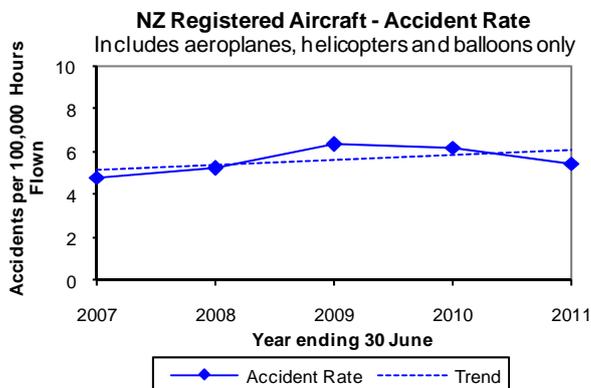
Trends

The following graphs show the aircraft accident rates (3 year moving average) for the three-year period 1 July 2008 to 30 June 2011 (excluding the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes).



Overall 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 five-year period 1 July 2006 to 30 June 2011.



Note that this graph does not show a moving average.

Safety Outcome Targets for 2014

Safety Target Structure

The 2014 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 quarters 1 April to 30 June 2010 and 2011. Social cost is the cost of fatal, serious and minor injuries, and aircraft destroyed, expressed in 2010 dollars.

Safety Target Group	1 Apr to 30 Jun	1 Apr to 30 Jun	Change
	2010	2011	
	\$m	\$m	
Airline Operations - Large Aeroplanes	0.00	0.00	0.00
Airline Operations - Medium Aeroplanes	0.00	0.00	0.00
Airline Operations - Small Aeroplanes	0.00	0.00	0.00
Airline Operations - Helicopters	0.00	0.31	+ 0.31
Sport Transport	0.37	0.39	+ 0.02
Other Commercial Operations - Aeroplanes	0.00	0.00	0.00
Other Commercial Operations - Helicopters	0.00	7.75	+ 7.75
Agricultural Operations - Aeroplanes	0.68	0.00	- 0.68
Agricultural Operations - Helicopters	0.00	0.00	0.00
Agricultural Operations - Sport	0.00	0.00	0.00
Private Operations - Aeroplanes	0.00	0.00	0.00
Private Operations - Helicopters	0.00	4.25	+ 4.25
Private Operations - Sport	0.83	8.02	+ 7.20
Total	1.89	20.72	+ 18.83

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

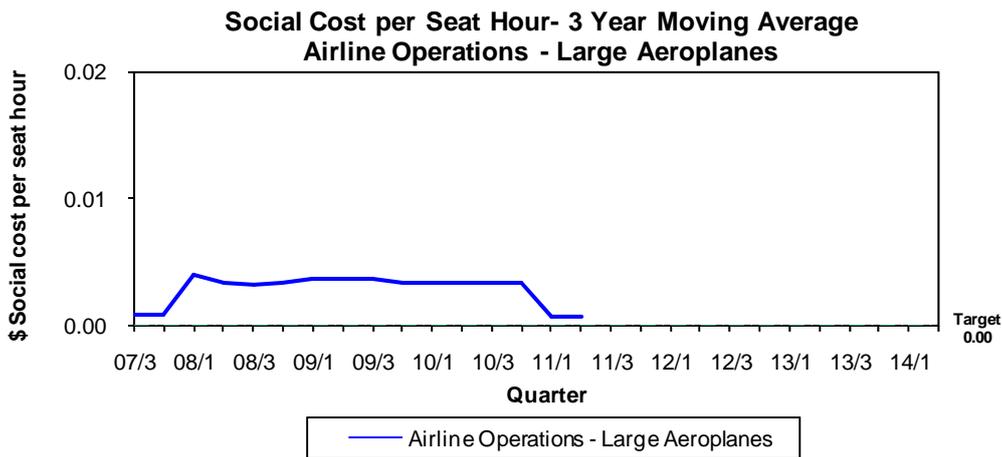
Note that the Sport groups include hang gliders and parachutes.

Safety Target Graphs

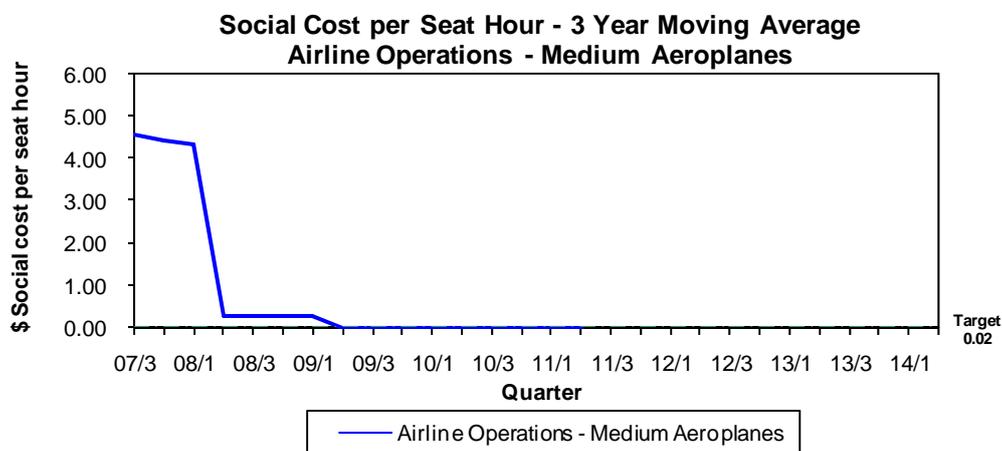
Each Safety Target Group has its own target level expressed as social cost per unit of person exposure, the unit being “one seat hour”. For Safety Target Groups that are not predominantly passenger carrying a surrogate of 500 kg of aircraft weight is used instead of person exposure. These outcomes represent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

The results for all groups are derived using 3 year averages.

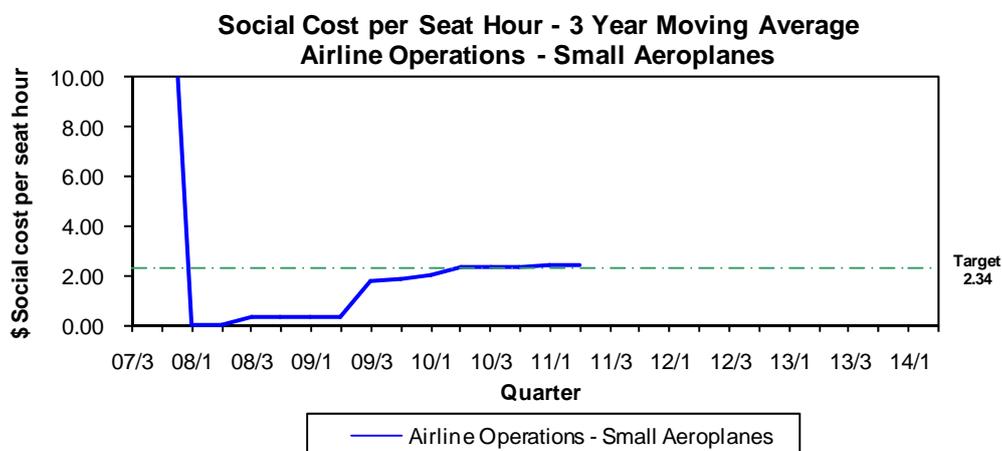
Graphs displaying the Safety Outcome Targets and the progress over each quarter are shown on the following pages.



