



# New Zealand Helicopter Safety Survey

This report presents the results of the survey distributed to participants in the New Zealand Helicopter Industry earlier in 2016. We organized this survey as part of a Themes and Systems investigation into helicopter safety in New Zealand (which you can read about [here](#)), and to gather information from industry participants about their views on issues underlying safety performance in the helicopter sector.

The survey asked nineteen multi-choice questions focusing on:

- Safety behaviours and attitudes;
- Industry structure and culture; and

- Regulations and safety initiatives.

How did we come up with the questions? Some were asked because they were identified through an analysis of helicopter accidents and incidents (by the CAA's Safety Investigation Team), and others were asked because they were raised by members of the industry. There were also two open-format questions inviting comments on the factors influencing safety performance and the characteristics required for pilot proficiency in the New Zealand helicopter industry.

In total 596 responses were received from a wide range of industry participants.

The information that the survey has captured gives us all a much richer and more sophisticated understanding of the state of the helicopter sector and the safety challenges it faces. The results raise new issues, particularly around how the CAA works with the sector and the risks that need to be concentrated on and mitigated. Identifying and developing strategies to do this is the next step.

## Results - Who Responded to the Survey?

Respondents were asked for demographic information on their gender, age, role(s) in the industry, and the operation type(s) they performed.

### GENDER

Respondents were predominantly male. 564 respondents were male, 95% of the total. 29 (5%) were female.

### AGE

Age Range	Total Respondents	Percent of Total
16-29	64	11%
30-39	124	21%
40-49	156	26%
50-59	149	25%
60+	100	17%

### ROLE

Role	Total Respondents
Helicopter Pilot	528
Business Operator/CEO	132
QA Manager	36
Maintenance Engineer	31
Other Role	74

89% of respondents were helicopter pilots. 183 (31%) respondents indicated that they held more than one role leaving 410 (69%) in a single role. 132 respondents were business operators/CEOs.

### OPERATION TYPE

Category	Total	Percentage
Private Only	127	21%
Transport & Other Commercial	123	21%
Transport & Agriculture	117	20%
Transport Only	64	11%
Non-Transport Multiple Operations	45	8%
'Other' Single Operation Only	41	7%
Transport & 'Other' Operation	36	6%
Agriculture Only	20	3%
Other Commercial Only	20	3%

357 respondents were involved in multiple types of operation, 49% of the total. The remainder indicated that they were only involved in one type of operation. The top three categories by operation type were private operators, transport and other commercial operators, and transport and agricultural operators. Together they made up 59% of all responses.

# Results - Safety Attitude & Behaviours Questions

Eight questions were presented in this section. We asked respondents to rate the frequency of four safety-related behaviours along a four-point scale running from never – rarely – sometimes – frequently. We then asked them to rate how much of a threat to safety they thought each one presented on a four-point threat scale running from no threat – small threat – moderate threat – large threat.

The items were:

1. The performance limitations of helicopters are exceeded;
2. Helicopter operators cut corners and take shortcuts;
3. When deciding to fly, safety considerations come second to financial and/or other considerations; and
4. Pilots are susceptible to peer pressure to operate in ways that are not always safe.

## HOW FREQUENTLY RESPONDENTS THOUGHT THESE HAPPENED

	Frequently	Sometimes	Rarely	Never
Performance limitations are exceeded	13% (76)	49% (289)	29% (170)	9% (51)
Operators cut corners and take shortcuts	8% (48)	42% (242)	38% (220)	11% (63)
Safety considerations come second	8% (47)	26% (153)	35% (203)	30% (175)
Pilots are susceptible to peer pressure	10% (57)	43% (247)	35% (201)	13% (75)

## HOW MUCH OF A THREAT TO SAFETY RESPONDENTS THOUGHT THESE PRESENTED

	Large Threat	Moderate Threat	Small Threat	No Threat
Performance limitations are exceeded	20% (115)	37% (214)	31% (181)	12% (72)
Operators cut corners and take shortcuts	24% (137)	34% (192)	31% (180)	11% (64)
Safety considerations come second	22% (128)	27% (155)	26% (152)	25% (143)
Pilots are susceptible to peer pressure	25% (147)	34% (198)	28% (162)	13% (73)

## QUICK FACTS

A higher proportion of respondents in 'Transport only' operations thought safety considerations came second 'sometimes or frequently' than respondents in the other categories.

