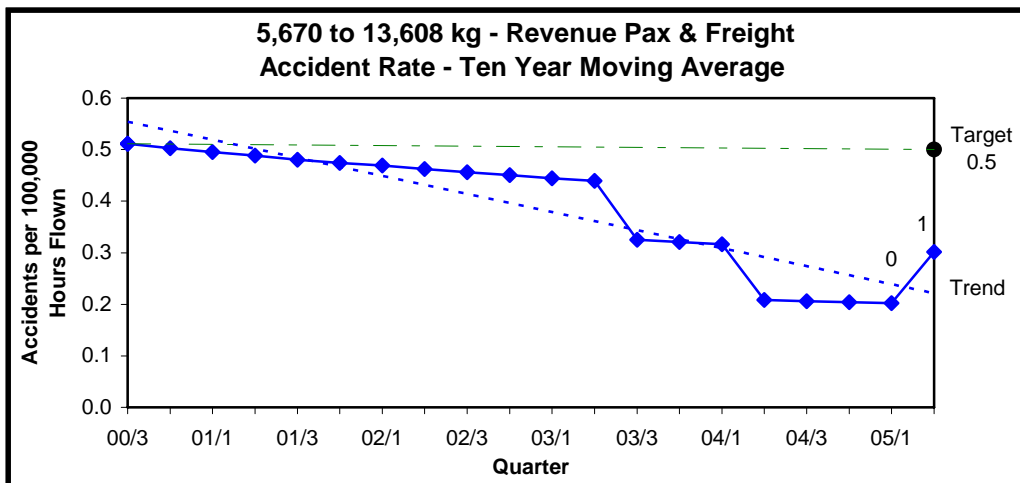




CIVIL AVIATION AUTHORITY
OF NEW ZEALAND

Aviation Safety Summary Report

1 July to 30 September 2005



The accident rate for the period ended 30 June 2005 and the trend line are below the "Target" line. The accident rate is currently below the 2005 target of 0.5 accidents per 100,000 flying hours.

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 versus targets. This complements the more detailed six-monthly “Aviation Industry Safety Update”, which is available only on the CAA web site.

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

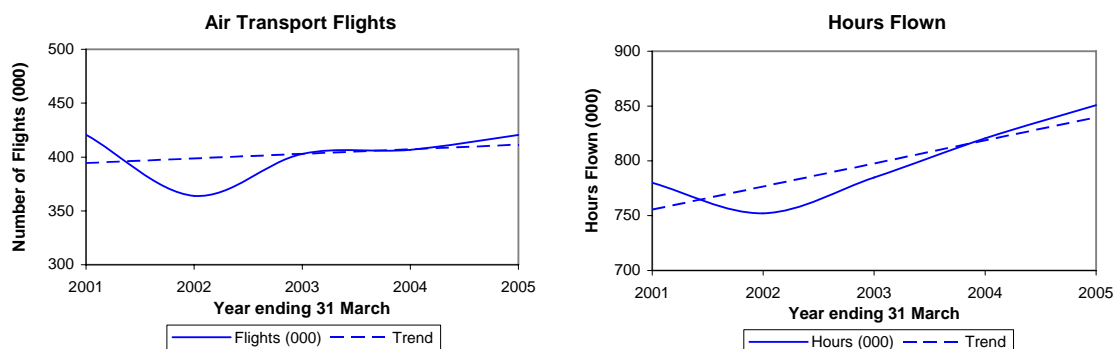
Activity

General

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 April 2000 to 31 March 2005 (excluding sport).



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

Quarterly Comparison

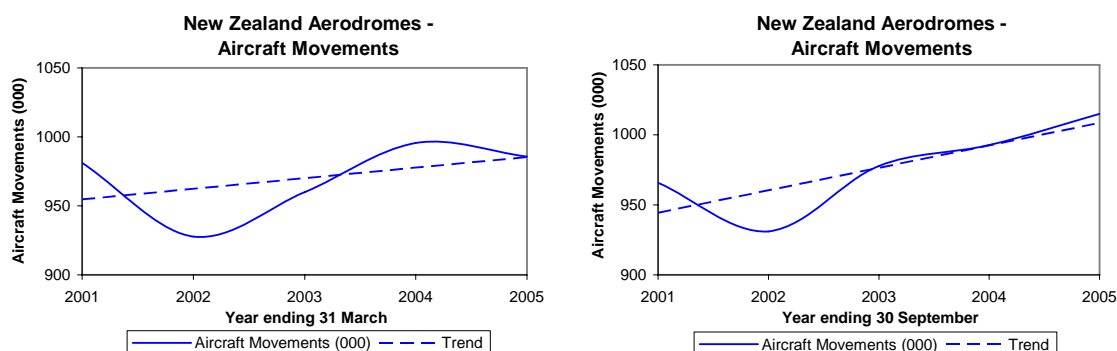
Activity	1 Jan to 31 Mar	1 Jan to 31 Mar	Change	
	2004	2005	Number	Percentage
Air Transport Flights	115,052	118,483	+ 3,431	+ 3.0
Total Hours	228,439	234,454	+ 6,015	+ 2.6

Note that these assessments exclude sport aircraft, hang gliders and parachutes, and foreign registered aircraft that are operated in New Zealand, and are based on Aircraft Operating Statistics for periods up to the quarter ended 31 March 2005 - the most recent quarter for which these data are available.

Aircraft Movements

Trends

The following graphs show the number of aircraft movements at certificated aerodromes (annual data) for the five-year periods 1 April 2000 to 31 March 2005 (the same period as for Air Transport Flights and Total Hours) and 1 October 2000 to 30 September 2005 (the most recent data).



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

Quarterly Comparison

Activity	1 Jul to 30 Sep	1 Jul to 30 Sep	Change	
	2004	2005	Number	Percentage
Aircraft Movements	243,338	260,951	+ 17,613	+ 7.2

Note that this covers certificated aerodromes only. Includes Auckland, Christchurch, Dunedin, Gisborne (from December 2004), Hamilton, Invercargill, Napier, Nelson, New Plymouth, Ohakea, Palmerston North, Queenstown, Rotorua, Taupo, Tauranga, Wellington and Woodbourne. Excludes Chatham Islands/Inia William Tuuta Memorial Airport, Kerikeri/Bay of Islands, Manapouri, Mount Cook, Timaru, Wanganui, Westport and Wigram.