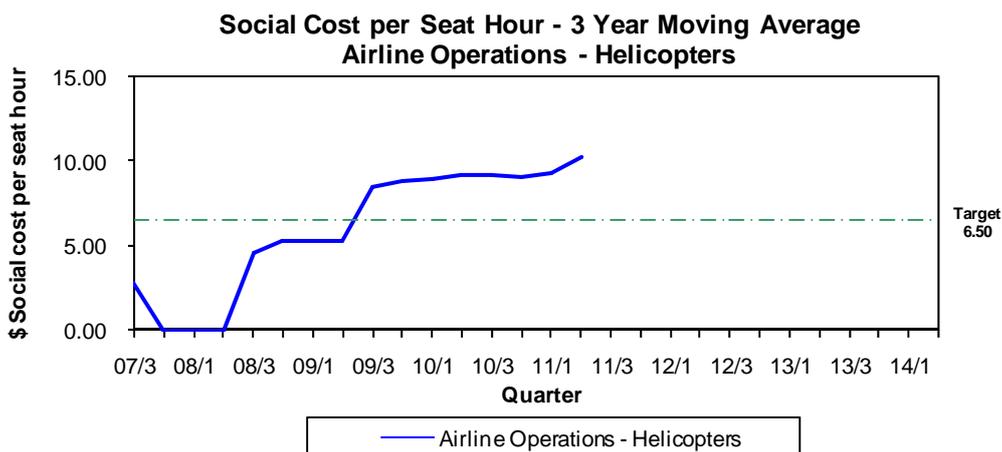
The outcome for Airline Operations – Large Aeroplanes (96.7% of total seat hours) has been just above the target level of \$0.00 per hour of exposure since the quarter Jan to Mar 11. There have been 6 minor injuries in this group in the three years Jul 08 to Jun 11.



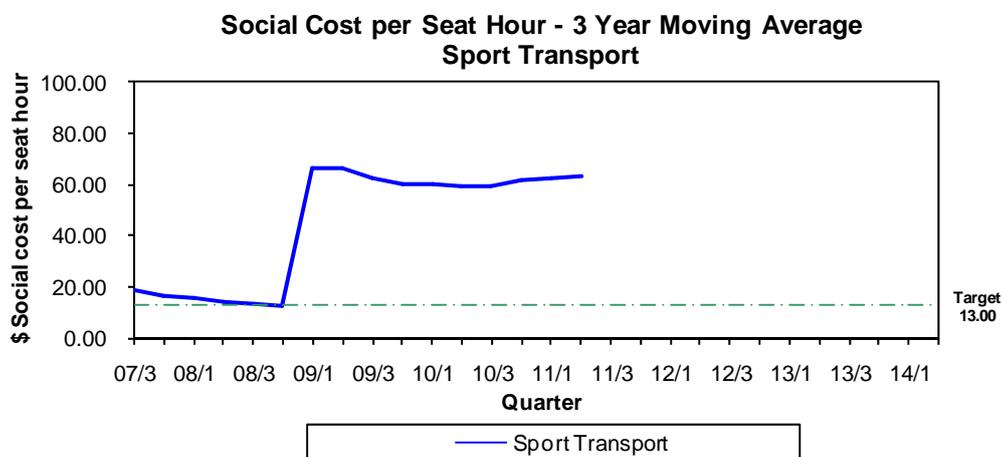
The outcome for Airline Operations – Medium Aeroplanes is trending down and has been at or below the target level since the quarter Apr to Jun 09 (the data point at 11/2 is \$0.02 per hour of exposure). The exposure (1.4% of total seat hours) associated with this sector is relatively small. There have been 3 minor injuries in this group during the period Jul 08 to Jun 11.



The outcome for Airline Operations – Small Aeroplanes (0.1% of total seat hours) shows a downward trend. There have been 1 serious and 2 minor injuries during the period Jul 08 to Jun 11. The safety outcome for this group has been just above the target level since the quarter Jul to Sep 10.

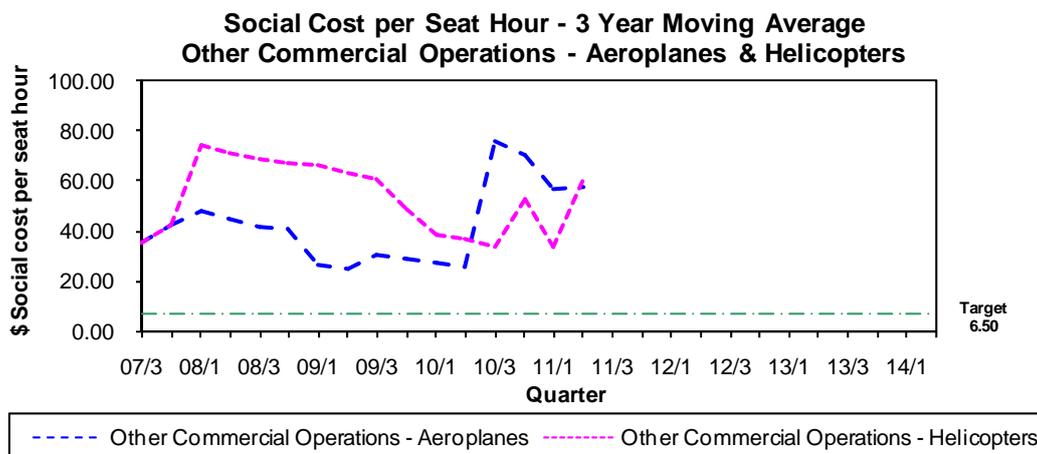


The outcome for Airline Operations – Helicopters has been above the target level since the quarter Jul to Sep 09. There have been 2 serious and 6 minor injuries in this group in the three years Jul 08 to Jun 11.



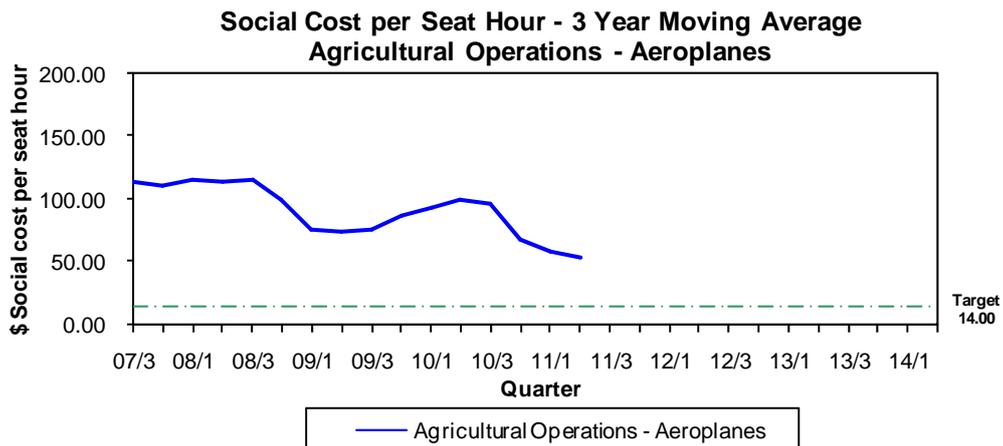
The outcome for Sport Transport is above the target level. There have been 5 fatal, 13 serious and 14 minor injuries in the three years Jul 08 to Jun 11.