18% of business operators/CEO's indicated performance limitations were exceeded frequently; 11% of non-business owners/CEO's thought it occurred frequently.

Fewer respondents involved in 'Private only' operations thought that pilots were susceptible to peer pressure than respondents involved in commercial operations.

# Results - Industry Structure & Culture Questions

Seven questions were included in this section. They were designed to get respondents' views on the state of the helicopter sector currently. Each question item consisted of a statement that respondents were asked to indicate their level of agreement with. Four levels of agreement were provided, running from 'Don't agree at all' – 'Don't really agree' – 'Agree' – 'Strongly agree'.

The questions were:

1. The New Zealand helicopter industry is close-knit;
2. Being regarded as a skilled pilot is more important than being regarded as a cautious pilot;
3. There are too many operators competing for the work that is available;
4. Hourly rates are driven down by operators undercutting one-another on price;
5. Considering the amount of work that is available, the current state of the industry is sustainable;
6. Competition in the industry leads to operators exceeding the performance limitations of their helicopters; and
7. Unsafe or unprofitable jobs are usually not rejected, because operators don't want to lose business.

## AGREEMENT/DISAGREEMENT WITH INDUSTRY STRUCTURE & CULTURE QUESTIONS

	Strongly Agree	Agree	Don't Really Agree	Don't Agree at All
The helicopter industry is close-knit	10% (57)	48% (269)	35% (197)	6% (36)
Being regarded as a skilled pilot is more important than being regarded as a cautious pilot	5% (25)	37% (204)	43% (240)	15% (86)
There are too many operators competing for the work that is available	24% (134)	43% (239)	30% (166)	4% (20)
Hourly rates are driven down by operators undercutting one-another on price	30% (168)	46% (256)	22% (120)	2% (11)
The current state of the industry is sustainable	3% (14)	46% (251)	42% (232)	10% (53)
Competition in the industry leads to operators exceeding the performance limitations of their helicopters	11% (59)	37% (204)	39% (214)	14% (78)
Unsafe or unprofitable jobs are usually not rejected, because operators don't want to lose business	9% (48)	44% (246)	34% (190)	12% (69)

## QUICK FACTS

49% of business operators/CEO's agreed that the helicopter industry was close-knit, a smaller proportion than the 61% of non-business operators/CEO's who agreed

More respondents involved in transport and agricultural operations agreed that there were too many operators competing for available work than non-transport and ag operators

Respondents involved in transport operations agreed more strongly that hourly rates were driven down by undercutting on price than respondents in other operation types

## Results - Regulations & Safety Initiatives

Four questions were included in this section, which focused on respondents' views on existing regulations and industry safety initiatives. The questions were presented with the same four-option agreement scale used for the industry structure and culture questions.

The questions were:

1. The existing rules and regulations are sufficient to reduce safety risks in the industry to acceptable levels;
2. The way that rules and regulations are applied/enforced by the CAA reduces safety risks to acceptable levels;
3. Industry-led instruction and education programmes are successful at improving safety; and
4. The industry is mostly successful at learning lessons from accidents and incidents.

### AGREEMENT/DISAGREEMENT WITH REGULATION & SAFETY INITIATIVE QUESTIONS

	Strongly Agree	Agree	Don't Really Agree	Don't Agree at All
Existing rules and regulations are sufficient to reduce safety risks to acceptable levels	13% (71)	67% (358)	16% (87)	3% (18)
The way that rules and regulations are applied/enforced by the CAA reduces safety risks to acceptable levels	6% (30)	47% (252)	36% (193)	11% (57)
Industry-led instruction and education programmes are successful at improving safety	11% (57)	67% (356)	19% (100)	4% (20)
The industry is mostly successful at learning lessons from accidents and incidents	10% (51)	57% (304)	28% (150)	5% (27)

### QUICK FACT

Respondents involved in 'Private operations only' agreed with all four of these questions in greater proportions than those involved in commercial/other operations

## Results - Open Format Questions

The final two questions in the survey gave participants the opportunity to provide their own comments. We wanted to hear what you thought the issues were, beyond the ones covered in the closed-response questions. The two questions we asked were:

1. Please provide any comments you have on helicopter safety in New Zealand. In particular we are eager to hear your ideas about causal factors underlying helicopter safety performance, as well as challenges facing the industry now and in the future; and
2. Please list what you think the most important characteristics for a proficient helicopter pilot in New Zealand.

