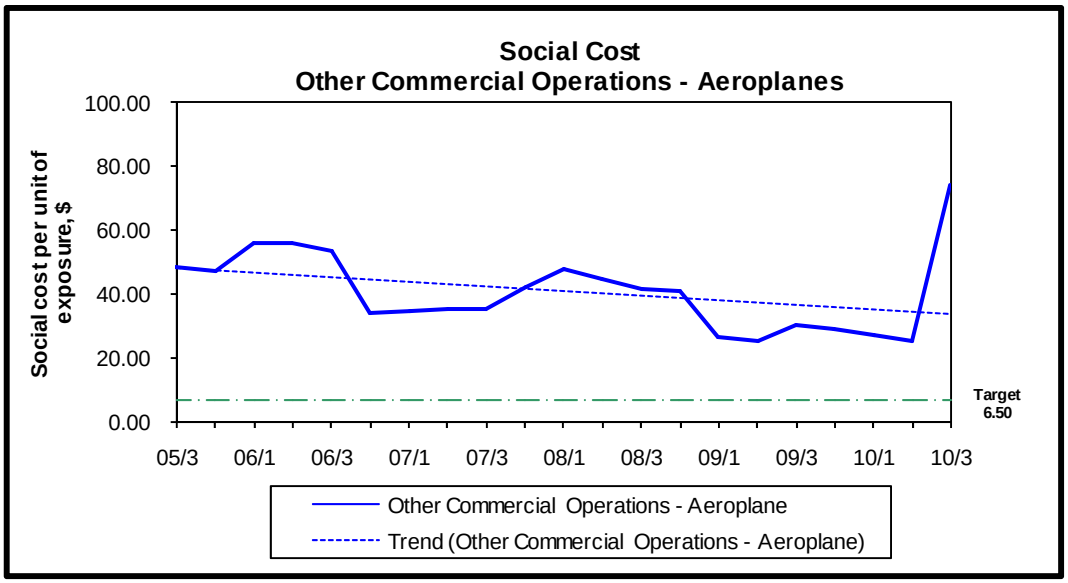
CIVIL AVIATION AUTHORITY
OF NEW ZEALAND

Aviation Safety Summary Report

1 July to 30 September 2010



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.

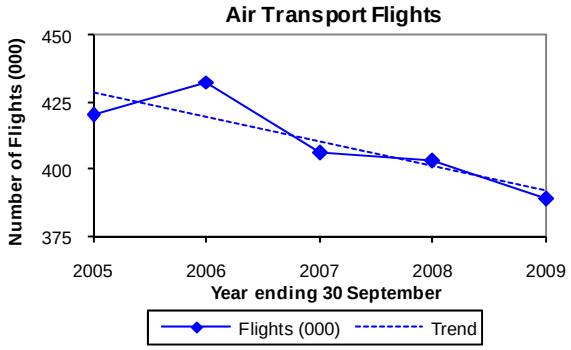
Overview

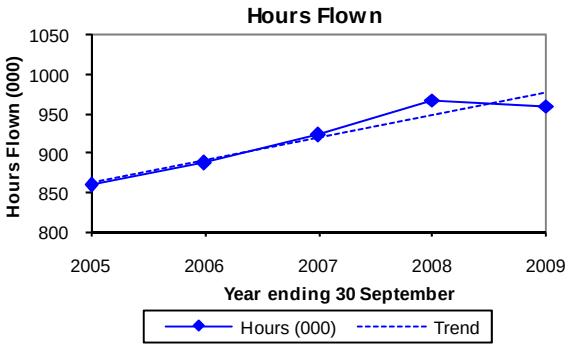
Activity

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 2004 to 30 September 2009 (includes the aircraft classes aeroplane, helicopter and balloon only).





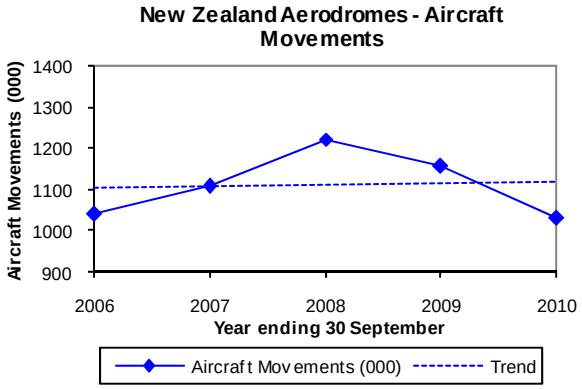
Note that the scales on these graphs do not start at zero.

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 2009 (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 October 2005 to 30 September 2010.



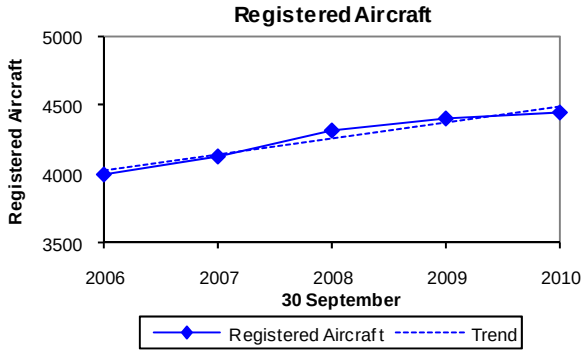
Note that the scale on this graph does not start at zero.

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, Manapouri, Mount Cook (certificated until Sep 2009), Paraparaumu (certificated from Apr 2009), Timaru, Wanganui, Westport, Whangarei (certificated from May 2006) and Wigram (certificated until Sep 2006).

Registered Aircraft

Trends

The following graph shows the number of registered aircraft at 30 September for each of the five-years 2006 to 2010.



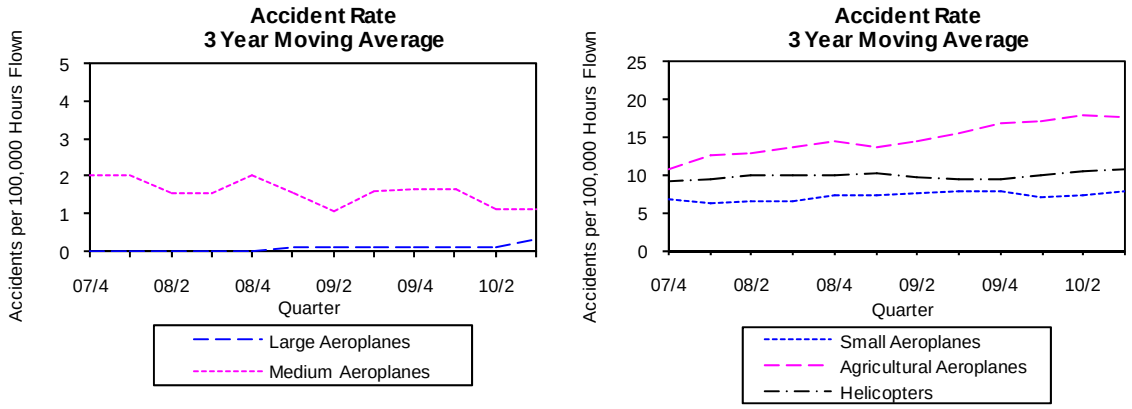
Note that the scale on this graph does not start at zero.