Registered Aircraft

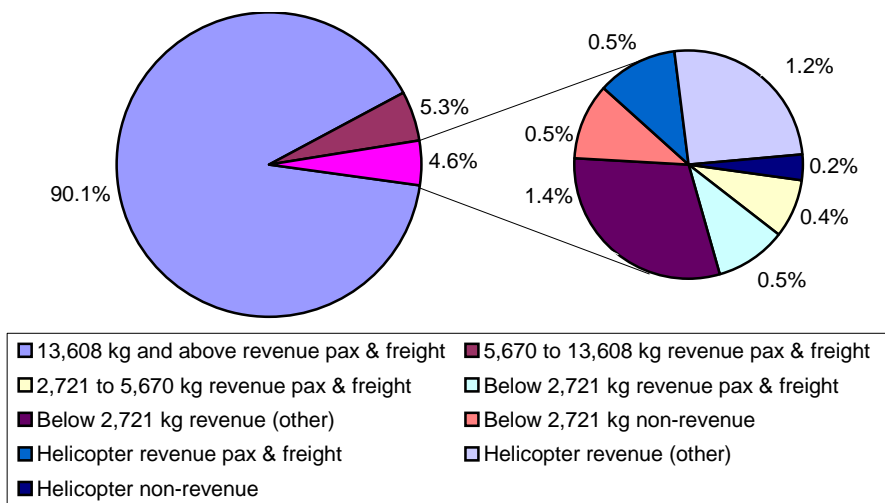
Quarterly Comparison

Aircraft Group	30 Sep	30 Sep	Change	
	2004	2005	Number	Percentage
13,608 kg and above	93	96	+ 3	+ 3.2
5,670 to 13,608 kg	71	66	- 5	- 7.0
2,721 to 5,670 kg	126	145	+ 19	+ 15.1
Below 2,721 kg	1,540	1,555	+ 15	+ 1.0
Helicopters	575	629	+ 54	+ 9.4
Sport	1,332	1,405	+ 73	+ 5.5
Total	3,737	3,896	+ 159	+ 4.3

Industry Size and Shape

The following graph shows the size and shape of the aviation industry as determined by aircraft that returned Aircraft Operating Statistics in the relevant safety target group categories for the period 1 January to 31 March 2005. The number of seats for aircraft with no seats recorded on the database was estimated using (maximum take off weight (lb) of the aircraft/1000). This does not take into account aircraft that are used for freight only, because the small number of aircraft in this category has a minimal effect on the overall outcome. For each safety target group the average number of seats is multiplied by the total hours flown, to give the number of seat hours offered by the group.

Percentage Seat Hours

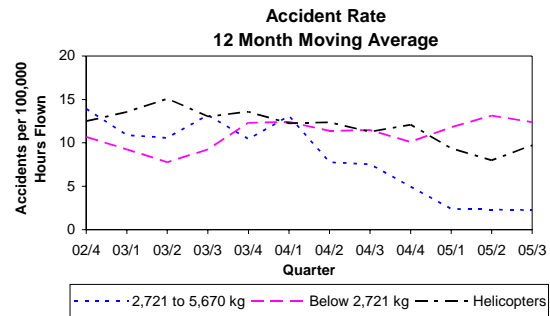
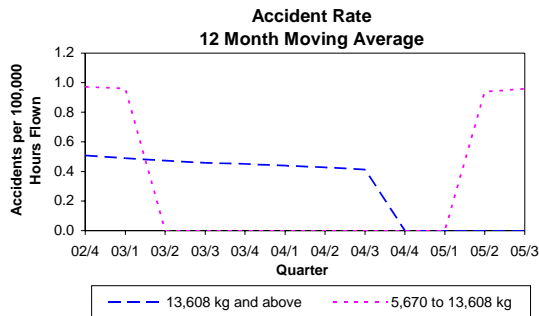


Note that this graph excludes revenue (other) and non-revenue hours flown by the 2,721 kg and above groups because these activities are not included in the Accident Rate Reduction Target graphs.

Accidents

Trends

The following graphs show the aircraft accident rates (12 month moving average) for the three-year period 1 October 2002 to 30 September 2005 (excluding Sport).



Quarterly Comparison

Number of Accidents

Aircraft Group	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
13,608 kg and above	0	0	0
5,670 to 13,608 kg	0	0	0
2,721 to 5,670 kg	1	1	0
Below 2,721 kg	9	7	- 2
Helicopters	2	5	+ 3
Sport	2	3	+ 1
Hang Gliders	1	1	0
Parachutes	0	0	0
Total	15	17	+ 2

Severity of Accidents

Severity	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
Critical	6	7	+ 1
Major	9	8	- 1
Minor	0	2	+ 2

No accidents in the 5,670 kg and above groups were classified as Critical.

Number of Fatal Accidents (and Number of Fatal Injuries)

Aircraft Group	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
13,608 kg and above	0	0	0
5,670 to 13,608 kg	0	0	0
2,721 to 5,670 kg	0	0	0
Below 2,721 kg	0	1 (2)	+ 1 (+ 2)
Helicopters	0	1 (1)	+ 1 (+ 1)
Sport	0	0	0
Hang Gliders	0	0	0
Parachutes	0	0	0
Total	0	2 (3)	+ 2 (+ 3)

Number of Serious Injuries

Aircraft Group	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
13,608 kg and above	0	0	0
5,670 to 13,608 kg	0	0	0
2,721 to 5,670 kg	0	0	0
Below 2,721 kg	0	0	0
Helicopters	0	1	+ 1
Sport	0	0	0
Hang Gliders	1	1	0
Parachutes	0	0	0
Total	1	2	+ 1

Number of Minor Injuries

Aircraft Group	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
13,608 kg and above	0	0	0
5,670 to 13,608 kg	0	0	0
2,721 to 5,670 kg	1	0	- 1
Below 2,721 kg	1	0	- 1
Helicopters	0	3	+ 3
Sport	0	1	+ 1
Hang Gliders	0	0	0
Parachutes	0	0	0
Total	2	4	+ 2

Significant Accidents and Other Injury Accidents

Significant Injury Accidents

This section describes significant injury accidents that occurred during the period 1 July to 30 September 2005.

Below 2,721 kg

- An aeroplane on a private flight crashed into the sea off Amberley, killing both occupants.

Helicopters

- A helicopter on a private flight was seen yawing uncontrollably before diving and hitting the ground nearly inverted, killing the pilot and causing serious injuries to the passenger.

Significant Non-Injury Accidents

This section describes significant non-injury accidents that occurred during the period 1 July to 30 September 2005.

Below 2,721 kg

- A twin engined aeroplane on a freight flight made a gear up landing due to incorrect maintenance of the nose landing gear.
- An aeroplane on a transport passenger A to B flight crashed just to the right of the runway shortly after lifting off.

Other Injury Accidents

This section describes other injury accidents that occurred during the period 1 July to 30 September 2005.

Helicopters

- A helicopter on a private flight rolled on landing after possibly clipping something with its main rotor. The pilot received minor injuries.
- A helicopter on a private flight crashed after flying in weather conditions well below minima. Both occupants received minor injuries.

Sport

- An amateur built aeroplane on a private flight flipped after making a forced landing due to engine failure. The pilot received minor injuries.