Around 300 participants gave answers for these questions, which were analyzed to search for the main underlying 'themes'. For the first question, eight separate themes were identified that captured the content of the comments. These themes, and the number of times they were raised, are presented in the table below<sup>1</sup>.

Theme	Description	Number of Times Raised
CAA Regulatory Effectiveness	How effectively the CAA regulates the industry with its existing methods and rules	123
Training, Monitoring, and Supervision Standards	The state of training, supervision, and monitoring in the industry currently	121
CAA Rules and Regulations	The existing rules and regulations that apply to the industry	114
Market Conditions	The current state of competition in the different sectors of the industry	114
Safety Culture	The state of the 'safety culture' amongst operators and in the industry overall	89
Rogue Operators	Individuals/operators that are wilfully non-compliant, high-risk, or otherwise problematic	77
Plant and Technology	Machines operated and role equipment used	52
Industry Impact and Effectiveness	Industry effectiveness at safety training and education	22

These themes are discussed further below. It is important to note that these are respondents' opinions, not facts. The CAA does not necessarily agree with all of them, and neither will all readers agree with all of them. Nonetheless in the interests of transparency it is important that they are made available in this report.

<sup>1</sup>Note that one comment could include multiple themes (and most did).

## **Theme One:** CAA Regulatory Effectiveness

This theme captured comments about how the CAA goes about its work as a regulator of the helicopter industry<sup>2</sup>. Five sub-themes were identified, and these are presented below.

The CAA is currently not effective at maintaining oversight of remote operations.

*"The CAA presence is very low and ineffective. Regulating from an office doesn't work in this industry, it needs more people in the field carrying out spot checks in isolated places..."*

The way the CAA conducts audits and surveillance work are not effective at influencing safety performance.

*"CAA Audits have a tendency to only review paperwork and fail to look into the way a company is actually operating. A company that is regularly pushing the boundaries of the laws will tend to make sure their paperwork is exceptional to avoid further investigation into their practices. The CAA when auditing a company should observe how the company is applying its QA and or safety management systems in flight and how these systems are supported by senior management within the company."*

CAA lacks the ability to deal with known high-risk or non-compliant operators.

*"The CAA audit process doesn't investigate operators' financial returns or cross reference fuel used versus hours flown. Because of the difficulties in proving under-recording of flight time CAA's position is that it doesn't happen. Get rid of the liars and cheats and safety will improve."*

The CAA is perceived as being punitive and this creates barriers with the helicopter sector.

*"CAA seems to have lost the common sense approach... they would get more help and respect from the industry if they took a softer, let's work together approach... Fear of prosecution, or grounding stops people speaking out."*

Safety information sharing and education needs to improve.

*"I believe that more openness and information sharing between operators in the industry would enable companies to improve their safety performance and general operations. Encourage a more collaborative approach to safety nationwide. The CAA could implement good operational ideas and practice between companies as a facilitator."*

## **Theme Two:** Training, Monitoring, and Supervision Standards

The comments in this theme were about the current state of pilot training, monitoring, and supervision in the industry.

There needs to be more/improved training and mentoring from senior people within operations.

*"I believe that ongoing training even with experienced pilots within the industry would increase safety hugely. After flying in Canada for a period & experiencing the ongoing training which involved a full week of theory & flying which is done annually with the Chief Pilot... this was a big step up from anything that I've experienced in NZ. This was prior to a fire season but could easily be adapted to Tourism / Ag work etc., I believe NZ could benefit hugely from adopting this technique. Unfortunately with so many companies fighting over a small slice of the pie, something has to give financially - which seems to generally be training & wages!"*

<sup>2</sup>Note that it does not include the actual current rules and regulations themselves. These comments were captured in a separate theme.

There has been a reduction in the quality of training.

*"I believe that there is a huge issue in the training phase of a pilot's career. Having instructors with little or no commercial experience creates an environment where bad habits and poor technique are passed onto students."*

Remote supervision by chief pilots of inexperienced operators adversely impacts safety performance.