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

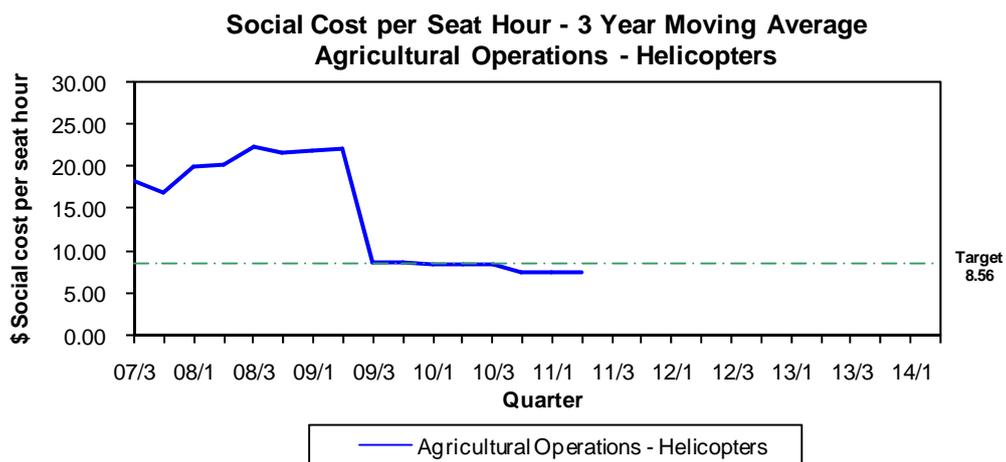


The outcome for Other Commercial Operations – Aeroplanes is well above the target of \$6.50. During the three years Jul 08 to Jun 11 there have been 12 fatal, 3 serious and 3 minor injuries in this group.

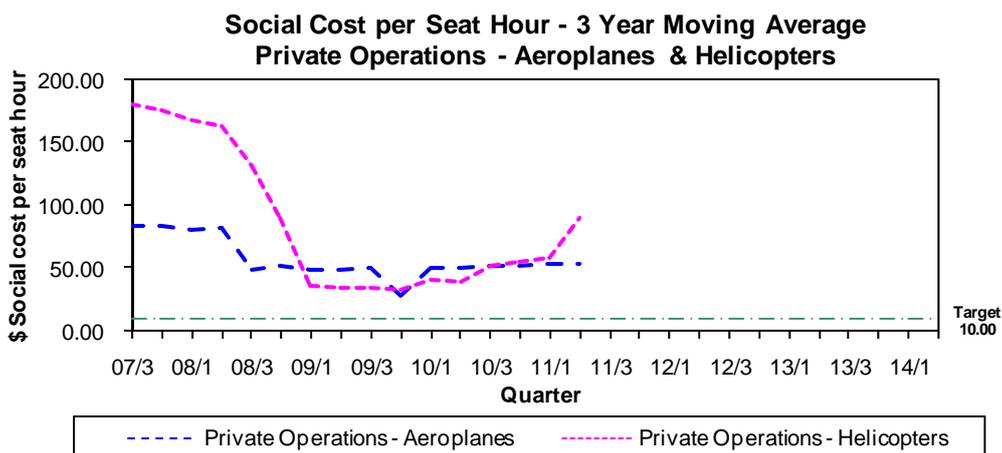
The outcome for Other Commercial Operations – Helicopters is also well above the target level. There have been 4 fatal, 2 serious and 3 minor injuries in this group in the three years Jul 08 to Jun 11.



The outcome for Agricultural Operations – Aeroplanes is well above the target level of \$14.00. During the three years Jul 08 to Jun 11 there have been 1 fatal, 1 serious and 2 minor injuries in this group.

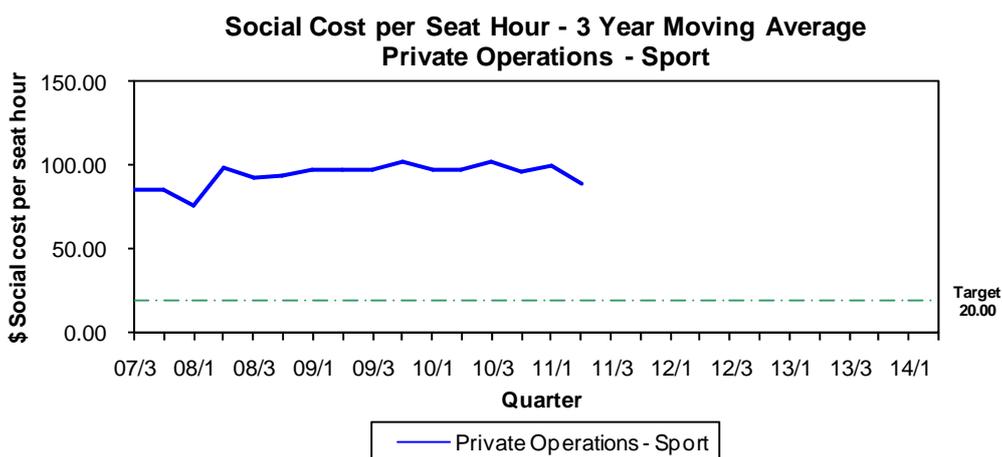


The outcome for Agricultural Operations – Helicopters has been below the target level since the quarter Jul to Sep 10. There have been 1 serious and 3 minor injuries in the three years Jul 08 to Jun 11.



The outcome for Private Operations – Aeroplanes is well above the target level of \$10.00. There have been 2 fatal, 3 serious and 2 minor injuries in the three years Jul 08 to Jun 11.

The outcome for Private Operations – Helicopters shows a long-term downward trend but is still well above the target level. There have been 2 fatal, 3 serious and 5 minor injuries in the three years Jul 08 to Jun 11.