Hang Gliders

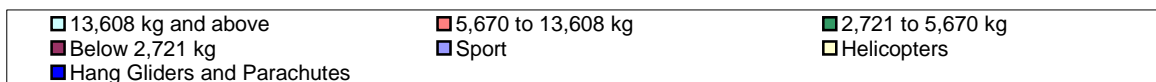
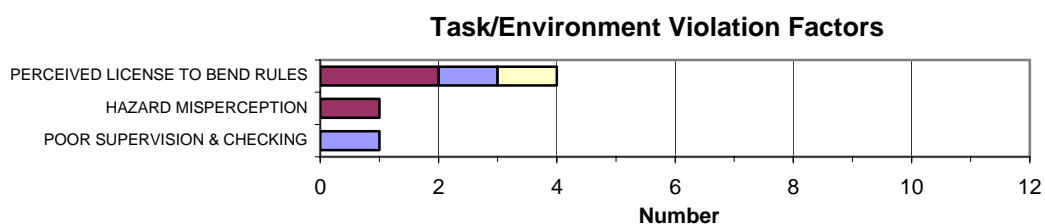
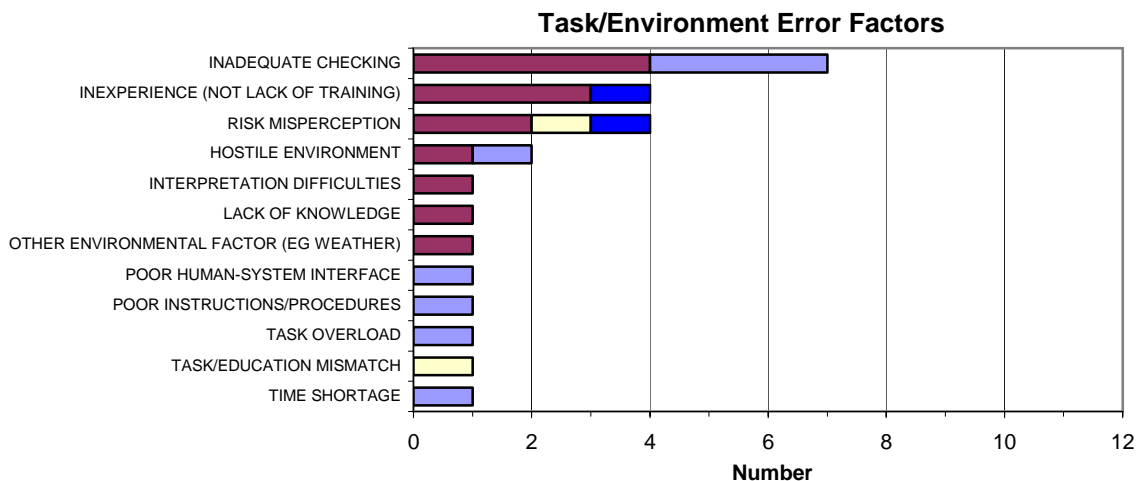
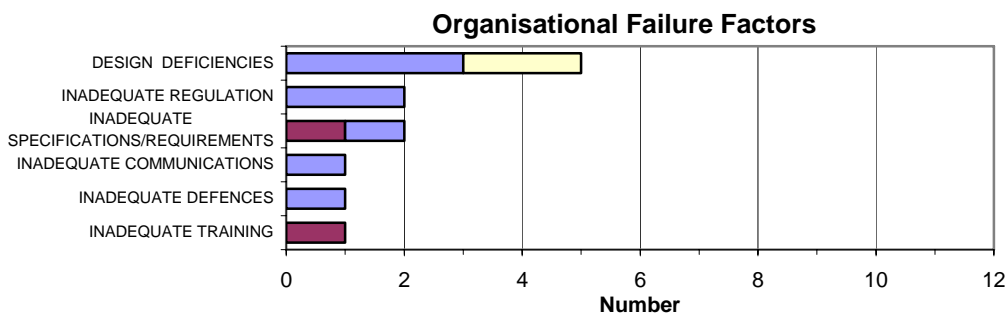
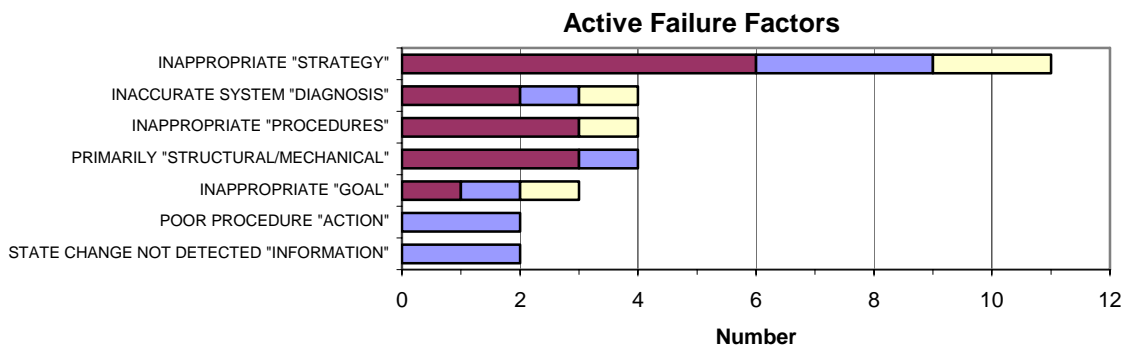
- A hang glider on a private flight crashed into a hillside, causing serious injuries to the pilot.

Accident Causal Factors by Aircraft Group

The following graphs show the number of causal factors recorded for accidents that occurred during the 12-month period 1 July 2004 to 30 June 2005 for the various aircraft groups.

Causal factors have been assigned to 47 (52%) of the 91 accidents.

Note that causes are not yet available for all accidents that occurred in the 1 July to 30 September 2005 period.



Accident Reduction Targets - 2005

Targets that were achieved:

- 13,608 kg and above revenue pax & freight,
- 5,670 to 13,608 kg revenue pax & freight,
- below 2,721 kg revenue (other),
- helicopter revenue pax & freight, and
- helicopter revenue (other) operations.

Targets that were not achieved:

- 2,721 to 5,670 kg revenue pax & freight,
- below 2,721 kg revenue pax & freight,
- below 2,721 kg non-revenue operations, and
- helicopter non-revenue operations.

The assessments above take into account the Aircraft Operating Statistics for April to June 2005 that are still in progress.

Graphs

The “Target” lines begin at the accident rates that existed at the start of the 5-year target period.

Pending receipt of Aircraft Operating Statistics the accident rates are based on estimated hours for the quarter 2005/2.

The actual numbers of accidents for the quarters 2005/1 and 2005/2 are shown next to the accident rates, and the trend is a dashed blue line.

Note that the CAA accident rates for the period ended 31 March 2005, based on estimated hours, were within 5% of the final rate except in the following cases.