*"There are too many companies working with chief pilots whom are nowhere near the operator, a lot of these are young guys starting out and really need to be under direct supervision, not ringing the chief pilot after an incident / accident has occurred."*

Only low/minimal levels of training are undertaken due to the cost (note that this relates to comments made in the 'Market Conditions' section).

*"In my experience there's a lack of resources for robust in house training and competence checking in many operations. A poor attitude towards flight and duty compliance exists with a reluctance to comply citing additional expense as the main obstacle."*

Some pilots have low levels of technical aviation knowledge and awareness, and/or do not work to maintain their knowledge and awareness.

*"More informal re-currency training and awareness of helicopter performance and limitations would be useful - especially effects of altitude, tail wind, loss of tail rotor effectiveness, low rotor rpm, etc."*

### **Theme Three: Market Conditions**

The comments under this theme were focused on the economic conditions that prevail in the helicopter industry currently, and the relationship between these conditions and safety.

Competition in the helicopter sectors has meant that prices have driven down to the point where operating unsafely or illegally may be required to stay in business.

*"The nature of the New Zealand Helicopter industry is that it is an extremely competitive market. This leads to undesirable commercial pressures and operating cost reductions to remain competitive. It's very difficult to remove commercial pressures from the operational decision making process, commercial pressures contribute to pilots exceeding aircraft performance limits and their own skill level sometimes in undesirable conditions."*

A high cost of compliance puts pressure on operators and this effects safety performance.

*"The increasing cost of compliance is concerning and adds stress to the industry."*

Pilots are underpaid and/or inexperienced pilots are hired at low rates leading to reduced safety performance.

*"Hourly rates are very low so as a result so is pilot remuneration. A large percentage of New Zealand's most experienced pilots now work overseas where wages are better and a more robust safety culture exists... As a result a large pool of potential pilots who could operate in a mentoring role no longer find this option financially viable."*

The market for helicopter services does not reward safety – users of helicopter services do not recognize or appreciate the ‘price of safety’.

*“...the scenic helicopter operator who only has to achieve the minimum standard in a regulatory audit, there are no benefits in achieving a higher standard as there is no one representing the general public who walk through the door of the booking office and who are oblivious to the level of safety of being provided by that operator. VFR scenic helicopter operators within New Zealand (in fact all aviation scenic operators both helicopter and fixed wing) are incapable of self-regulation, there is no incentive for them to achieve anything other than basic compliance and for this they can then take short cuts on once the CAA auditor leaves the building.”*

#### **Theme Four:** The Current Rules and Regulations

This theme captured those comments that were directed toward the actual rules and regulations that apply to the helicopter industry.

It takes too much effort and time to write and maintain lengthy and complex documentation (paperwork) under the rules.

*“The industry is becoming over burdened by the continual necessity to write complex and verbose documentation at all levels over numerous disciplines to achieve regulatory, auditing, and client requirements. These documents/procedures/SOPs become simply ‘window dressing’ that satisfy the requirements, but are very often not put into practice.”*

The rules and standards for pilot training are not robust enough.

*“Lack of training is simply due to very little or no recurrent training and a minimum of competency checking being required by CAR Part 135. Operators are legally able to have pilots trained, current and competent in around an hour per year. Half a dozen pilot FCC checks knocked over in a day is not out of the question. Enforcement by CAA would only be effective if there were much more stringent requirements laid down by the CARs or an AC.”*

There are no rules or regulations covering minimum charge-out rates for helicopter services.

*“In my opinion, the greatest risk to safety in this industry are the low barriers to entry for operators and as a consequence the large number of operators competing for a finite pool of work. This results in operators competing primarily on price which leads to under-reporting of flight hours and risk taking by pilots to complete jobs in as short a time as possible. I would suggest that legally mandated minimum charges per flight hour would solve many of these problems as operators would no longer need to compete on price but would then concentrate on competing on service, safety culture and systems, pilot experience etc.”*

The standards that need to be met to get an AOC are too low.

*“The threshold to get an AOC is too low. There should be a higher threshold as the number of operators are too many for the amount of work.”*

There are too many rules, they are too complex, and/or are not effective.