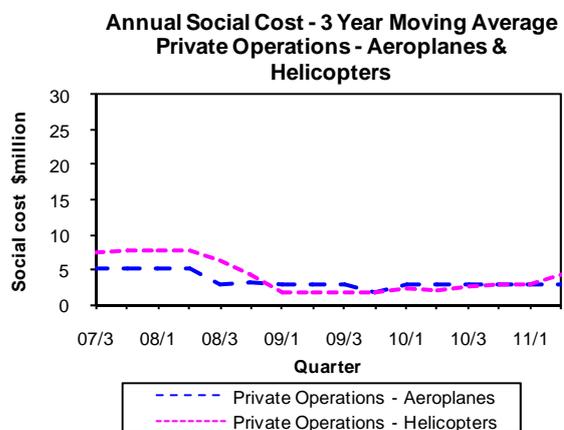
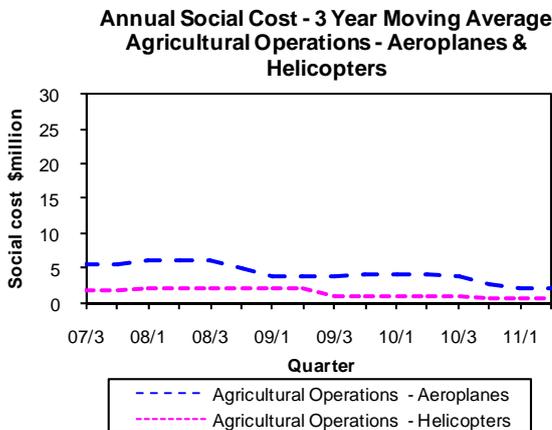
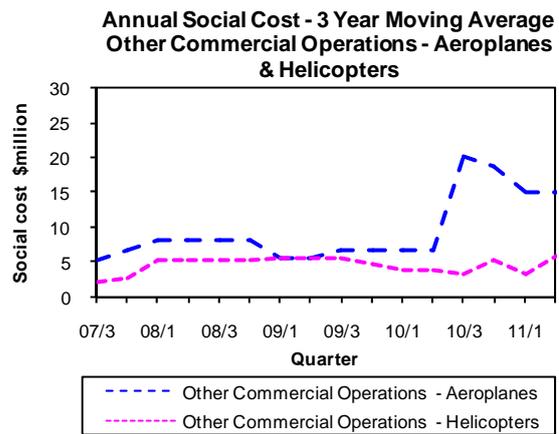
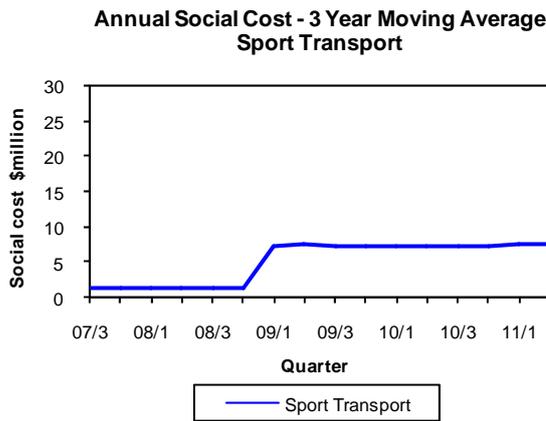
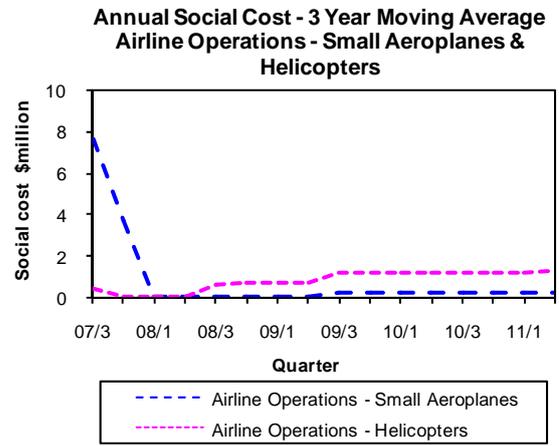
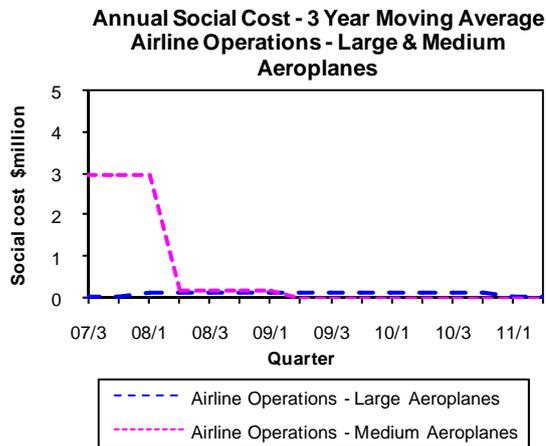
The outcome for Private Operations – Sport is well above the target of \$20.00. There have been 12 fatal, 28 serious and 27 minor injuries in the three years Jul 08 to Jun 11.

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

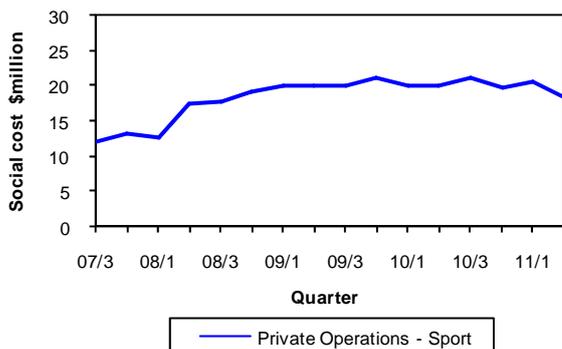
Social Cost

Trends

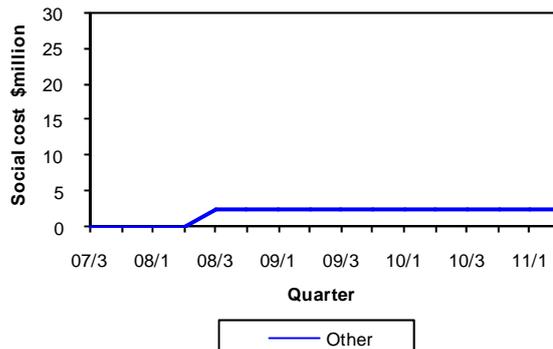
The following graphs show the annual social cost (3 year moving average) for each Safety Target Group for the four-year period 1 July 2007 to 30 June 2011. Social cost is the cost of fatal, serious and minor injuries, and aircraft destroyed, expressed in 2010 dollars. Note that the Sport groups include hang gliders and parachutes.



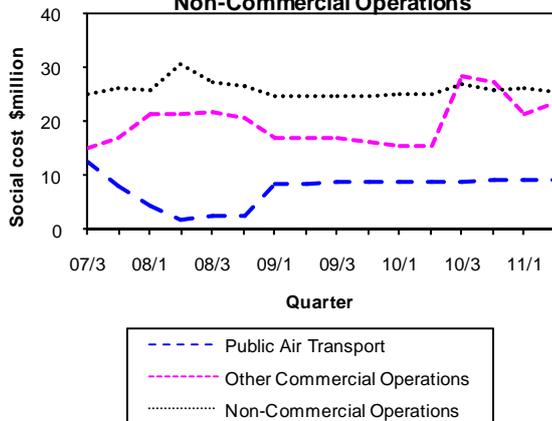
**Annual Social Cost - 3 Year Moving Average
Private Operations - Sport**



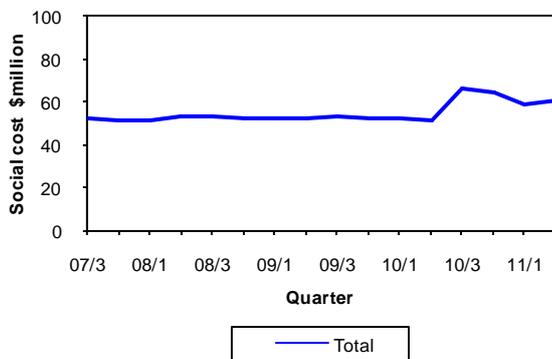
**Annual Social Cost - 3 Year Moving Average
Other**



**Annual Social Cost - 3 Year Moving Average
Public Air Transport, Other Commercial &
Non-Commercial Operations**



**Annual Social Cost - 3 Year Moving Average
Total**



Activity

Air Transport Flights, Total Hours

Quarterly Comparison

Activity	1 Jul to 30 Sep	1 Jul to 30 Sep	Change	
	2009	2010	Number	Percentage
Air Transport Flights	83,353	86,018	+ 2,665	+ 3.2
Hours	229,894	214,030	- 15,864	- 6.9

Note that these assessments include the aircraft classes aeroplane, helicopter and balloon only and exclude other aircraft classes such as hang gliders and parachutes, and foreign registered aircraft that are operated in New Zealand. These assessments are based on Aircraft Operating Statistics for periods up to the quarter ended 30 September 2010 (the most recent quarter for which these data are available).