Four exceptions occurred in the 1 January to 31 March 2005 report:

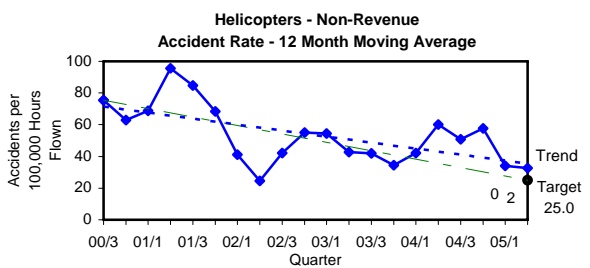
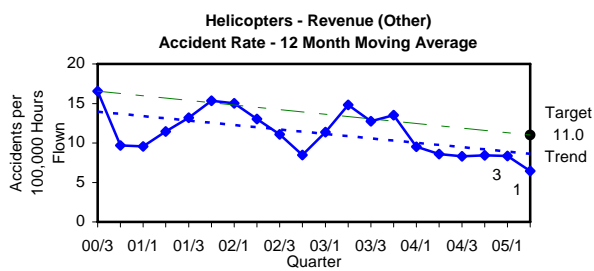
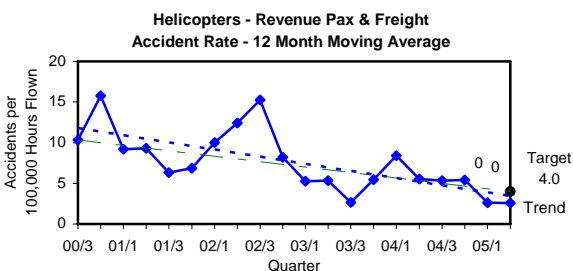
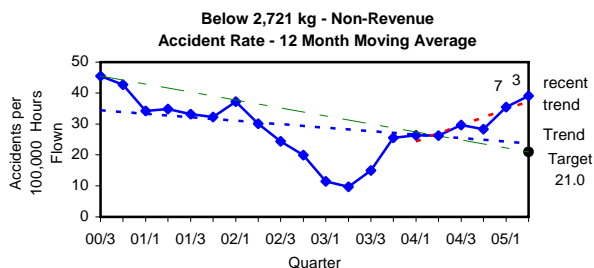
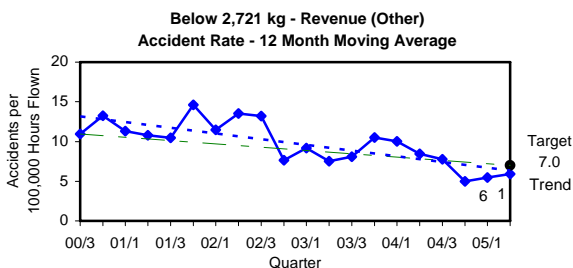
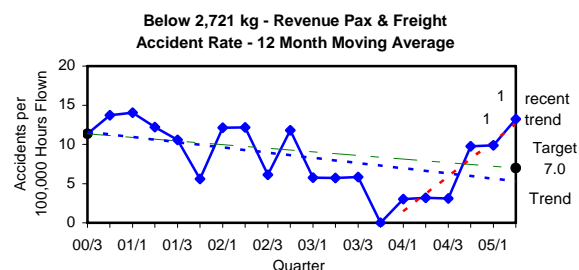
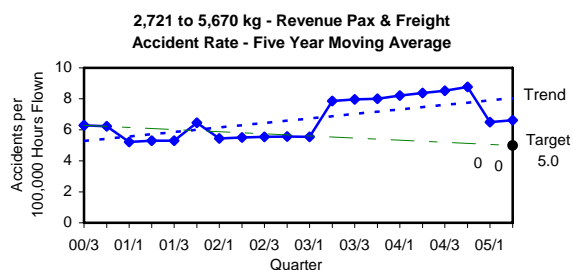
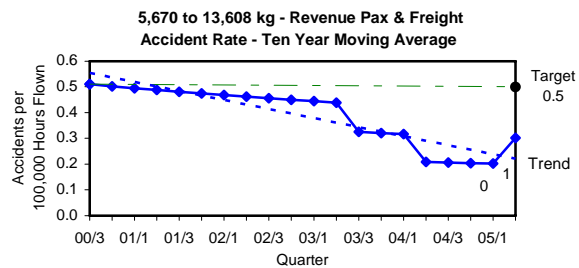
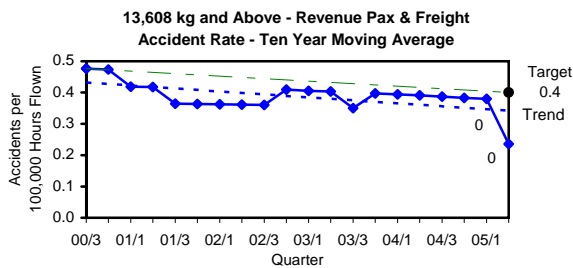
- below 2,721 kg revenue pax & freight (12.6% error),
- helicopter revenue pax & freight (7.4% error),
- helicopter revenue (other) (6.7% error), and
- helicopter non-revenue operations (- 20.0% error).

The error in the helicopter non-revenue operations accident rate placed the group below the “Target” line instead of above the line. The other errors did not change whether the groups were above or below the “Target” line.

Two exceptions occurred in the 1 April to 30 June 2005 report.

- below 2,721 kg revenue pax & freight (- 5.1% error), and
- helicopter non-revenue operations (15.8% error).

These errors did not change whether the groups were above or below the “Target” line.



Safety Outcome Targets for 2010

The Civil Aviation Authority has developed Safety Outcome Targets to be achieved by the year 2010. The new targets came into effect on 1 July 2005. These targets follow on from the current Safety Outcome Targets, which were set for 2005.

The CAA has identified two key benefits of setting Safety Outcome Targets. The targets provide a strategic goal for the CAA and provide links to its Vision of “New Zealand aviation free from safety failure, and contributing to an integrated, responsive, and sustainable transport system.” The targets also provide a means of monitoring the success of the aviation community as a whole in influencing safety outcomes. The Safety Outcome Targets enable the Government, the public, and the aviation community to measure safety performance against an appropriate yardstick.

Consultation

To begin the process of setting Safety Targets for 2010, the CAA used a commercial survey organisation to help gather the views of passengers, people who charter aircraft, and members of the wider community who may be affected by aviation risk. The overall objective was to gain an understanding of general perceptions regarding the level of aviation safety within New Zealand.

Aviation community consultation was also vital to this project. To achieve this, the CAA sent consultation packs directly to 40 organisations that CAA senior managers believed would be interested in expressing their views. All consultation material was posted on the CAA web site, along with an open invitation for interested parties to complete and return the questionnaire. The consultation period finished at the end of January 2005. The analysis of the aviation community’s input and the Colmar Brunton survey of the general public are available on the CAA web site under “Safety information – Towards 2010 Safety Targets for the Year 2010”.

After consultation, it was decided that the Safety Outcome Targets for 2010 would be set in terms of social cost to the nation, rather than continuing to use accident rates.