*"Right now we are in a world where the rules and regulations are becoming one of the biggest hazards, simply because there are so many of them. Aviation needs to be made simpler and it needs to be accepted that mistakes can occur."*

### **Theme Five: Safety Culture**

This theme captures those comments that were about safety culture in the sector. This is a broad theme and conceptually it closely relates to the next one to be covered, 'Rogue operator' and in many cases comments were counted in both categories. Many of the comments discussed how there is a 'cultural legacy' in the helicopter industry stemming from high-risk operations in the past and this, combined with a New Zealand 'she'll be right' attitude, means many operators have a poor safety culture that is passed on to those they train.

*"Past history also taints much of the industry as its roots and still some of its attitudes are seated in the "good ole bad ole days" of the deer industry. The versatility of the aircraft has opened doors of opportunity to the industry which coupled with the Kiwi can do attitude, has prompted a number of applications which were neither desired nor anticipated by the helicopter manufacturer. Whilst this is good when all is going well (i.e. spray gear or lifting hook on R22), the moment the system fails, there is no reflection toward the fact that the tool was not fit for purpose. This has led to a culture in the industry of going to the edge of the limits in many cases not only of the aircraft, but the pilot/crew and ultimately the governance aspects e.g. bill payments v overheads v necessities (maintenance)."*

*"I am of the opinion that there is too much of the old "she'll be right attitude" still in our industry and until this attitude is changed or got rid of completely we are going to continue to have unnecessary accidents."*

### **Theme Six: Rogue Operator**

77 comments mentioned 'rogue operators' as a factor in helicopter safety. A 'rogue operator' is defined as an individual, business, or collection of operators who/that are wilfully non-compliant with rules and regulations and/or who choose to operate in ways that are high-risk. Comments that were made about rules not being followed (for example under-recording flight hours/overloading) were included in this category.

*"Operators continue to ignore the rules as the baseline for safety standards whenever they do not suit the circumstances: Passengers being transported in combination with sling-loads, passengers being transported seated on cargo in the absence of certified seating, insufficient recording of passenger details and computation of weight & balance, inadequate radio communications systems for flight following, insufficient passenger safety information delivery to passengers transported from remote locations, flight & duty time limitations not adhered to, fatigue arising from agricultural operations not compensated for when carrying out ATO within the same organisation..."*

*"There are clearly operators who just keep getting away with overloading. It would be nice if the CAA actually dealt with these dodgy operators once and for all so the rest of us can carry on flying safely."*

### **Theme Seven: Plant and Technology**

52 comments were made relating to how equipment, helicopters, and technology relate to safety, including those comments made about the performance characteristics/limitations of helicopters. Also included in this category are comments about the need for tamper-proof hour meters: 28 comments specifically mentioned the need these to be installed/made mandatory on helicopters.

*"Challenges facing the industry now and in the future: 1. Achieving realistic returns on plant investment. 2. Investing in modern and advanced technology as expected by overseas clients..."*

*"Tamperproof hour meters and over-exceedance recorders should be fitted to all aircraft. This would stop some operators from undercutting others by not recording the hours flown on a job. By recording over-exceedances this greatly reduces the chance of component failure and possible crashes."*

### **Theme Eight: Industry Impact and Effectiveness**

22 comments were made relating to industry safety initiatives and the relationship between the CAA and the helicopter industry.

*"There needs to be ongoing 'industry' emphasis on human factors and decision making, sponsored by the CAA and industry."*

*"I believe that more openness and information sharing between operators in the industry would enable companies to improve their safety performance and general operations. Encourage a more collaborative approach to safety nationwide. The CAA could implement good operational ideas and practice between companies as a facilitator."*

### **Open Response Question Two: What do you think the most important characteristics for a proficient helicopter pilot in New Zealand?**

From analysing the responses to this question, eight themes were distilled.

Theme	Description	Number of Times Raised
Psychological Characteristics	General psychological traits or attitudes, e.g. calmness, caution, etc.	116
Flight Discipline	Having and following personal limitations. Knowing and following normal operating limitations. Rejecting flights outside of limits.	92
Training and Monitoring	Being well trained, supervised, and monitored.	83
Learning and Knowledge	Being open to learn new skills, gain knowledge about aircraft, human factors, etc.	79

Operating Awareness	'On the job awareness', with situational awareness, good flight planning, weather watching, etc.	49
Professionalism	Professionalism and organisational safety culture.	42
Skilled	Having a high level of flying skill.	31
Experience	Having a lot of flight experience.	30

### Theme One: Psychological Characteristics

116 comments were made that discussed how particular psychological traits or attitudes were important characteristics for a proficient New Zealand helicopter pilot.