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

Accidents

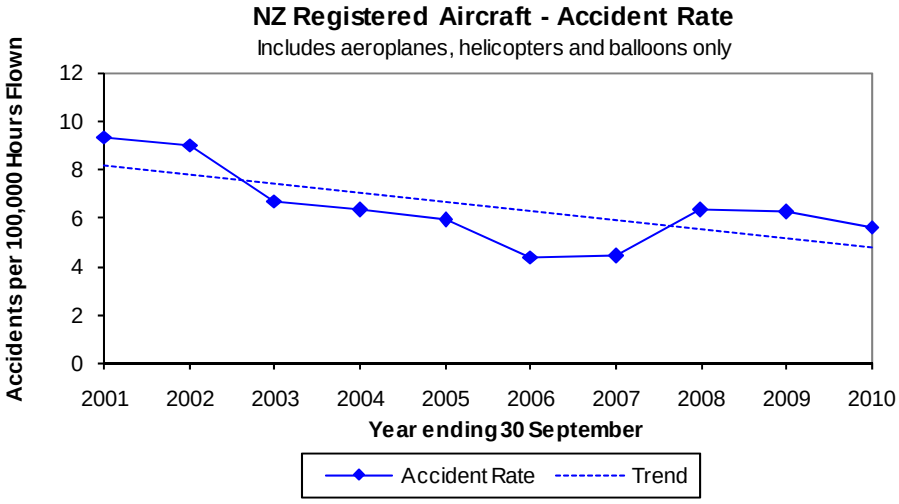
Trends

The following graphs show the aircraft accident rates (3 year moving average) for the three-year period 1 October 2007 to 30 September 2010 (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 10-year period 1 October 2000 to 30 September 2010.



Note that this graph does not show a moving average.

Safety Outcome Targets for 2010

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 quarters 1 July to 30 September 2009 and 2010. Social cost is the cost of fatal, serious and minor injuries, and aircraft destroyed, expressed in 2010 dollars.

Safety Target Group	1 Jul to 30 Sep 2009 $m	1 Jul to 30 Sep 2010 $m	Change $m
Airline Operations - Large Aeroplanes	0.00	0.00	0.00
Airline Operations - Medium Aeroplanes	0.05	0.00	- 0.05
Airline Operations - Small Aeroplanes	0.56	0.00	- 0.56
Airline Operations - Helicopter	1.21	0.00	- 1.21
Sport Transport	0.00	0.00	0.00
Other Commercial Operations - Aeroplane	4.03	41.26	+ 37.23
Other Commercial Operations - Helicopter	0.00	0.00	0.00
Agricultural Operations - Aeroplane	0.00	0.00	0.00
Agricultural Operations - Helicopter	0.00	0.00	0.00
Agricultural Operations - Sport	0.00	0.00	0.00
Private Operations - Aeroplane	0.00	0.00	0.00
Private Operations - Helicopter	0.03	2.14	+ 2.11
Private Operations - Sport	0.39	4.09	+ 3.70
Total	**6.27**	**47.48**	**+ 41.21**

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

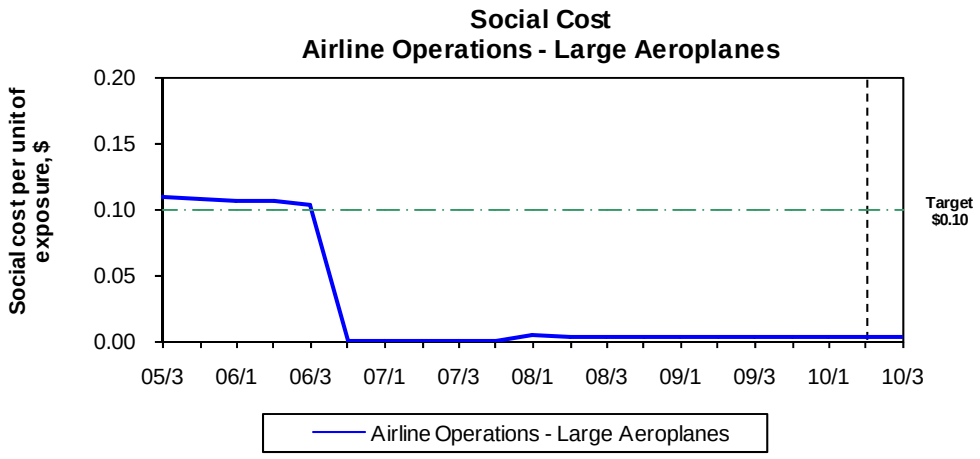
Note that the Sport groups include hang gliders and parachutes.

Safety Target Graphs

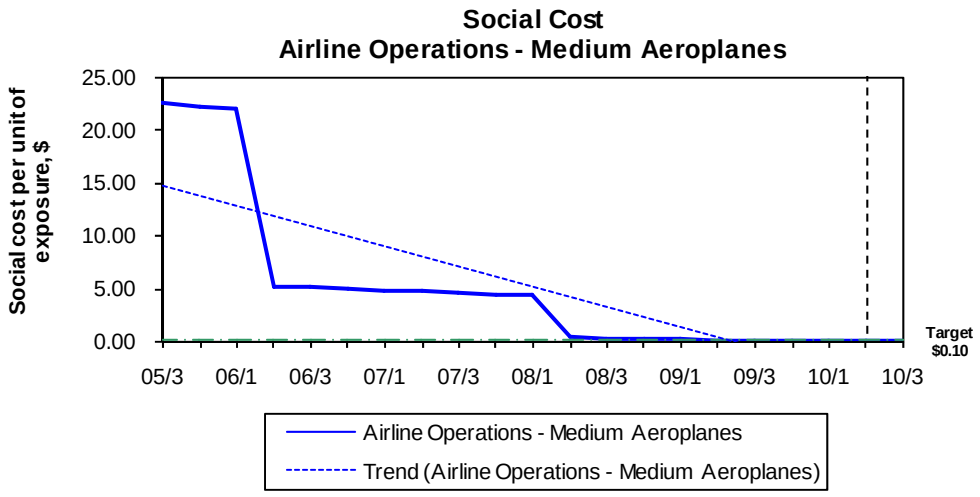
Each Safety Target Group has its own target level expressed as social cost per unit of person exposure, the unit being “one seat hour”. For Safety Target Groups that are not predominantly passenger carrying a surrogate of 500 kg of aircraft weight is used instead of person exposure. These outcomes represent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

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

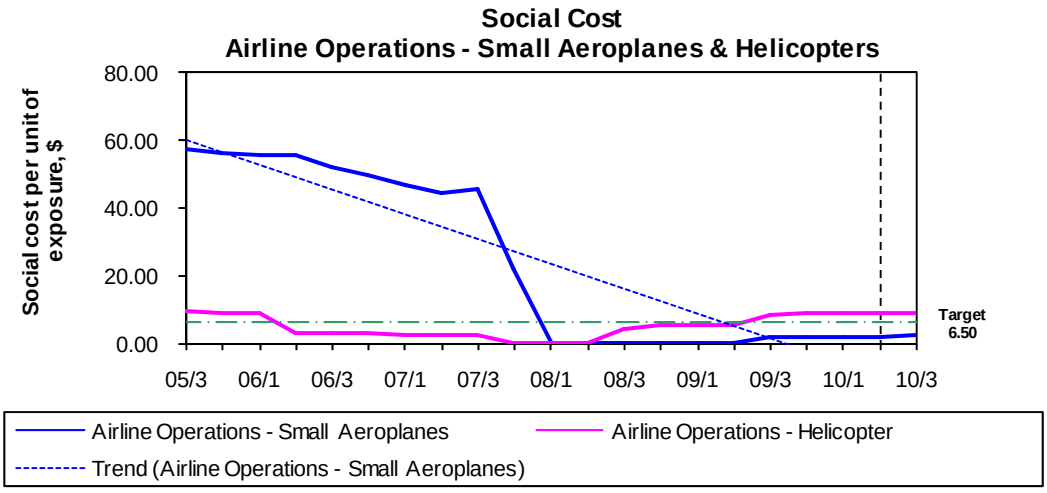
Graphs displaying the Safety Outcome Targets and the progress over each quarter are shown on the following pages.