The Social Cost of Accidents

The use of accident rates can be misleading, because each accident has a different economic and social impact: a minor accident where there is no injury, and a fatal accident where two people are killed, are each recorded as one accident, even though the economic and social consequences are very different. Estimating the social cost of accidents is also a way of determining what the real cost of aviation accidents is to the nation.

The main components of the social cost of accidents are fatalities, serious injuries, and aircraft destroyed in fatal or serious injury accidents. The value to the nation of fatalities (\$2.84 million each) is the value of statistical life (VOSL) estimated by the Land Transport Safety Authority (LTSA) in June 2004 dollars. The value of serious injuries (\$0.284 million each) is also the LTSA’s figure. Aircraft destroyed are valued using estimates of aircraft values made by the CAA on the basis of market prices in a number of developed aviation nations (in 1999 dollars). These values, along with the value of statistical life, will shortly be reviewed and expressed in 2005 dollars.

The total estimated social cost of accidents for the nine 2005 safety target groups and the sport group over the 10 years 1 July 1995 to 30 June 2005 is \$647.30 million (on average \$64.7 million per annum). This represents the cost of 207 fatalities, 105 serious injuries, and 99 aircraft destroyed in fatal and serious injury accidents. While 96% of the aviation activity in New Zealand is undertaken by large and medium airline aircraft, almost 97% of the cost of accidents is incurred by aeroplanes below 5,670 kg, helicopters, balloons, and sport aircraft, i.e. 4% of the activity is responsible for 97% of the social cost.

The data used to calculate accident rates will still be collected; this does not change with the move to using social cost for safety targets. Accident rate information, therefore, will not be lost. It will still be used for safety analysis, and the new social cost data will be in addition to the current accident rate data produced by the CAA Safety Analysis Unit.

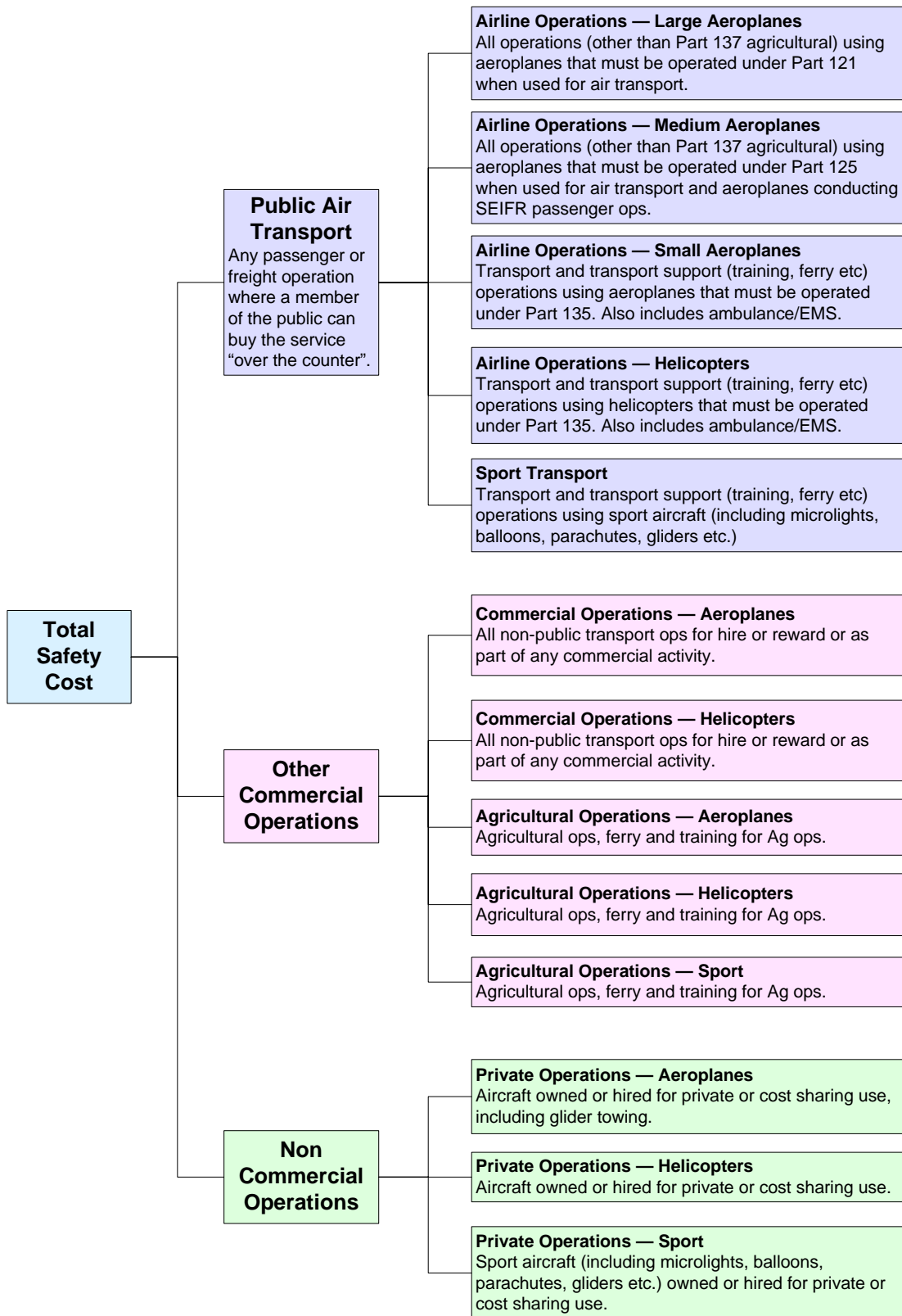
Safety Target Structure

The 2005 Safety Target Groups were based on the type of aircraft, weight and the type of operation being carried out at the time of the accident. The 2010 Safety Target Groups will see all New Zealand aviation classified under three broad headings: Public Air Transport, Other Commercial Operations, and Non-Commercial Operations.

Thirteen further sub-groups have been created under these headings to enable differentiation between aeroplanes, helicopters, and sport aircraft, and to allow for different weight groups.

The following table displays the social cost for each Safety Target Group for the quarter 1 July to 30 September 2005. Cost per fatal and serious injury in 2004 dollars, cost per aircraft destroyed in 2005 dollars.