*"Only one - decision making ability. You don't have to be the best with your hands and feet, but every decision you make needs to consider everything regarding that flight. Aircraft condition/ limitations, the pilot fitness/limitations, weather, terrain etc. Everything comes down to Human Factors."*

*"Diligent. Safety focused. Not having a huge ego. The difference between a capable pilot and a good pilot is a good pilot always puts safety first. The sooner the industry realizes this the better it will be."*

### Theme Two: Flight Discipline

92 comments related to flight discipline. This concept is borrowed from human factors author Tony Kern who defines it as:

*"The strength of will required to systematically develop all areas of airmanship and execute sound judgment in the presence of temptations to do otherwise; and to safely plan and employ an aircraft within all operational, regulatory, organizational, and commonsense guidelines<sup>3</sup>."*

As that definition suggests, these comments centred around such things as rejecting unsafe flights, flying safely and in line with rules/SOPs when unsupervised, not exceeding aircraft limitations, keeping within personal minimums, etc.

*"Having a disciplined approach to operate within aircraft limitations, rules, & company procedures every time they go to work and being confident enough to make the right decisions when a task is beyond them."*

*"Know the risks and make your own safety rules and never break them e.g.: Your tail rotor won't touch a blade of grass. Always have an escape route."*

### Theme Three: Training and Monitoring

83 comments were made regarding the importance of good training, supervision, and mentoring to pilot proficiency.

*"A proficient helicopter pilot is a pilot who is well trained, has a good technical knowledge of the aircraft they are flying and the regulations under which they are required to operate and is safety focused. They must be placed within an organization that provides strong mentoring from the more senior pilots in the company, he/she must feel that they are working in an environment that allows them to both develop their skill set, but at the same time does not provide a punitive environment."*

*"Thorough training, close supervision, and adequate observation/ auditing by the issuing authority for new operators. Good airmanship will remain the most important aspect of safe helicopter operation."*

<sup>3</sup>Kern, Tony (1998). *Flight Discipline*. McGraw-Hill Professional Books: New York

#### **Theme Four: Learning and Knowledge**

79 comments were made about the importance of having a good level of knowledge, learning, and being able to learn, to pilot proficiency. A wide range of learning topics were mentioned, including helicopter characteristics/limitations, human factors information, weather, and generally learning from past experiences/incidents.

*"An attitude of "can I do it?" rather than "I can do it". Solid understanding of the performance limitations of the aircraft being flown. Solid understanding of the impacts of temperature, altitude, and wind on performance achievable. Solid understanding of the effects of weight and balance on performance and controllability. Including that it is possible to operate outside the envelope without adverse outcomes, but when other factors start conspiring against you suddenly it is this aspect that bites really hard. Consistent stick and rudder skills. A willingness to listen and learn coupled with an ability to sort meaningful advice from bullshit bar talk.*

*"A person with a large degree of patience, some mechanical skills, is willing to learn, and most of all keeps up with AD's and service bulletins, and the aircraft flight manual..."*

#### **Theme Five: Operating Awareness**

49 comments were made about the importance of operating awareness to pilot proficiency. Mainly this related to situational awareness (i.e. a pilot's continuous perception of self and aircraft in relation to the environment of flight, threats, and mission), but broader comments were made about the importance of risk identification and awareness and good flight planning.

*"The very nature of just about always landing away from the protections of an airport means the decision making skills and awareness of what's going on, changes occurring etc. should be well trained and reinforced during checks etc."*

*"Cautiousness and an ability to analyse developing situations quickly and accurately and make a decision on a course of action that is reviewed constantly and changed if required."*

#### **Theme Six: Professionalism**

41 comments referenced the concept of 'professionalism' and/or organisational aspects (including safety culture), as being important to pilot proficiency.

*"Professionalism and the mindset to get home safely every night and worry about money second."*

*"Self discipline, professional attitude, confident decision making. Self confidence. New Zealand has far too much of a "blokes and mates" approach to professionalism. Peer pressure is all too present especially among younger pilots."*

#### **Theme Seven: Skilled**

The importance of the skill levels of pilots to proficiency were mentioned in 31 comments.