The outcome for Airline Operations – Large Aeroplanes (96.3% of total seat hours) has been below the target level of $0.10 per hour of exposure since late 2006. There have been 1 serious and 6 minor injuries in this group in the three years Oct 07 to Sep 10.

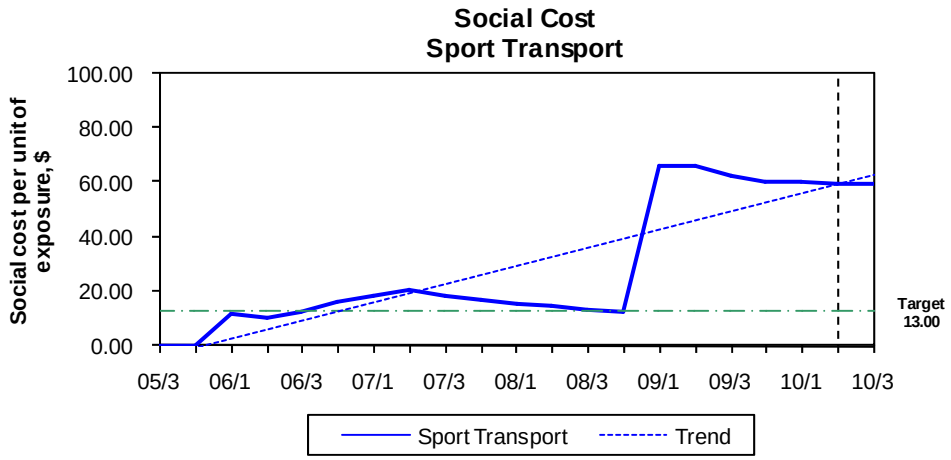


The outcome for Airline Operations – Medium Aeroplanes is trending down and has been below the target level since the quarter Apr to Jun 09 (the data point at 10/3 is $0.02 per hour of exposure). The exposure (1.4% of total seat hours) associated with this sector is relatively small. There have been 3 minor injuries in this group during the period Oct 07 to Sep 10.



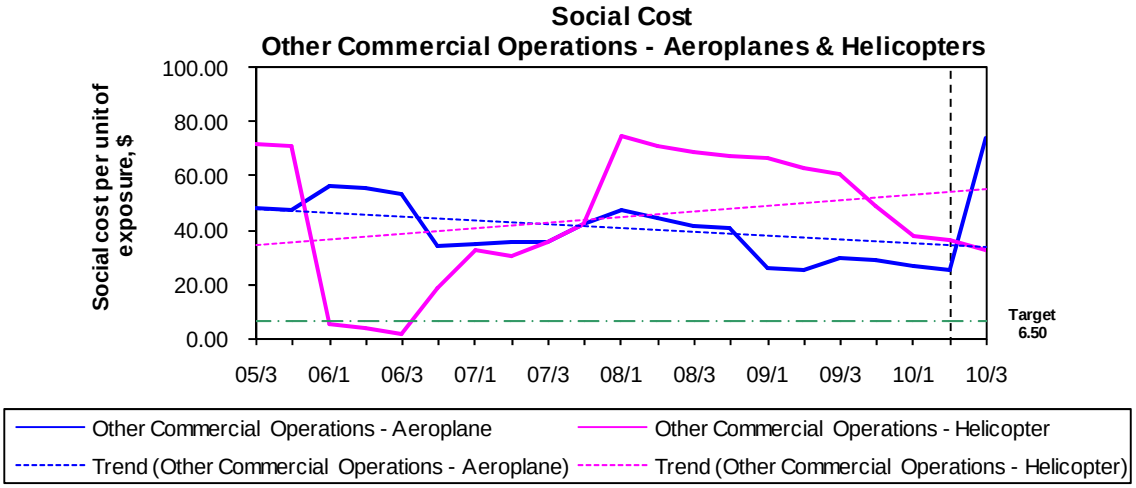
The outcome for Airline Operations – Small Aeroplanes (0.2% of total seat hours) shows a significant long term downward trend from the high starting point of $57.40 per hour of exposure generated by 6 fatal and 2 serious injuries and 1 minor injury in the three years Oct 02 to Sep 05. There have been 1 serious and 3 minor injuries during the period Oct 07 to Sep 10. The safety outcome for this group has been below the target level since the quarter Jan to Mar 08.

The outcome for Airline Operations – Helicopter has been above the target level since the quarter Jul to Sep 09. There have been 2 serious and 4 minor injuries in this group in the three years Oct 07 to Sep 10.



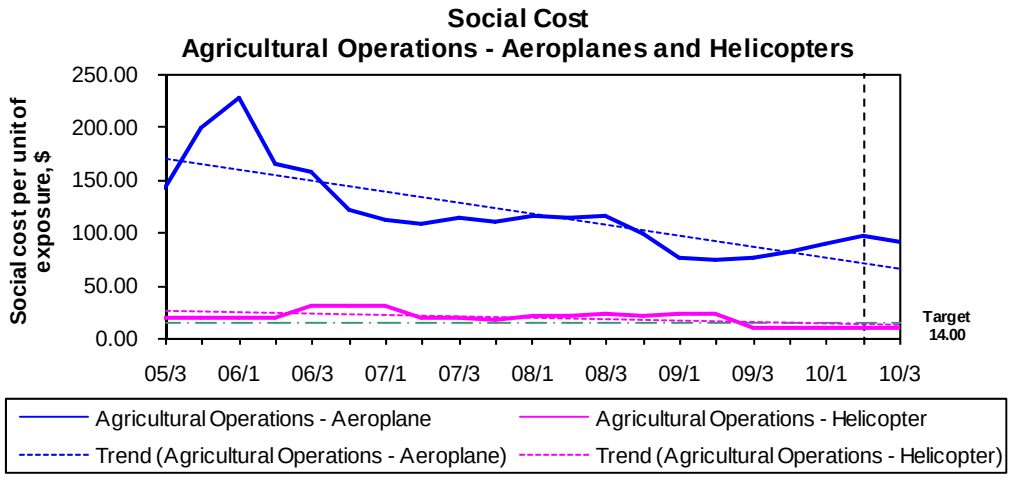
Three fatal accidents that occurred in the quarter Jan to Mar 09, the first since the target regime was established, have resulted in the highest outcomes for Sport Transport since the target regime was established in 2005. There have been 5 fatal, 9 serious and 10 minor injuries in the three years Oct 07 to Sep 10.