Safety Outcome Target Group	Social Cost \$m
Airline Operations - Large Aeroplanes	-
Airline Operations - Medium Aeroplanes	-
Airline Operations - Small Aeroplanes	-
Airline Operations - Helicopter	-
Sport Transport	-
Other Commercial Operations - Aeroplane	0.14
Other Commercial Operations - Helicopter	0.23
Agricultural Operations - Aeroplane	-
Agricultural Operations - Helicopter	-
Agricultural Operations - Sport Aircraft	-
Private Operations - Aeroplane	5.86
Private Operations - Helicopter	3.40
Private Operations - Sport	0.31



Safety Outcome Targets for 2010

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

Historical data indicates that the 13,608 kg and above and 5,670 to 13,608 kg revenue pax and freight groups account for 96% of New Zealand aviation exposure units, and have the lowest social cost per seat hour (\$0.13 and \$0.00 respectively). This safety outcome reflects the significance of 6 fatalities in the 13,608 kg and above group, and 0 fatalities in the 5,670 to 13,608 kg group over the past 10 years. An outcome target of \$0.10 per seat hour for the new Public Air Transport – Large and Medium Aeroplanes groups is considered both reasonable, and achievable, representing less than 3 fatalities in these groups over the next 5 years.

Historical data indicates that for the remaining groups the safety outcomes using the new social cost system would have been in the range of \$6.44 to \$174.06 per seat hour. These are several orders of magnitude worse than the outcomes achieved by Large and Medium Transport Aeroplanes. The lower end of this range (in terms of fatalities per hour of flying) is roughly equivalent to what is being achieved by Part 135 operations in the USA, and accordingly an outcome of \$6.50 per seat hour has been targeted for most New Zealand commercial aviation. It should be noted that research indicates this outcome is almost twice the social cost (on an equivalent exposure basis) associated with the operation of private motor cars in New Zealand.

For non-commercial and some commercial operations, it is unlikely that social costs can be reduced even to these levels in the short term, and accordingly ‘softer’ targets have been set for these groups.

The table on the next page shows the starting point for the new Safety Outcome Targets for the period ending 30 June 2005 in 2004 dollars (excluding the cost of aircraft destroyed). On 1 July 2005 calculations showed that some groups were already achieving or bettering their desired outcome target level, which is very pleasing. This is because there were less fatal and serious injury accidents in the 12 months leading up to 1 July 2005 than the 12-month average for the 5-year period used when the targets were developed. These base line estimates will be confirmed or adjusted when operating data for the January to June 2005 period has been received and processed. The target groups highlighted in yellow are the groups where the major safety improvements need to be achieved.

Safety Outcome Target Group	Type of Injuries						Previous Estimate \$	Current Estimate \$	Target \$
	Fatal Crew	Serious Crew	Minor Crew	Fatal Pax	Serious Pax	Minor Pax			
Airline Operations - Large Aeroplanes*	2	2			1		0.13	0.03	0.10
Airline Operations - Medium Aeroplanes*	2	1		5	1	2		0.13	0.10
Airline Operations - Small Aeroplanes	2	1		4	1		65.18	85.91	6.50
Airline Operations - Helicopter							55.46		6.50
Sport Transport							113.21		13.00
Other Commercial Operations - Aeroplane	1			1			6.44	21.31	6.50
Other Commercial Operations - Helicopter			1				36.76	0.07	6.50
Agricultural Operations - Aeroplane	1						141.90	109.05	14.00
Agricultural Operations - Helicopter		1	1				85.44	18.45	14.00
Agricultural Operations - Sport Aircraft									28.00
Private Operations - Aeroplane			2				115.51	0.22	10.00
Private Operations - Helicopter							98.31		10.00
Private Operations - Sport	2	6	3		2	3	174.06	137.27	20.00

Previous Estimate:

This was the estimate of social cost of injuries over exposure used during the development of the Safety Outcome Targets.

- For large and medium aeroplane operations 10 years of injury data was considered
- For all other operations 5 years of injury data was considered.

It was not feasible to estimate the previous performance of the new Airline Operations – Medium Aeroplanes target group because it comprises elements from two previously disparate groups.

There is no previous history for the Agricultural Operations – Sport group.

Current Estimate:

This is the estimated social cost of injuries over exposure during the relevant averaging period.

- For large and medium aeroplane operations 10 years of injury data*
- For all other operations 1 year of injury data
- The 4 groups with no injuries recorded in the previous 12 months have been left blank.

The current position for the Airline Operations – Medium Aeroplanes group reflects the significance of injury accidents involving aircraft that are now required to be operated in accordance with Part 125. These accidents occurred prior to the development and implementation of the improved standards required by Part 125.

The table below shows the new Safety Outcome Targets for the period ending 30 September 2005 in 2004 dollars (excluding the cost of aircraft destroyed). The target groups highlighted in yellow are the groups where the major safety improvements need to be achieved.

Safety Outcome Target Group	Type of Injuries						Current Estimate \$	Target \$
	Fatal Crew	Serious Crew	Minor Crew	Fatal Pax	Serious Pax	Minor Pax		
Airline Operations - Large Aeroplanes*	2	2			1		0.03	0.10
Airline Operations - Medium Aeroplanes*	2				1	2	0.04	0.10
Airline Operations - Small Aeroplanes	2	1		4	1		85.91	6.50
Airline Operations - Helicopter								6.50
Sport Transport								13.00
Other Commercial Operations - Aeroplane	1			1			21.31	6.50
Other Commercial Operations - Helicopter			1				0.07	6.50
Agricultural Operations - Aeroplane	1	1					120.43	14.00
Agricultural Operations - Helicopter		1	1				18.45	14.00
Agricultural Operations - Sport Aircraft								28.00
Private Operations - Aeroplane	1		1	1			48.88	10.00
Private Operations - Helicopter	1		1		1		98.33	10.00
Private Operations - Sport	2	6	5		2	3	100.95	20.00

Current Estimate:

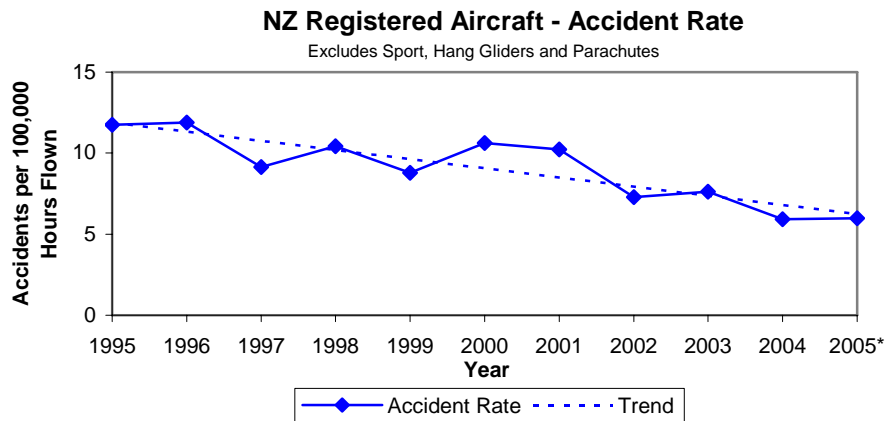
This is the estimated social cost of injuries over exposure for the relevant averaging period ending 30 September 2005.

- For large and medium aeroplane operations 10 years of injury data*
- For all other operations 1 year of injury data
- The 3 groups with no injuries recorded in the previous 12 months have been left blank.