*"High skill levels and currency especially in the role being undertaken. Good cockpit resource management. Confidence and lack of pressure to perform beyond the individual's skill set."*

*"Competent flying skills appropriate to each task."*

## Theme Eight: Experienced

30 comments mentioned the importance of pilots' operating experience to proficiency.

*"Well rounded experience of operating alone in diverse terrain and weather conditions. Recurrent training focusing on aircraft performance limitations and severe effects of Density altitude/high MTOW on Autorotation."*

*"Experience in a wide range of helicopter operations, a considered and professional approach to each job and each flight. Current."*

## Summary

### What do the results tell us?

Firstly, there were mixed levels of agreement with the multi-choice questions. In many cases there was roughly 50/50 agreement/disagreement with these. In itself this is an important result. It suggests that there are quite different views on what takes place in the industry, as well as different views on its current safety performance and economic health.

Secondly, there are a range of views and opinions on the factors influencing the safety performance of helicopter operations in New Zealand. From training, through to regulations, through to safety culture, many factors were raised in the open response questions. These results (along with the recent Part 135 Sector Risk Profile) provide a current overview of the state of the helicopter industry and they give us all a far richer and clearer understanding of existing issues than we have had before.

### Where to next?

There are a number of lessons to take away from the results, both for the CAA and for operators, particularly regarding the areas of focus for identifying risks and the methods for treating them. Many of the issues were raised previously in the Part 135 Sector Risk Profile (that you can access [here](#)). In that document we made several comments about the CAA's position on these and work that was underway to treat them. Some of these comments are reproduced here in order to give clarity on the CAA's position and to outline work that is currently underway to treat some of the risks.

**CAA Comment on Training:** *The CPL training syllabus provides for a basic level of pilot competency. Air transport operators, including those with Part 135 privileges, must then provide pilots with type training and line training for their specific operation. While CPL training is generic, this operator training will vary according to the aircraft and nature of the operation. Shifting this Part 135 focused training to a CPL syllabus would be difficult given the vast differences in this sector, and would potentially detract from existing programmes aimed at instilling behaviours which will be applicable throughout a pilot's flying career. Nevertheless, the CAA is willing to work with Part 135 operators and flight training providers to identify opportunities regarding training that better meet Part 135 operational requirements.*

**CAA Comment on Safety Information and Promotion:** *The role of the CAA is to ensure public safety by ensuring that participants entering the system meet safety criteria and through on-going monitoring to ensure safety standards are maintained. The CAA also has a role to play in promoting safety and providing guidance to participants to assist them in their efforts. This is currently happening through Aviation Safety Advisors, AvKiwi seminars, provision of safety reports, CAA participation at industry seminars and workshop, and initiatives such as this Sector Risk Profile. However, the CAA take on board the industry comments and will explore other ways to share information more effectively.*

**CAA Comment on Surveillance/Audits:** *The CAA accepts that there are opportunities to improve the conduct of surveillance. The CAA has implemented new audit procedures which are risk-based, and focus on operator systems and processes to manage safety. Further work is planned to improve CAA auditor skills in this area, including improving understanding of Safety Management Systems (SMS) and safety culture. This training will take on board the SRP comments of improving consistency and adding value. This Sector Risk Profile work is viewed as a positive and collaborative initiative, and an example of the type of engagement the CAA seeks to have with participants in the conduct of its regulatory activities such as audits.*

**CAA Comment on Sector Collaboration:** *The CAA recognises the importance of a strong relationship between the sector and the regulator. Due to the geographically spread out nature of the sector, it may be effective for the CAA to work with leaders who emerge from locally coordinated user groups. The CAA encourages the collaboration between the sector and the regulator. This sector risk profile and these survey results are intended to be a shared resource for the sector and the CAA and is intended to lead to further collaboration.*

The CAA is committed to continuing this engagement with the industry and to working together to develop and implement strategies that improve safety performance. We would like to thank all of those who took the time to respond to this survey and provided such detailed information. If you have further questions or comments about these survey results, please send these to [avintel@caa.govt.nz](mailto:avintel@caa.govt.nz), addressed to Matt Harris or Joe Dewar.