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



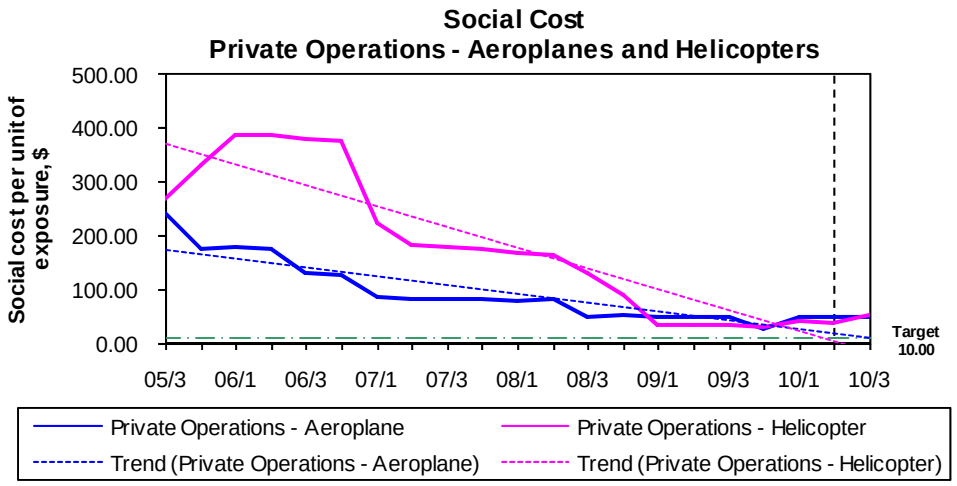
The outcome for Other Commercial Operations – Aeroplane is well above the target of $6.50. During the three years Oct 07 to Sep 10 there have been 16 fatal, 4 serious and 2 minor injuries in this group.

The outcome for Other Commercial Operations – Helicopter turned sharply upwards during the fourth quarter of 2006 and is now well above the target level. There have been 2 fatal, 1 serious and 3 minor injuries in this group in the three years Oct 07 to Sep 10.



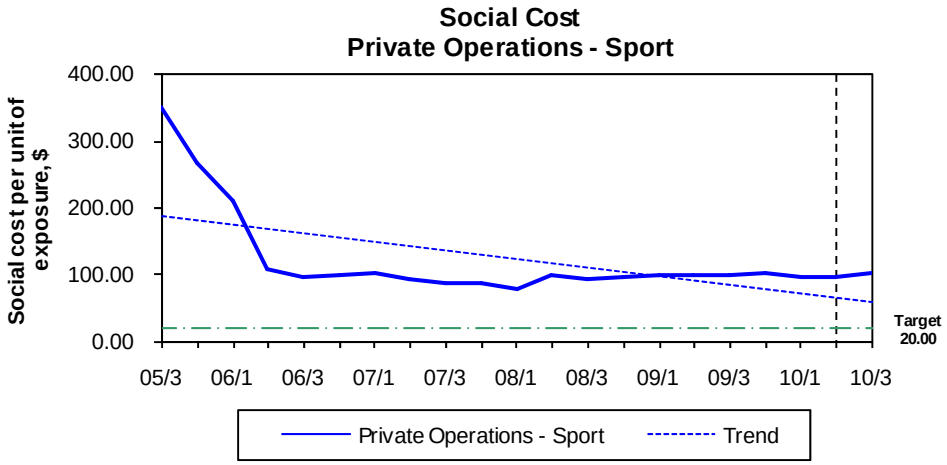
The outcome for Agricultural Operations – Aeroplanes is well above the target level of $14.00. During the three years Oct 07 to Sep 10 there have been 2 fatal, 2 serious and 2 minor injuries in this group.

The outcome for Agricultural Operations – Helicopter has been below the target level since the quarter Jul to Sep 09. There have been 1 serious and 2 minor injuries in the three years Oct 07 to Sep 10.



The outcome for Private Operations – Aeroplanes has been trending down since late 2005, but is still well above the target level of $10.00. There have been 2 fatal, 3 serious and 3 minor injuries in the three years Oct 07 to Sep 10.

The outcome for Private Operations – Helicopters has been trending down since early 2006, but is still well above the target level. There have been 1 fatal, 1 serious and 6 minor injuries in the three years Oct 07 to Sep 10.



The outcome for Private Operations – Sport is well above the target of $20.00. There have been 15 fatal, 21 serious and 29 minor injuries in the three years Oct 07 to Sep 10.

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

Activity

Air Transport Flights, Total Hours

Quarterly Comparison

Activity	1 Jul to 30 Sep 2008	1 Jul to 30 Sep 2009	Change	
			Number	Percentage
Air Transport Flights	91,942	83,353	- 8,589	- 9.3
Hours	226,206	229,894	+ 3,689	+ 1.6

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 2009 (the most recent quarter for which these data are available).

Aircraft Movements

Quarterly Comparison

Activity	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change	
			Number	Percentage
Aircraft Movements	278,588	240,033	- 38,555	- 13.8

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, Manapouri, Mount Cook (certificated until Sep 2009), Paraparaumu, Timaru, Wanganui, Westport and Whangarei.

Registered Aircraft

Quarterly Comparison

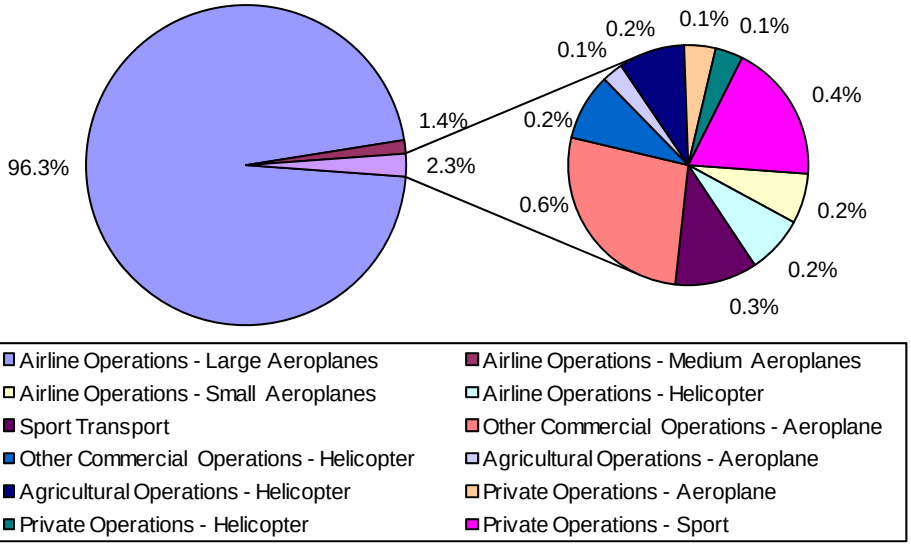
Aircraft Statistics Category	30 September 2009	30 September 2010	Change	
			Number	Percentage
Large Aeroplanes	120	119	- 1	- 0.8
Medium Aeroplanes	82	85	+ 3	+ 3.7
Small Aeroplanes	1,516	1,522	+ 6	+ 0.4
Agricultural Aeroplanes	111	110	- 1	- 0.9
Helicopters	750	769	+ 19	+ 2.5
Sport Aircraft	1,817	1,842	+ 25	+ 1.4
Total	**4,396**	**4,447**	**+ 51**	**+ 1.2**

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 2010 Safety Target Group categories for the period 1 July to 30 September 2009 (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	96.3
Airline Operations - Medium Aeroplanes	1.4
Airline Operations - Small Aeroplanes	0.2
Airline Operations - Helicopter	0.2
Sport Transport	0.3
Other Commercial Operations - Aeroplane	0.6
Other Commercial Operations - Helicopter	0.2
Agricultural Operations - Aeroplane	0.1
Agricultural Operations - Helicopter	0.2
Agricultural Operations - Sport	-
Private Operations - Aeroplane	0.1
Private Operations - Helicopter	0.1
Private Operations - Sport	0.4

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

Accidents

Quarterly Comparison

Number of Accidents

Aircraft Statistics Category	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Large Aeroplanes	0	2	+ 2
Medium Aeroplanes	1	0	- 1
Small Aeroplanes	8	6	- 2
Agricultural Aeroplanes	1	0	- 1
Helicopters	4	4	0
Sport Aircraft	5	5	0
Unknown Aircraft	0	0	0
Hang Gliders	4	2	- 2
Parachutes	1	1	0
Total	**24**	**20**	**- 4**

Severity of Accidents

Severity	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Critical	8	12	+ 4
Major	16	5	- 11
Minor	0	3	+ 3

No accidents in the ‘Large Aeroplanes’ statistics category were classified as Critical in the 1 July to 30 September 2009 or 2010 quarters.