Graphs displaying the new Safety Outcome Targets and the progress over each quarter will be developed once there are sufficient data points to show.

Overall Accident Rate

The following graph shows the overall accident rate per 100,000 hours flown (excluding the sport group, hang gliders and parachutes) for the years 1995 to 2004. The data point for 2005* is for 1 January to 30 September 2005 only.



Note that this graph does not show a moving average.

Bird Incident Rates

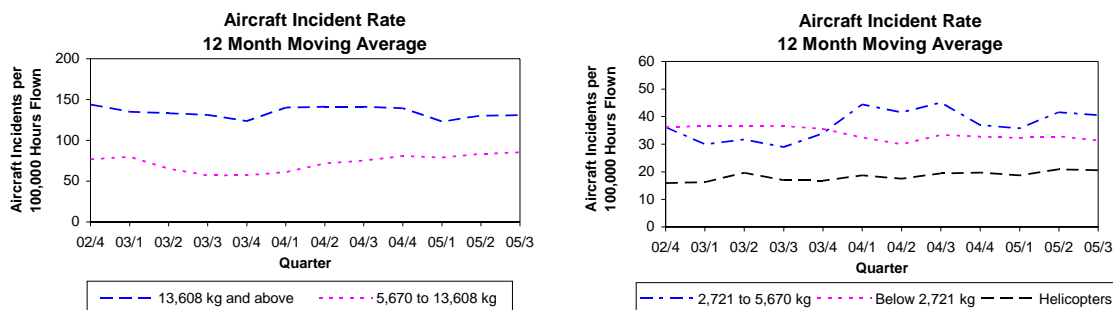
Bird hazard monitoring has been carried out against the CAA standard for the period ended 30 June 2005. Analysis shows that 10 of the 18 monitored aerodromes have bird strike rates above the “trigger level” for CAA action.

No aerodromes exhibited strike rates in the high risk category of the CAA standard (above 10.0 bird strikes per 10,000 aircraft movements). Eight aerodromes exhibited a strike rate in the medium risk category (5.0 to 10.0 per 10,000 movements) and all of these aerodromes displayed a long-term upward or constant trend. Ten aerodromes exhibited a strike rate in the low risk category (below 5.0 per 10,000 movements) and two of these aerodromes displayed a long-term upward trend.

Aircraft Incidents

Trends

The following graphs show the aircraft incident rates (12 month moving average) for the three-year period 1 October 2002 to 30 September 2005 (excluding Sport).



The ratios of reported aircraft incidents for the below 2,721 kg and helicopter groups to the respective number of reported accidents continue to be low.

Quarterly Comparison

Number of Aircraft Incidents

Aircraft Group	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
13,608 kg and above	91	97	+ 6
5,670 to 13,608 kg	19	19	0
2,721 to 5,670 kg	4	4	0
Below 2,721 kg	24	20	- 4
Helicopters	7	7	0
Sport	5	3	- 2
Unknown	11	12	+ 1
Total	161	162	+ 1

Severity of Aircraft Incidents

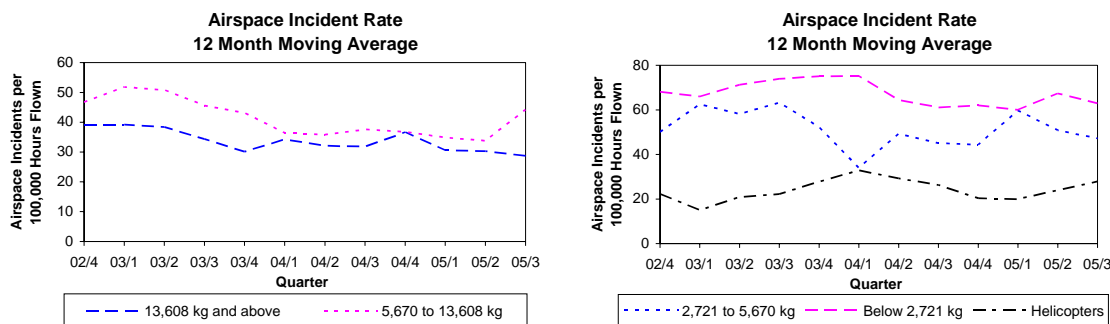
Severity	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
Critical	0	0	0
Major	12	20	+ 8
Minor	149	142	- 7

No aircraft incidents in the 5,670 kg and above groups were classified as Critical.

Airspace Incidents

Trends

The following graphs show the airspace incident rates (12 month moving average) for the three-year period 1 October 2002 to 30 September 2005 (excluding Sport).



Quarterly Comparison

Number of Airspace Incidents

Aircraft Group	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
13,608 kg and above	17	14	- 3
5,670 to 13,608 kg	7	17	+ 10
2,721 to 5,670 kg	4	3	- 1
Below 2,721 kg	42	30	- 12
Helicopters	6	13	+ 7
Sport	6	4	- 2
Unknown	72	82	+ 10
Total	154	163	+ 9

Severity of Airspace Incidents

Severity	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
Critical	0	0	0
Major	11	13	+ 2
Minor	143	150	+ 7

No airspace incidents in the 5,670 kg and above groups were classified as Critical.

Attributability

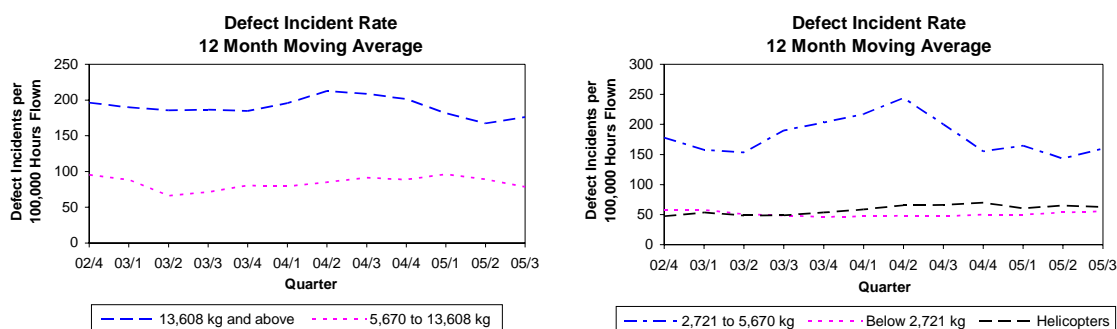
Of the 163 airspace incidents in the 1 July to 30 September 2005 quarter, 27% are Air Traffic Service (ATS) attributable, 59% are pilot attributable, 0% are ATS and pilot attributable, and 14% are unknown attributable.

Since October 2002 the long-term trends of the ATS attributable airspace occurrence rate and pilot attributable rate are upward. However, the slope of the ATS attributable trend line is close to zero.

Defect Incidents

Trends

The following graphs show the defect incident rates (12 month moving average) for the three-year period 1 October 2002 to 30 September 2005 (excluding Sport).