Aircraft Movements

Quarterly Comparison

Activity	1 Apr to 30 Jun	1 Apr to 30 Jun	Change	
	2010	2011	Number	Percentage
Aircraft Movements	252,639	242,338	- 10,301	- 4.1

Note that this covers certificated aerodromes only. Includes Auckland, Christchurch, Dunedin, Gisborne, Hamilton, Invercargill, Napier, Nelson, New Plymouth, Ohakea, Palmerston North, Queenstown, Rotorua, Taupo, Tauranga, Wellington and Woodbourne. Excludes Chatham Islands/Tuuta Airport, Hokitika, Kerikeri/Bay of Islands, Paraparaumu, Te Anau/Manapouri, Timaru, Wanganui, Westport and Whangarei.

Registered Aircraft

Quarterly Comparison

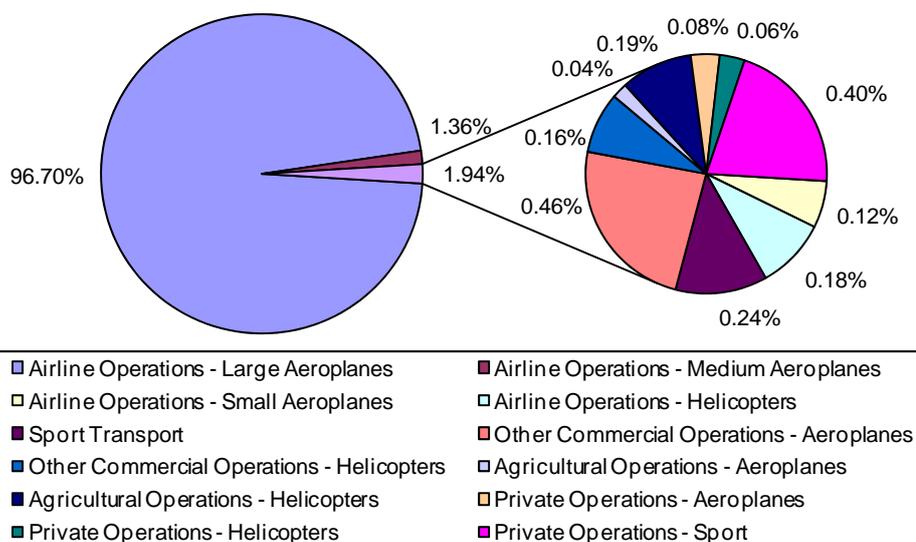
Aircraft Statistics Category	30 June	30 June	Change	
	2010	2011	Number	Percentage
Large Aeroplanes	119	128	+ 9	+ 7.6
Medium Aeroplanes	85	86	+ 1	+ 1.2
Small Aeroplanes	1,522	1,524	+ 2	+ 0.1
Agricultural Aeroplanes	109	111	+ 2	+ 1.8
Helicopters	768	768	0	0
Sport Aircraft	1,850	1,892	+ 42	+ 2.3
Total	4,453	4,509	+ 56	+ 1.3

Note that these figures include the sport aircraft statistics category and exclude hang gliders and parachutes.

Industry Size and Shape

The following graph and table show the size and shape of the aviation industry as determined from Aircraft Operating Statistics in the relevant 2014 Safety Target Group categories for the period 1 July to 30 September 2010 (the most recent quarter for which Aircraft Operating Statistics data are available). 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 person exposure. For the Sport Safety Target Groups a standard estimate of seat hours offered is used as well as reported data for such aircraft in these groups, as most sport aircraft do not report hours or seats.

Percentage Sector Seat Hours



Safety Target Group	Percentage Sector Seat Hours
Airline Operations - Large Aeroplanes	96.70
Airline Operations - Medium Aeroplanes	1.36
Airline Operations - Small Aeroplanes	0.12
Airline Operations - Helicopters	0.18
Sport Transport	0.24
Other Commercial Operations - Aeroplanes	0.46
Other Commercial Operations - Helicopters	0.16
Agricultural Operations - Aeroplanes	0.04
Agricultural Operations - Helicopters	0.19
Agricultural Operations - Sport	-
Private Operations - Aeroplanes	0.08
Private Operations - Helicopters	0.06
Private Operations - Sport	0.40

Note that the percentages may not sum exactly to 100.00% due to rounding.

Accidents

Quarterly Comparison

Number of Accidents

Aircraft Statistics Category	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	1	+ 1
Small Aeroplanes	9	4	- 5
Agricultural Aeroplanes	3	3	0
Helicopters	3	6	+ 3
Sport Aircraft	6	5	- 1
Unknown Aircraft	0	1	+ 1
Hang Gliders	5	3	- 2
Parachutes	1	3	+ 2
Total	27	26	- 1

The accident in the 'Unknown Aircraft' statistics category in the 1 April to 30 June 2011 quarter involved a UAV on an other aerial work flight.

Severity of Accidents

Severity	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Critical	8	14	+ 6
Major	16	7	- 9
Minor	3	5	+ 2

No accidents in the 'Large Aeroplanes' statistics category were classified as Critical in the 1 April to 30 June 2010 or 2011 quarters.

No accidents in the 'Medium Aeroplanes' statistics category were classified as Critical in the 1 April to 30 June 2010 or 2011 quarters.

Significant Accidents and Other Injury Accidents

Significant Injury Accidents

This section describes significant injury accidents during the period 1 April to 30 June 2011.

Helicopters

Other Commercial Operations - Helicopter

- A Robinson R22 went missing on a dual training flight and was later found crashed in a riverbed. Both occupants were killed and the aircraft destroyed.

Private Operations - Helicopter

- A Robinson R22 was reported missing and later found with the pilot deceased and the passenger seriously injured. The aircraft was destroyed.

Sport Aircraft

Private Operations - Sport

- A gyrocopter (microlight class 1) crashed, killing one occupant and seriously injuring the other. The aircraft was destroyed.
- A microlight class 2 was reported missing and later found crashed. The pilot was killed and the aircraft destroyed.

Significant Non-Injury Accidents

There were no significant non-injury accidents during the period 1 April to 30 June 2011.

Other Injury Accidents

This section describes other injury accidents that occurred during the period 1 April to 30 June 2011.

Helicopters

Airline Operations - Helicopter

- A Robinson R44 on a passenger transport A to B flight encountered sink on landing and rolled over, destroying the aircraft and resulting in minor injuries to one passenger.

Sport Aircraft

Sport Transport

- The hang glider passenger on a passenger transport A to B flight failed to run on landing, and suffered serious injuries.
- The passenger on a tandem skydive landed heavily, suffering minor injuries.

Private Operations - Sport

- The parachute instructor suffered serious injuries after turning too close to the ground and landing heavily.