One accident in the ‘Medium Aeroplanes’ statistics category was classified as Critical in the 1 July to 30 September 2009 quarter. No accidents in the ‘Medium Aeroplanes’ statistics category were classified as Critical in the 1 July to 30 September 2010 quarter.

Significant Accidents and Other Injury Accidents

Significant Injury Accidents

This section describes significant injury accidents during the period 1 July to 30 September 2010.

Small Aeroplanes

Other Commercial Operations - Aeroplane

- An FU24-954 on a parachuting flight was seen to dive into the ground and burst into flames immediately after takeoff. All nine persons on board were killed. The aircraft was destroyed.
- A Cessna 152 on a dual training flight collided with another aircraft while airborne. Both persons on board were killed. The aircraft was destroyed. (The other aircraft landed without injury.)

Sport Aircraft

Private Operations - Sport

- A class 2 microlight was observed to enter a spiral shortly after takeoff, impacting the ground at the edge of the runway. The pilot was killed. The aircraft was destroyed.

Significant Non-Injury Accidents

This section describes significant non-injury accidents during the period 1 July to 30 September 2010.

Large Aeroplanes

Airline Operations - Large Aeroplanes

- An aeroplane on a passenger transport A to B flight diverted due to an unsafe gear indication. The nose gear collapsed on landing.

Small Aeroplanes

Other Commercial Operations - Aeroplane

- A Cessna 152 on a solo training flight collided with another aircraft while airborne. The aircraft landed successfully. (Both persons on board the other aircraft were killed, and the aircraft was destroyed.)

Helicopters

Other Commercial Operations - Helicopter

- An AS 350BA on an other aerial work operation was left unattended with the engine running and a gust of wind caught it and blew it backwards.

Private Operations - Helicopter

- A Hughes 369D lost power and ditched into water. The pilot was rescued by a fishing boat.

Other Injury Accidents

This section describes other injury accidents that occurred during the period 1 July to 30 September 2010.

Small Aeroplanes

Other Commercial Operations – Aeroplane

- A Piper PA-38-112 on a dual training flight impacted a hillside during a cross country flight. Both occupants suffered serious injuries and the aircraft was destroyed.
- A Cessna 172K on a parachuting flight partially lost power around 4,000 ft, with the engine stopping completely at 200 ft. Significant sink was experienced and the aircraft impacted a bank short of the runway. The pilot suffered serious injuries. The aircraft was substantially damaged and written off.

Helicopters

Private Operations – Helicopter

- An MD 500N lost power, crashed in a ditch and caught fire. The pilot suffered serious injuries. The aircraft was destroyed.

Sport Aircraft

Private Operations - Sport

- A parachutist suffered serious injuries upon striking the ground during a low banking turn.
- A glider encountered downdraft while ridge soaring, causing the aircraft to sink and strike the tree tops. The pilot suffered minor injuries and the aircraft was substantially damaged and written off.

Injuries

Number of Fatal Accidents and Number of Fatal Injuries

Aircraft Statistics Category	1 Jul to 30 Sep 2009		1 Jul to 30 Sep 2010		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	1	1	2	11	+ 1	+ 10
Agricultural Aeroplanes	0	0	0	0	0	0
Helicopters	0	0	0	0	0	0
Sport Aircraft	0	0	1	1	+ 1	+ 1
Unknown Aircraft	0	0	0	0	0	0
Hang Gliders	0	0	0	0	0	0
Parachutes	0	0	0	0	0	0
Total	**1**	**1**	**3**	**12**	**+ 2**	**+ 11**

Number of Serious Injuries

Aircraft Statistics Category	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	0	0
Small Aeroplanes	1	3	+ 2
Agricultural Aeroplanes	0	0	0
Helicopters	0	1	+ 1
Sport Aircraft	0	0	0
Unknown Aircraft	0	0	0
Hang Gliders	1	0	- 1
Parachutes	0	1	+ 1
Total	**2**	**5**	**+ 3**