Quarterly Comparison

Number of Defect Incidents

Aircraft Group	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
13,608 kg and above	106	134	+ 28
5,670 to 13,608 kg	32	19	- 13
2,721 to 5,670 kg	8	17	+ 9
Below 2,721 kg	30	37	+ 7
Helicopters	24	21	- 3
Sport	2	2	0
Unknown	5	4	- 1
Total	207	234	+ 27

Severity of Defect Incidents

Severity	1 Jul to 30 Sep 2004	1 Jul to 30 Sep 2005	Change
Critical	2	0	- 2
Major	17	23	+ 6
Minor	188	211	+ 23

No defect incidents in the 5,670 kg and above groups were classified as Critical.

Rate Monitoring

Defect incident rate monitoring of individual types of medium and large air transport aircraft has been carried out against the CAA standard for the period ended 30 June 2005. Analysis shows that none of the twelve monitored aircraft types have defect rates above the “trigger level” for CAA action.

Quarterly Statistics

Quarter	2002/4	2003/1	2003/2	2003/3	2003/4	2004/1
Number of Air Transport Flights¹	104,098	114,820	94,601	88,249	108,890	115,052
Number of Hours Flown¹	205,768	222,324	196,156	182,696	213,246	228,439
Number of Aircraft Movements²	240,492	252,948	245,136	239,288	249,245	261,860
Number of Aircraft on the Register³	3,465	3,497	3,530	3,552	3,600	3,675
Number of Licences						
Private Pilot Licence	3,648	3,688	3,762	3,773	3,656	3,710
Commercial Pilot Licence	3,250	3,266	3,317	3,335	3,276	3,349
Airline Transport Pilot Licence	1,564	1,574	1,608	1,612	1,624	1,661
Aircraft Maintenance Engineer Licence	1,806	1,827	1,847	1,865	1,881	1,898
Air Traffic Controller Licence	270	282	305	304	286	304
Number of Part 119 Certificated Operators						
Air Operator – Large Aeroplanes	11	10	12	13	12	13
Air Operator – Medium Aeroplanes	12	11	13	13	13	12
Air Operator – Helicopters and Small Aeroplanes	127	147	147	147	146	146
Air Operator – Pacific	0	0	0	0	0	2
Number of Aircraft Accidents⁴						
13,608 kg and above	1	0	0	0	1	0
5,670 to 13,608 kg	0	0	0	0	0	0
2,721 to 5,670 kg	2	0	2	1	1	1
Below 2,721 kg	6	9	4	8	15	9
Helicopters	3	9	5	3	4	7
Sport	10	3	7	4	7	6
Hang Gliders	1	5	1	0	2	4
Parachutes	0	3	0	0	0	1
Unknown	1	1	0	0	1	2
Number of Fatal Accidents⁴	3	4	6	2	7	3
Number of Fatalities⁴	7	4	15	2	10	6
Number of Serious + Minor Injuries⁴	8	12	4	4	6	2
Injury Social Cost \$ million⁵						
Number of Incidents⁶	845	871	891	755	902	1,019
Number of Aviation Related Concerns	54	101	56	56	76	85

¹ New Zealand registered aircraft. Excluding the sport group, hang gliders and parachutes. Estimated for 2005/2 and 2005/3.

² Certificated aerodromes. Includes Auckland, Christchurch, Dunedin, Gisborne (from December 2004), Hamilton, Invercargill, Napier, Nelson, New Plymouth, Ohakea, Palmerston North, Queenstown, Rotorua, Taupo, Tauranga, Wellington and Woodbourne. Excludes Chatham Islands/Inia William Tuuta Memorial Airport, Kerikeri/Bay of Islands, Manapouri, Mount Cook, Timaru, Wanganui, Westport and Wigram.

³ Includes the sport group. Excludes hang gliders and parachutes.

⁴ All aircraft categories. Includes hang gliders and parachutes.

⁵ All aircraft categories. Cost per fatal and serious injury in June 2004 dollars, cost per aircraft destroyed in 2005 dollars.

⁶ All incident sub-types

Quarter	2004/2	2004/3	2004/4	2005/1	2005/2	2005/3
Number of Air Transport Flights¹	95,715	97,568	108,865	118,483	97,148	98,856
Number of Hours Flown¹	203,332	204,513	208,652	234,454	208,625	210,062
Number of Aircraft Movements²	238,223	243,338	239,658	264,617	249,893	260,951
Number of Aircraft on the Register³	3,703	3,737	3,795	3,828	3,872	3,896
Number of Licences						
Private Pilot Licence	3,711	3,687	3,649	3,655	3,683	3,683
Commercial Pilot Licence	3,381	3,437	3,470	3,484	3,524	3,540
Airline Transport Pilot Licence	1,695	1,714	1,733	1,746	1,791	1,802
Aircraft Maintenance Engineer Licence	1,927	1,960	1,983	2,003	2,019	2,055
Air Traffic Controller Licence	314	304	299	302	306	312
Number of Part 119 Certificated Operators						
Air Operator – Large Aeroplanes	12	12	12	11	11	12
Air Operator – Medium Aeroplanes	11	11	11	11	11	12
Air Operator – Helicopters and Small Aeroplanes	146	147	149	150	150	152
Air Operator – Pacific	1	1	1	1	2	2
Number of Aircraft Accidents⁴						
13,608 kg and above	0	0	0	0	0	0
5,670 to 13,608 kg	0	0	0	0	1	0
2,721 to 5,670 kg	0	1	0	0	0	1
Below 2,721 kg	1	9	10	14	5	7
Helicopters	5	2	5	3	3	5
Sport	3	2	10	11	6	3
Hang Gliders	0	1	2	6	0	1
Parachutes	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Number of Fatal Accidents⁴	2	0	3	4	1	2
Number of Fatalities⁴	2	0	4	7	2	3
Number of Serious + Minor Injuries⁴	2	3	9	6	5	6
Injury Social Cost \$ million⁵						9.9
Number of Incidents⁶	962	838	884	957	962	874
Number of Aviation Related Concerns	62	75	78	110	60	69

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 the 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.

Aircraft Group

The following table shows the aircraft classes included in each aircraft group.

Aircraft Group	Aircraft Class
13,608 kg and above	Aeroplane
5,670 to 13,608 kg	Aeroplane
2,721 to 5,670 kg	Aeroplane, Balloon
Below 2,721 kg	Aeroplane, Balloon
Helicopters	Helicopter
Sport	Amateur Built Aeroplane, Amateur Built Glider, Amateur Built Helicopter, Glider, Gyroplane, Microlight Class 1, Microlight Class 2, Power Glider

Aircraft Incident

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

Airspace Incident

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

- (1) avoiding collisions between aircraft; or
- (2) avoiding collisions 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.

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 seven days from the date the injury was received; or
- (2) results in a fracture of any bone, except simple fracture 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.