Injuries***Number of Fatal Accidents and Number of Fatal Injuries***

Aircraft Statistics Category	1 Apr to 30 Jun 2010		1 Apr to 30 Jun 2011		Change	
	Fatal Accidents	Fatal Injuries	Fatal Accidents	Fatal Injuries	Fatal Accidents	Fatal Injuries
Large Aeroplanes	0	0	0	0	0	0
Medium Aeroplanes	0	0	0	0	0	0
Small Aeroplanes	0	0	0	0	0	0
Agricultural Aeroplanes	0	0	0	0	0	0
Helicopters	0	0	2	3	+2	+3
Sport Aircraft	0	0	2	2	+2	+2
Unknown Aircraft	0	0	0	0	0	0
Hang Gliders	0	0	0	0	0	0
Parachutes	0	0	0	0	0	0
Total	0	0	4	5	+4	+5

Number of Serious Injuries

Aircraft Statistics Category	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	0	0
Small Aeroplanes	0	0	0
Agricultural Aeroplanes	1	0	-1
Helicopters	0	1	+1
Sport Aircraft	0	1	+1
Unknown Aircraft	0	0	0
Hang Gliders	3	1	-2
Parachutes	0	1	+1
Total	4	4	0

Number of Minor Injuries

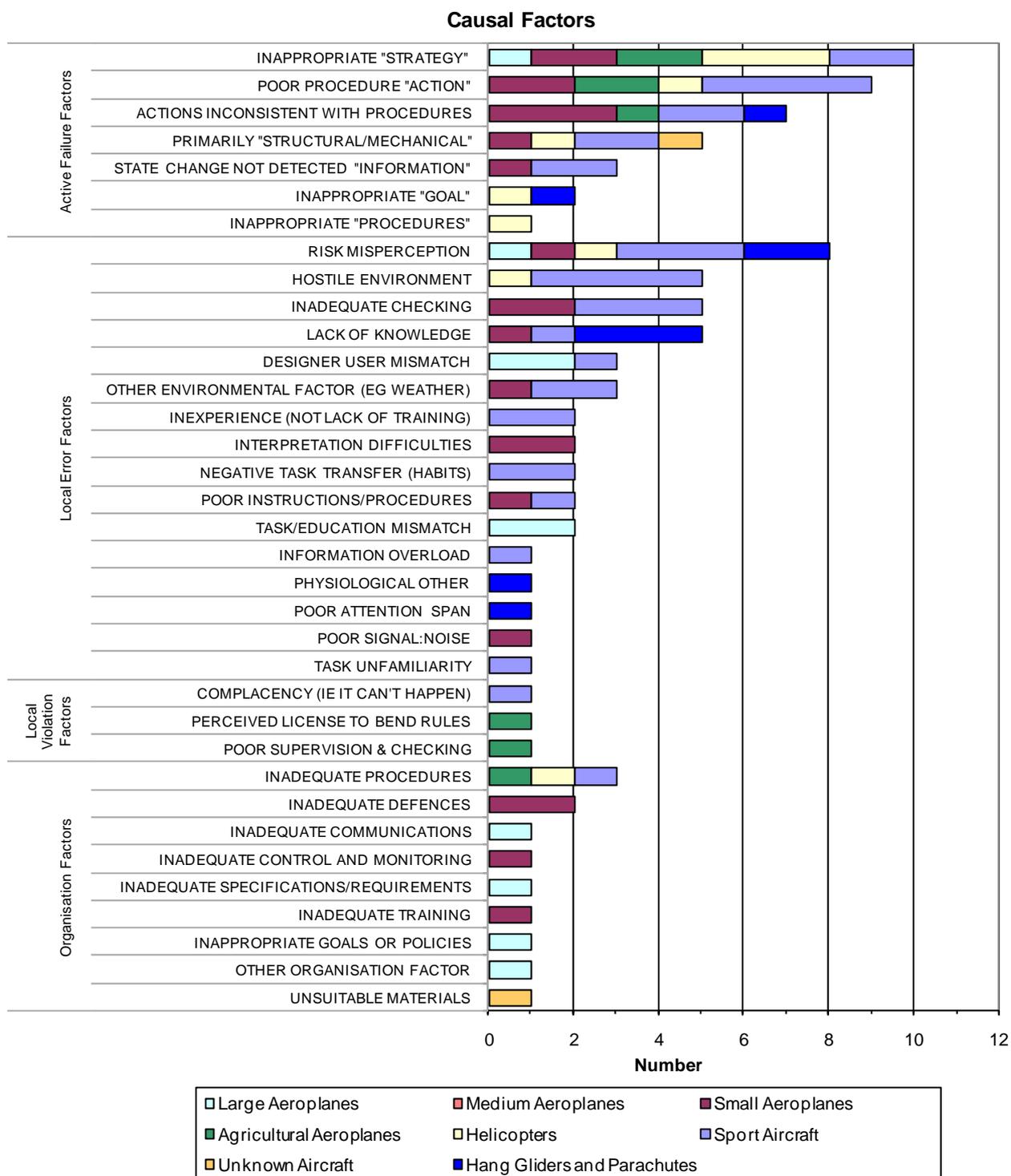
Aircraft Statistics Category	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	0	0
Small Aeroplanes	0	0	0
Agricultural Aeroplanes	1	0	-1
Helicopters	0	1	+1
Sport Aircraft	3	0	-3
Unknown Aircraft	0	0	0
Hang Gliders	1	0	-1
Parachutes	1	1	0
Total	6	2	-4

Accident Causal Factors by Aircraft Statistics Category

The following graph shows the number of causal factors recorded for accidents that occurred during the 12-month period 1 April 2010 to 31 March 2011 for the various aircraft statistics categories.

Causal factors have been assigned to 59 (54%) of the 110 accidents.

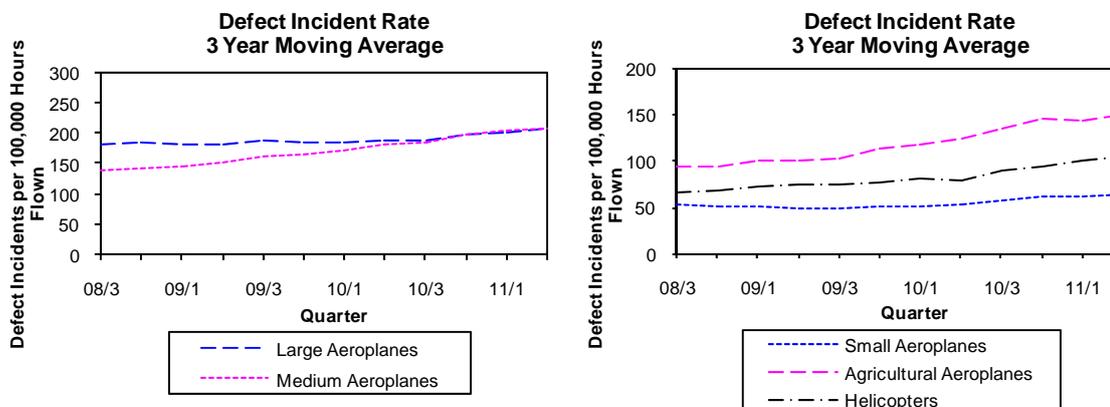
Note that causes are not yet available for all accidents that occurred in the 1 April to 30 June 2011 period.



Defect Incidents

Trends

The following graphs show the defect incident rates (3 year moving average) for the three-year period 1 July 2008 to 30 June 2011 (excluding the Sport Aircraft statistics category).



Quarterly Comparison

Number of Defect Incidents

Aircraft Statistics Category	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Large Aeroplanes	173	214	+ 41
Medium Aeroplanes	21	54	+ 33
Small Aeroplanes	63	54	- 9
Agricultural Aeroplanes	15	17	+ 2
Helicopters	38	44	+ 6
Sport Aircraft	10	6	- 4
Unknown Aircraft	16	9	- 7
Total	336	398	+ 62

Severity of Defect Incidents

Severity	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Critical	0	0	0
Major	82	54	- 28
Minor	254	344	+ 90

No defect incidents in the 'Large Aeroplanes' statistics category were classified as Critical in the 1 April to 30 June 2010 or 2011 quarters.