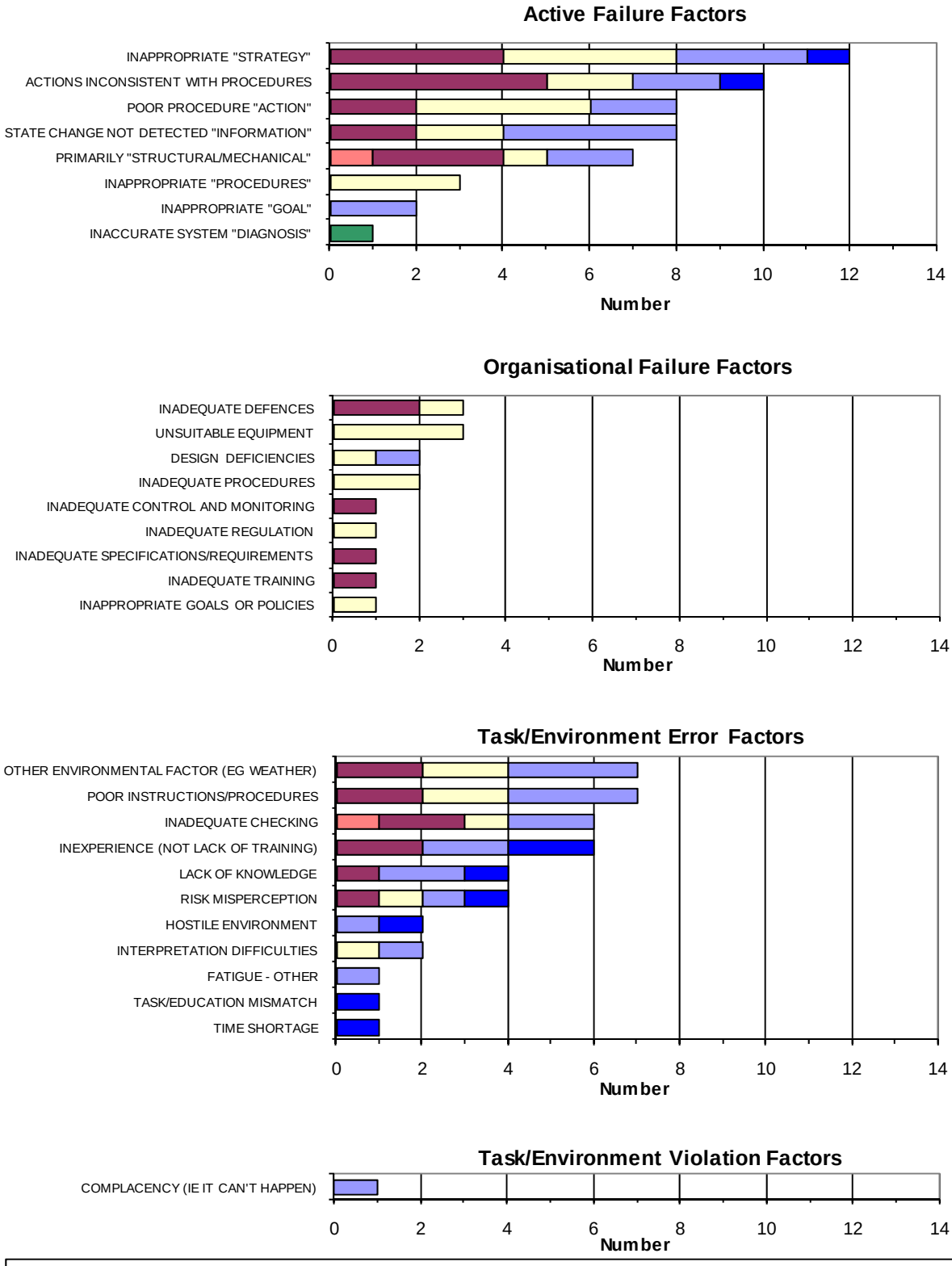
Number of Minor Injuries

Aircraft Statistics Category	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	3	0	- 3
Small Aeroplanes	2	0	- 2
Agricultural Aeroplanes	0	0	0
Helicopters	4	0	- 4
Sport Aircraft	1	1	0
Unknown Aircraft	0	0	0
Hang Gliders	0	0	0
Parachutes	0	0	0
Total	**10**	**1**	**- 9**

Accident Causal Factors by Aircraft Statistics Category

The following graphs show the number of causal factors recorded for accidents that occurred during the 12-month period 1 July 2009 to 30 June 2010 for the various aircraft statistics categories.
Causal factors have been assigned to 68 (57%) of the 120 accidents.

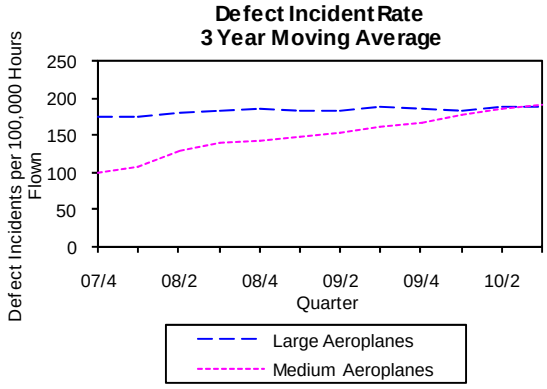
Note that causes are not yet available for all accidents that occurred in the 1 July to 30 September 2010 period.

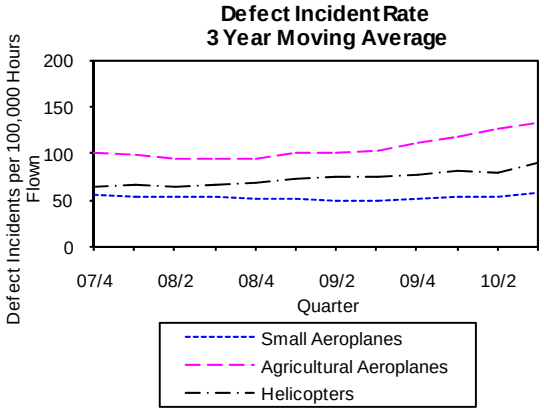


Defect Incidents

Trends

The following graphs show the defect incident rates (3 year moving average) for the three-year period 1 October 2007 to 30 September 2010 (excluding the Sport Aircraft statistics category).





Quarterly Comparison

Number of Defect Incidents

Aircraft Statistics Category	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Large Aeroplanes	195	127	- 68
Medium Aeroplanes	29	23	- 6
Small Aeroplanes	53	87	+ 34
Agricultural Aeroplanes	14	11	- 3
Helicopters	25	81	+ 56
Sport Aircraft	8	7	- 1
Unknown Aircraft	14	21	+ 7
Total	**338**	**357**	**+ 19**

Severity of Defect Incidents

Severity	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Critical	0	0	0
Major	44	68	+ 24
Minor	294	289	- 5

No defect incidents in the ‘Large Aeroplanes’ statistics category were classified as Critical in the 1 July to 30 September 2009 or 2010 quarters.

No defect incidents in the ‘Medium Aeroplanes’ statistics category were classified as Critical in the 1 July to 30 September 2009 or 2010 quarters.

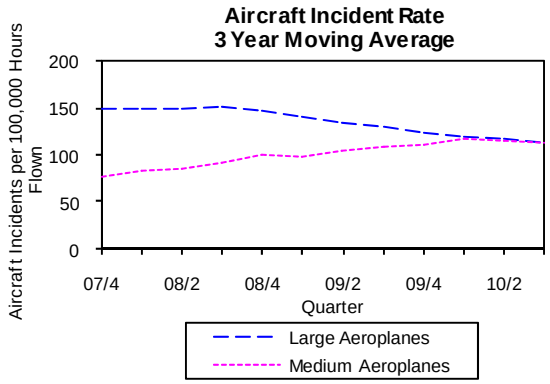
Rate Monitoring

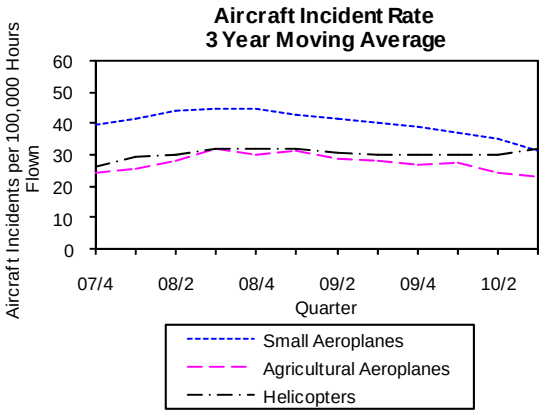
Defect incident rate monitoring of individual types of large and medium air transport aircraft has been carried out against the CAA standard for the period ended 30 June 2010. Analysis shows that five of the 14 monitored aircraft types have defect rates above the “trigger level” for CAA action.

Aircraft Incidents

Trends

The following graphs show the aircraft incident rates (3 year moving average) for the three-year period 1 October 2007 to 30 September 2010 (excluding the Sport Aircraft statistics category).





Quarterly Comparison

Number of Aircraft Incidents

Aircraft Statistics Category	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Large Aeroplanes	86	56	- 30
Medium Aeroplanes	14	11	- 3
Small Aeroplanes	17	12	- 5
Agricultural Aeroplanes	0	1	+ 1
Helicopters	8	17	+ 9
Sport Aircraft	7	2	- 5
Unknown Aircraft	38	60	+ 22
Total	**170**	**159**	**- 11**

Severity of Aircraft Incidents

Severity	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Critical	2	0	- 2
Major	21	18	- 3
Minor	147	141	- 6

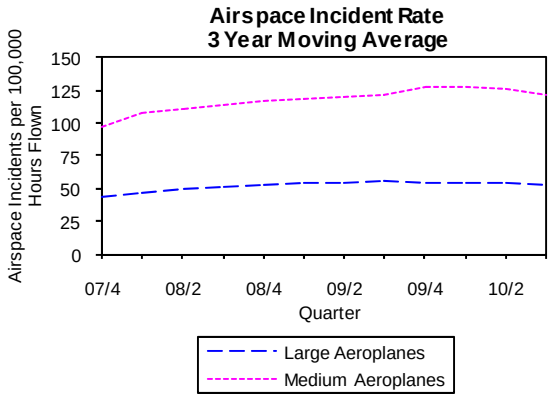
One aircraft incident in the 'Large Aeroplanes' statistics category was classified as Critical in the 1 July to 30 September 2009 quarter. No aircraft incidents in the 'Large Aeroplanes' statistics category were classified as Critical in the 1 July to 30 September 2010 quarter.

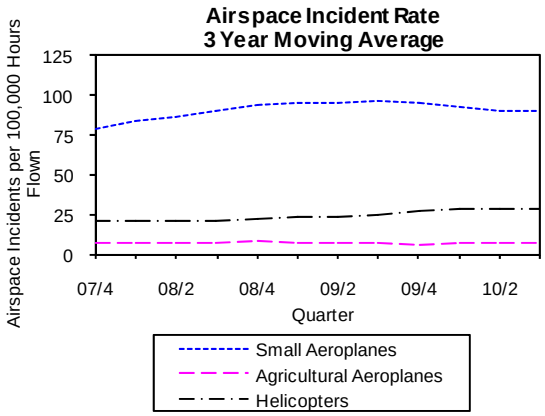
No aircraft incidents in the 'Medium Aeroplanes' statistics category were classified as Critical in the 1 July to 30 September 2009 or 2010 quarters.

Airspace Incidents

Trends

The following graphs show the airspace incident rates (3 year moving average) for the three-year period 1 October 2007 to 30 September 2010 (excluding the Sport Aircraft statistics category).





Quarterly Comparison

Number of Airspace Incidents

Aircraft Statistics Category	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Large Aeroplanes	54	23	- 31
Medium Aeroplanes	15	11	- 4
Small Aeroplanes	81	73	- 8
Agricultural Aeroplanes	1	1	0
Helicopters	12	6	- 6
Sport Aircraft	3	5	+ 2
Unknown Aircraft	75	82	+ 7
Total	**241**	**201**	**- 40**

Severity of Airspace Incidents

Severity	1 Jul to 30 Sep 2009	1 Jul to 30 Sep 2010	Change
Critical	2	3	+ 1
Major	21	31	+ 10
Minor	218	167	- 51

One airspace incident in the ‘Large Aeroplanes’ statistics category was classified as Critical in the 1 July to 30 September 2009 quarter. No airspace incidents in the ‘Large Aeroplanes’ statistics category were classified as Critical in the 1 July to 30 September 2010 quarter.

No airspace incidents in the ‘Medium Aeroplanes’ statistics category were classified as Critical in the 1 July to 30 September 2009 or 2010 quarters.

Attributability

Of the 201 airspace incidents in the 1 July to 30 September 2010 quarter, 22% are Air Traffic Service (ATS) attributable, 68% are pilot attributable, 0% are ATS and pilot attributable, and 10% are unknown attributable. (Note that the percentages may not sum exactly to 100% due to rounding.)

Since October 2007 the long-term trends of the ATS and pilot attributable airspace occurrence rates are upward (but the slopes of the trend lines are close to zero).

Bird Incident Rates

Bird hazard monitoring has been carried out against the CAA standard for the period ended 30 September 2010. Analysis shows that 14 of the 27 monitored aerodromes have bird strike rates above the "trigger level" for CAA action.

There were three aerodromes with 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 two having long-term downward trends. Eight aerodromes had strike rates in the medium risk category (5.0 to 10.0 per 10,000 movements), six having long-term upward trends, one having a long-term constant trend and one having a long-term downward trend. 16 aerodromes had strike rates in the low risk category (below 5.0 per 10,000 aircraft movements), four having long-term upward trends, five having long-term constant trends and seven having long-term downward trends.

Quarterly Statistics

Quarter	2007/4	2008/1	2008/2	2008/3	2008/4	2009/1
Number of Air Transport Flights[1]	104,008	119,796	87,384	91,942	104,711	115,409
Number of Hours Flown[1]	243,975	266,321	230,893	226,206	232,412	271,270
Number of Aircraft Movements[2]	300,512	321,583	306,863	291,661	295,075	299,289
Number of Aircraft on the Register[3]	4,193	4,250	4,301	4,315	4,354	4,405
Number of Licences (Type of Medical Certificate)[4]						
Recreational Pilot Licence (RPL Medical)	0	0	0	32	68	80
Private Pilot Licence (Class 1 & 2)	3,819	3,873	3,856	3,849	3,733	3,787
Commercial Pilot Licence (Class 2 only)	1,662	1,705	1,763	1,792	1,761	1,794
Commercial Pilot Licence (Class 1)	2,155	2,171	2,162	2,199	2,295	2,322
Airline Transport Pilot Licence (Class 2 only)	913	869	847	947	991	903
Airline Transport Pilot Licence (Class 1)	1,055	1,109	1,152	1,073	1,048	1,130
Air Traffic Controller Licence (Class 3)	325	325	332	340	342	342
Aircraft Maintenance Engineer Licence (N/A)	2,227	2,241	2,276	2,311	2,342	2,352
Number of Part 119 Certificated Operators						
Air Operator – Large Aeroplanes	11	11	11	10	9	10
Air Operator – Medium Aeroplanes	16	16	16	15	15	15
Air Operator – Helicopters and Small Aeroplanes	164	163	161	163	163	166
Air Operator – Pacific	3	2	3	3	2	2
Number of Aircraft Accidents[5]						
Large Aeroplanes	0	0	0	0	0	1
Medium Aeroplanes	0	0	0	0	1	0
Small Aeroplanes	7	8	6	8	9	8
Agricultural Aeroplanes	1	6	3	2	3	0
Helicopters	4	5	6	5	7	6
Sport Aircraft	5	13	5	4	14	11
Unknown Aircraft	1	0	0	0	1	0
Hang Gliders	2	1	2	1	2	12
Parachutes	1	0	0	0	1	1
Number of Fatal Accidents[5]	3	5	2	1	3	4
Number of Fatal Injuries[5]	3	7	4	2	3	6
Number of Serious + Minor Injuries[5]	8	2	4	12	11	10
Social Cost $ million[6]	14.60	28.87	15.51	5.05	14.42	24.83
Number of Incidents[7]	1,026	1,231	1,271	1,294	1,147	1,175
Number of Aviation Related Concerns	86	106	82	69	56	88

[1] New Zealand registered aircraft. Includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes. Estimated for 2009/4, 2010/1, 2010/2 and 2010/3.