No defect incidents in the 'Medium Aeroplanes' statistics category were classified as Critical in the 1 April to 30 June 2010 or 2011 quarters.

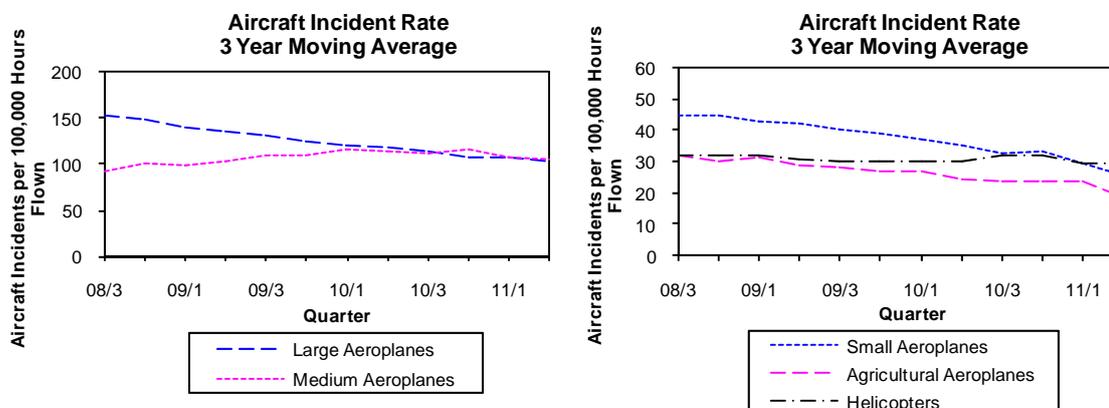
Rate Monitoring

Defect incident rate monitoring of individual types of large and medium air transport aircraft has been carried out against the CAA standard for the period ended 31 December 2010. Analysis shows that two of the 14 monitored aircraft types have defect rates above the "trigger level" for CAA action.

Aircraft Incidents

Trends

The following graphs show the aircraft incident rates (3 year moving average) for the three-year period 1 July 2008 to 30 June 2011 (excluding the Sport Aircraft statistics category).



Quarterly Comparison

Number of Aircraft Incidents

Aircraft Statistics Category	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Large Aeroplanes	79	83	+ 4
Medium Aeroplanes	10	13	+ 3
Small Aeroplanes	9	15	+ 6
Agricultural Aeroplanes	1	1	0
Helicopters	8	15	+ 7
Sport Aircraft	3	3	0
Unknown Aircraft	38	55	+ 17
Total	148	185	+ 37

Severity of Aircraft Incidents

Severity	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Critical	2	1	- 1
Major	23	13	- 10
Minor	123	171	+ 48

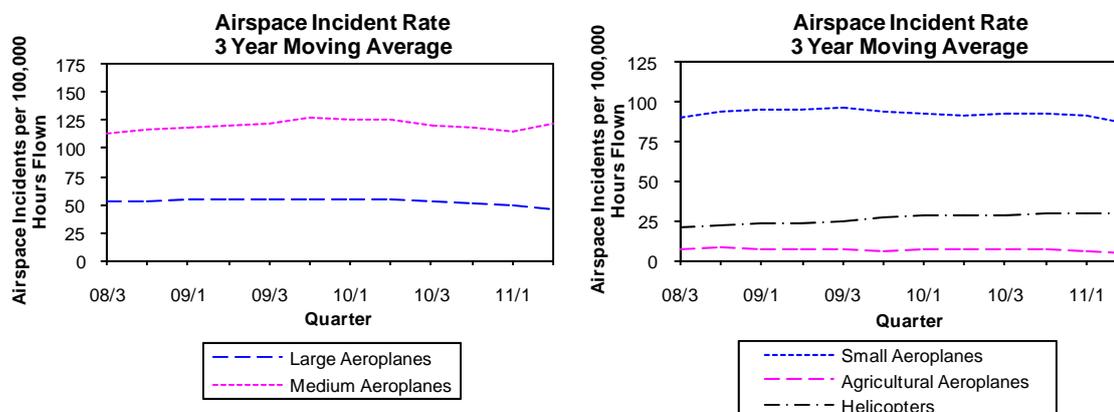
No aircraft incidents in the 'Large Aeroplanes' statistics category were classified as Critical in the 1 April to 30 June 2010 or 2011 quarters.

One aircraft incident in the 'Medium Aeroplanes' statistics category was classified as Critical in the 1 April to 30 June 2010 quarter. No aircraft incidents in the 'Medium Aeroplanes' statistics category were classified as Critical in the 1 April to 30 June 2011 quarter.

Airspace Incidents

Trends

The following graphs show the airspace incident rates (3 year moving average) for the three-year period 1 July 2008 to 30 June 2011 (excluding the Sport Aircraft statistics category).



Quarterly Comparison

Number of Airspace Incidents

Aircraft Statistics Category	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Large Aeroplanes	36	18	- 18
Medium Aeroplanes	14	20	+ 6
Small Aeroplanes	68	41	- 27
Agricultural Aeroplanes	0	0	0
Helicopters	11	8	- 3
Sport Aircraft	7	17	+ 10
Unknown Aircraft	61	105	+ 44
Total	197	209	+ 12

Severity of Airspace Incidents

Severity	1 Apr to 30 Jun 2010	1 Apr to 30 Jun 2011	Change
Critical	8	5	- 3
Major	34	27	- 7
Minor	155	177	+ 22

No airspace incidents in the 'Large Aeroplanes' statistics category were classified as Critical in the 1 April to 30 June 2010 or 2011 quarters.

No airspace incidents in the 'Medium Aeroplanes' statistics category were classified as Critical in the 1 April to 30 June 2010 or 2011 quarters.

Attributability

Of the 209 airspace incidents in the 1 April to 30 June 2011 quarter, 21% are Air Traffic Service (ATS) attributable, 69% are pilot attributable, 1% are ATS and pilot attributable, and 9% are unknown attributable. (Note that the percentages may not sum exactly to 100% due to rounding.)

Since July 2008 the long-term trend of the ATS attributable airspace occurrence rate is constant (the slope of the trend line is zero) and the long-term trend of the pilot attributable rate is upward.

Bird Incident Rates

Bird hazard monitoring has been carried out against the CAA standard for the period ended 30 June 2011.

There were two aerodromes with strike rates in the high risk category of the CAA standard (10.0 and above bird strikes per 10,000 aircraft movements), one having a long-term upward trend and one having a long-term downward trend. Seven aerodromes had strike rates in the medium risk category (5.0 to 10.0 per 10,000 movements), five having long-term upward trends and two having long-term downward trends. 18 aerodromes had strike rates in the low risk category (below 5.0 per 10,000 aircraft movements), four having long-term upward trends, 10 having long-term constant trends and four having long-term downward trends.