[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, Manapouri, Mount Cook (certificated until Sep 2009), Paraparaumu (certificated from Apr 2009), 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	2009/2	2009/3	2009/4	2010/1	2010/2	2010/3
Number of Air Transport Flights[1]	85,482	83,353	96,301	105,231	83,154	83,251
Number of Hours Flown[1]	226,574	229,894	236,788	262,782	228,693	232,640
Number of Aircraft Movements[2]	282,900	278,588	261,753	276,062	252,639	240,033
Number of Aircraft on the Register[3]	4,406	4,396	4,415	4,428	4,453	4,447
Number of Licences (Type of Medical Certificate)[4]						
Recreational Pilot Licence (RPL Medical)	103	120	133	141	132	128
Private Pilot Licence (Class 1 & 2)	3,799	3,850	3,829	3,795	3,757	3,750
Commercial Pilot Licence (Class 2 only)	1,909	1,919	1,969	1,990	2,066	2,027
Commercial Pilot Licence (Class 1)	2,300	2,344	2,359	2,403	2,344	2,397
Airline Transport Pilot Licence (Class 2 only)	893	975	976	922	913	986
Airline Transport Pilot Licence (Class 1)	1,152	1,069	1,068	1,135	1,134	1,075
Air Traffic Controller Licence (Class 3)	345	363	363	366	363	358
Aircraft Maintenance Engineer Licence (N/A)	2,378	2,402	2,424	2,445	2,463	2,479
Number of Part 119 Certificated Operators						
Air Operator – Large Aeroplanes	10	10	10	10	10	10
Air Operator – Medium Aeroplanes	15	15	15	15	15	15
Air Operator – Helicopters and Small Aeroplanes	171	170	173	172	174	175
Air Operator – Pacific	1	1	1	1	0	0
Number of Aircraft Accidents[5]						
Large Aeroplanes	0	0	0	0	0	2
Medium Aeroplanes	0	1	0	0	0	0
Small Aeroplanes	5	8	7	2	9	6
Agricultural Aeroplanes	1	1	1	0	3	0
Helicopters	1	4	6	8	3	4
Sport Aircraft	6	5	16	9	6	5
Unknown Aircraft	0	0	0	0	1	0
Hang Gliders	2	4	6	10	4	2
Parachutes	3	1	2	2	1	1
Number of Fatal Accidents[5]	0	1	5	1	0	3
Number of Fatal Injuries[5]	0	1	6	1	0	12
Number of Serious + Minor Injuries[5]	7	12	11	16	9	6
Social Cost $ million[6]	1.56	6.27	23.12	6.97	1.51	47.48
Number of Incidents[7]	1,130	1,121	1,084	1,120	1,149	1,136
Number of Aviation Related Concerns	83	105	96	124	152	149

[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

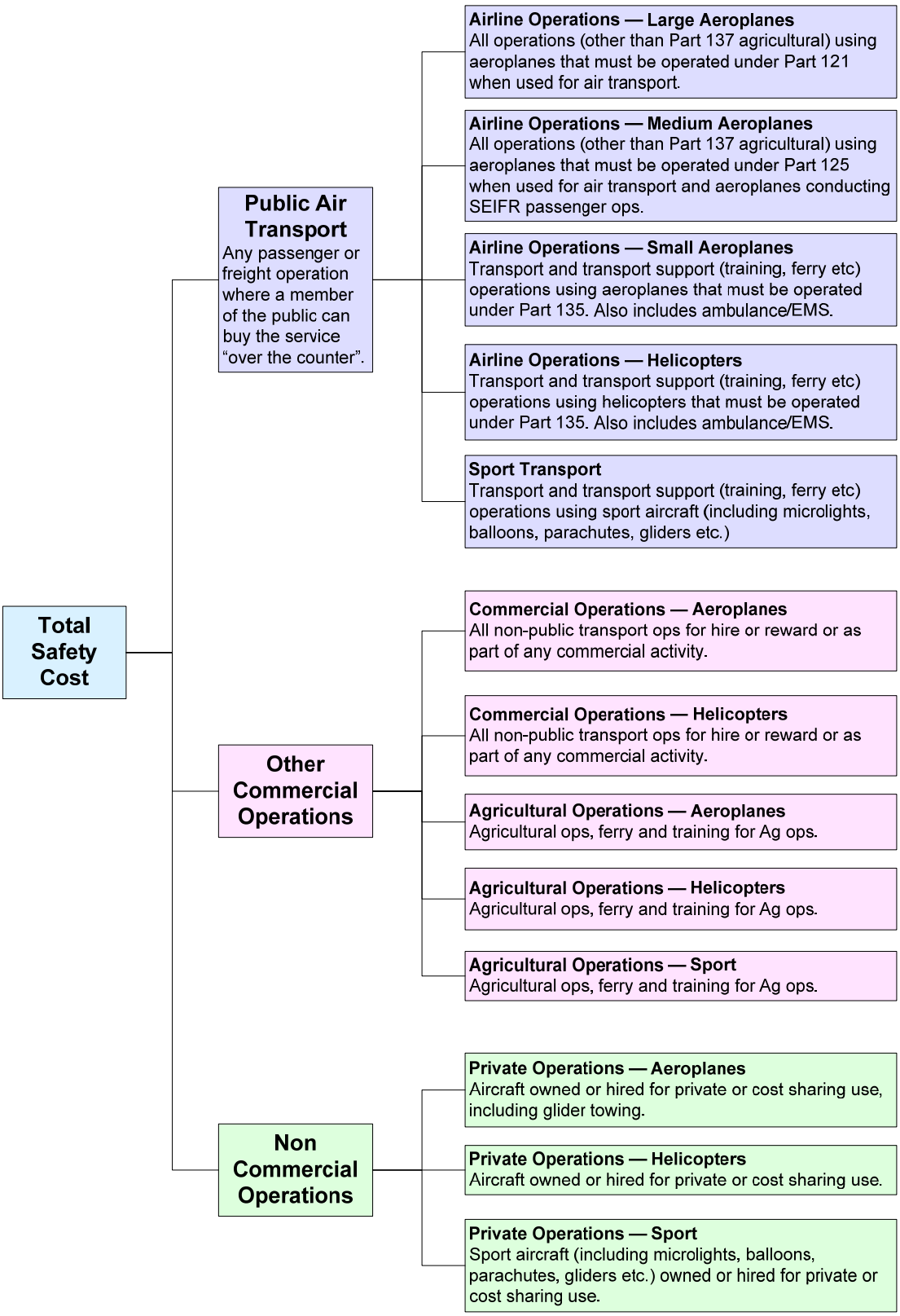
(6) involves verified exposure to infectious substances or injurious radiation.

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



Errata for previous reports

Aviation Safety Summary Report for 1 April to 30 June 2010

Safety Outcome Targets for 2010

On pages 4 and 7 in the Safety Target Structure and Safety Target Graphs sections, and page 20 in the Social Cost $ million row of the Quarterly Statistics table, there are some errors. These errors were due to an incorrect value recorded for an aircraft destroyed in an accident in the Agricultural Operations – Aeroplane safety target group.

A corrected and updated safety target graph and corrected values of quarterly Social Cost $ million are shown in the report for 1 July to 30 September 2010 on pages 7 and 21.

The correct data for page 4, Safety Target Structure, is shown below:

The following table displays the social cost for each Safety Target Group for the quarters 1 April to 30 June 2009 and 2010. Social cost is the cost of fatal, serious and minor injuries, and aircraft destroyed, expressed in 2009 dollars.

Safety Target Group	1 Apr to 30 Jun 2009 $m	1 Apr to 30 Jun 2010 $m	Change $m
Airline Operations - Large Aeroplanes	0.02	0.00	- 0.02
Airline Operations - Medium Aeroplanes	0.00	0.00	0.00
Airline Operations - Small Aeroplanes	0.00	0.00	0.00
Airline Operations - Helicopter	0.00	0.00	0.00
Sport Transport	0.38	0.37	- 0.02
Other Commercial Operations - Aeroplane	0.00	0.00	0.00
Other Commercial Operations - Helicopter	0.00	0.00	0.00
Agricultural Operations - Aeroplane	0.00	0.67	+ 0.67
Agricultural Operations - Helicopter	0.02	0.00	- 0.02
Agricultural Operations - Sport	0.00	0.00	0.00
Private Operations - Aeroplane	0.00	0.00	0.00
Private Operations - Helicopter	0.00	0.00	0.00
Private Operations - Sport	1.12	0.45	- 0.67
Total	**1.53**	**1.49**	**- 0.05**

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.