Quarterly Statistics

Quarter	2008/3	2008/4	2009/1	2009/2	2009/3	2009/4
Number of Air Transport Flights¹	91,942	104,711	115,409	85,482	83,353	97,144
Number of Hours Flown¹	226,206	232,412	271,270	226,574	229,894	240,179
Number of Aircraft Movements²	291,661	295,075	299,289	282,900	278,588	261,753
Number of Aircraft on the Register³	4,315	4,354	4,405	4,406	4,396	4,415
Number of Licences (Type of Medical Certificate)⁴						
Recreational Pilot Licence (RPL Medical)	32	68	80	103	120	133
Private Pilot Licence (Class 1 & 2)	3,849	3,733	3,787	3,799	3,850	3,829
Commercial Pilot Licence (Class 2 only)	1,792	1,761	1,794	1,909	1,919	1,969
Commercial Pilot Licence (Class 1)	2,199	2,295	2,322	2,300	2,344	2,359
Airline Transport Pilot Licence (Class 2 only)	947	991	903	893	975	976
Airline Transport Pilot Licence (Class 1)	1,073	1,048	1,130	1,152	1,069	1,068
Air Traffic Controller Licence (Class 3)	340	342	342	345	363	363
Aircraft Maintenance Engineer Licence (N/A)	2,311	2,342	2,352	2,378	2,402	2,424
Number of Part 119 Certificated Operators						
Air Operator – Large Aeroplanes	10	9	10	10	10	10
Air Operator – Medium Aeroplanes	15	15	15	15	15	15
Air Operator – Helicopters and Small Aeroplanes	163	163	166	171	170	173
Air Operator – Pacific	3	2	2	1	1	1
Number of Aircraft Accidents⁵						
Large Aeroplanes	0	0	1	0	1	1
Medium Aeroplanes	0	1	0	0	1	0
Small Aeroplanes	8	9	8	5	8	7
Agricultural Aeroplanes	2	3	0	1	1	1
Helicopters	5	7	6	1	4	6
Sport Aircraft	4	14	11	6	5	16
Unknown Aircraft	0	1	0	0	0	0
Hang Gliders	1	2	12	2	4	6
Parachutes	0	1	1	3	1	2
Number of Fatal Accidents⁵	1	3	4	0	1	5
Number of Fatal Injuries⁵	2	3	6	0	1	6
Number of Serious + Minor Injuries⁵	12	11	10	7	12	11
Social Cost \$ million⁶	12.21	14.42	24.83	1.56	6.27	24.06
Number of Incidents⁷	1,294	1,147	1,176	1,130	1,120	1,083
Number of Aviation Related Concerns	69	56	89	83	105	97

¹ New Zealand registered aircraft. Includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes. Estimated for 2010/4, 2011/1 and 2011/2.

² Certificated aerodromes. Includes Auckland, Christchurch, Dunedin, Gisborne, Hamilton, Invercargill, Napier, Nelson, New Plymouth, Ohakea, Palmerston North, Queenstown, Rotorua, Taupo, Tauranga, Wellington and Woodbourne. Excludes Chatham Islands/Tuuta Airport, Hokitika (certificated from Apr 2010), Kerikeri/Bay of Islands, Mount Cook (certificated until Sep 2009), Paraparaumu (certificated from Apr 2009), Te Anau/Manapouri, Timaru, Wanganui, Westport and Whangarei.

³ As at the last day of the quarter. Includes the sport aircraft statistics category. Excludes hang gliders and parachutes.

Quarter	2010/1	2010/2	2010/3	2010/4	2011/1	2011/2
Number of Air Transport Flights¹	108,240	86,247	86,018	102,681	111,458	90,587
Number of Hours Flown¹	255,874	222,718	214,030	236,127	245,244	219,605
Number of Aircraft Movements²	276,062	252,639	240,033	256,474	256,398	242,338
Number of Aircraft on the Register³	4,428	4,453	4,447	4,442	4,480	4,509
Number of Licences (Type of Medical Certificate)⁴						
Recreational Pilot Licence (RPL Medical)	141	132	128	146	162	180
Private Pilot Licence (Class 1 & 2)	3,795	3,757	3,750	3,655	3,611	3,603
Commercial Pilot Licence (Class 2 only)	1,990	2,066	2,027	2,083	2,131	2,229
Commercial Pilot Licence (Class 1)	2,403	2,344	2,397	2,385	2,372	2,339
Airline Transport Pilot Licence (Class 2 only)	922	913	986	981	928	909
Airline Transport Pilot Licence (Class 1)	1,135	1,134	1,075	1,096	1,155	1,188
Air Traffic Controller Licence (Class 3)	366	363	358	362	363	361
Aircraft Maintenance Engineer Licence (N/A)	2,445	2,463	2,479	2,496	2,511	2,519
Number of Part 119 Certificated Operators						
Air Operator – Large Aeroplanes	10	10	10	10	9	9
Air Operator – Medium Aeroplanes	15	15	15	16	15	15
Air Operator – Helicopters and Small Aeroplanes	172	174	175	175	173	174
Air Operator – Pacific	1	0	0	0	0	0
Number of Aircraft Accidents⁵						
Large Aeroplanes	0	0	2	0	1	0
Medium Aeroplanes	1	0	0	0	0	1
Small Aeroplanes	2	9	6	4	4	4
Agricultural Aeroplanes	0	3	0	1	3	3
Helicopters	8	3	4	3	5	6
Sport Aircraft	9	6	5	13	17	5
Unknown Aircraft	0	0	0	0	1	1
Hang Gliders	10	5	2	2	6	3
Parachutes	2	1	1	2	1	3
Number of Fatal Accidents⁵	1	0	3	1	2	4
Number of Fatal Injuries⁵	1	0	12	2	2	5
Number of Serious + Minor Injuries⁵	16	10	6	9	11	6
Social Cost \$ million⁶	6.97	1.89	47.35	9.35	12.64	20.72
Number of Incidents⁷	1,119	1,154	1,165	1,173	1,230	1,231
Number of Aviation Related Concerns	124	153	153	203	242	153

⁴ As at the last day of the quarter. For RPL holders, a medical fitness certificate, in accordance with the NZTA medical fitness standards that are applicable for a Class 2, 3, 4 or 5 driver licence with a passenger endorsement. For PPL, CPL & ATPL holders, an active class 1 or active class 2 medical certificate; 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). For ATCL holders, an active class 3 medical certificate. This does not show the number of licence holders as each client may hold more than one licence.

⁵ All accidents. All aircraft statistics categories. Includes hang gliders and parachutes.

⁶ All aircraft statistics categories. Includes hang gliders and parachutes. Cost of fatal, serious and minor injuries, and aircraft destroyed, in June 2010 dollars.

⁷ All incident sub-types.

Definitions

Accident

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, antennas, tyres, brakes, fairings, small dents, or puncture holes in the aircraft skin; or

- (3) the aircraft is missing or is completely inaccessible.

Aircraft Incident

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

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

Other Aircraft Types (not included on the NZ Aircraft Register)

Hang Glider

Means a glider, including a powered glider, that is capable of being launched and landed solely by the use of the pilot's legs, and includes paragliders. **Paraglider** means a hang glider with no rigid primary structure.

Parachute

Means any device, without a motor in operation, comprising a flexible drag, or lift/drag, surface from which a load is suspended by shroud lines capable of controlled deployment from a packed condition.

Airspace Incident

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

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.

Defect Incident

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

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.

Incident Sub-Types	
Aerodrome Incident	Dangerous Goods Incident
Aircraft Incident	Defect Incident
Airspace Incident	Facility Malfunction Incident
Bird Incident	Promulgated Information Incident
Cargo Security Incident	Security Incident

Occurrence

Means an accident or incident.

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 accidents and incidents as the result of investigation of occurrences:

Severity	Definition
Critical	An occurrence or deficiency that caused, or on its own had the potential to cause, loss of life or limb;
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;
Minor	An isolated occurrence or deficiency not indicative of a significant system problem.

Safety Target Structure

