

CAA NEWS

Informing for Safer Aviation



Wire-Marking Trial



ACE Day

New Rotary Wing Manager

Young Eagles News

Wire-Marking Trial



For some time the Civil Aviation Authority has been examining the feasibility of marking wires to prevent aircraft striking them. Marking of wires is an internationally accepted means of reducing the risk of aircraft flying into aerial wires. A trial to test the effectiveness of using marker balls to alert pilots of the presence of wires has begun in the Hutt Valley.

For this trial, marker balls of different sizes and colours have been placed on the transmission lines spanning the Hutt Valley from the Haywards sub-station. Marking wires may prevent only some 'wire-strike' accidents. Other measures include education and increasing pilot awareness.

A consultative working group comprising representatives from the aviation industry, electricity industry, and the CAA, have been making steady progress on the wire-marking project. They have established draft wire-marking criteria.

The aviation industry have identified the 20 most hazardous spans. Transpower have studied these to identify the owners, and to examine the engineering aspects of marking them. Meanwhile, Transpower are proceeding with the marking of some transmission cables. A span at Manapouri has already been marked. The Haywards area in the Hutt Valley was chosen for this marker ball trial because of its accessibility. There are many factors which must be taken into account, such as cost, and the loading on the wires from weight, wind, and ice. Sizes of 900 mm, 600 mm, and 500 mm diameter, and colours of red, yellow, and white will be trialed. Three balls of each colour and size have been installed on the span.



Pilots' Feedback Sought

The CAA wants feedback from pilots about the effectiveness of the different sizes and colours of the marker balls. Those who wish to comment should note the following:

- How far away the markers can be seen is important. Obviously the large ones will be visible further away, but if the smaller ones are adequate, the lines will not have to handle a larger loading.
- Observers should view the balls from at least 1.25 kilometres to allow for scan rate and reaction time. Observations from greater distances are also helpful. Take note of which colours are more visible, and those that are not.

- Please state the time of day, what the weather was like, and if you were on the ground or flying. If flying, altitude and time will be helpful, as will the direction you viewed the marker balls from. Photographs would be helpful and appreciated. ■

Comments and any other supporting information can be sent to:

Ted Hawker
Civil Aviation Authority
P O Box 31-441
Lower Hutt
Tel: 0-4-560 9535
Fax: 0-4-560 9452
Email: hawker@caa.govt.nz



AIRMANSHIP CONFIDENCE EXPERIENCE **ACE** Day

A great turnout, high level of interest from the participants, and excellent food were the characteristics of the first ACE Day, according to the pilots who attended.

Sponsored by *Aviation News*, the first ACE Day was held at Forest Field in Canterbury on 13 April 2002, in order to increase airmanship awareness for GA and recreational pilots. Following the success of the day, it is planned to make it a series, with the next one to be held in the North Island late in 2002.

Graeme Porter, editor of *Aviation News*, was pleased with the result.

“For *Aviation News*, the event was successful in that it reached a wide cross-section of general aviation pilots. The feedback from some pilots who attended has been positive, all commenting that the seminars were of relevance to continuing to be a safe pilot.

“Of significance is the support gained from the aviation industry, with donations of aircraft and pilot supplies. Comments from industry are encouraging, as they feel they are contributing to safety through their product support. Airways Corporation want to join us as an equal partner for the remaining two ACE days this year – this is brilliant,” said Graeme Porter.

The day began with a presentation of theory and practical demonstration of pilot maintenance that may be permitted by a proposed change to Part 43 *General Maintenance Rules*. Aspects such as inspecting removed spark plugs for clues about engine condition were covered by showing actual examples. Oil filtration systems were explained, and information was provided about an oil analysis programme that could give an early alert on potential engine problems and save further damage.

Following the theory, engineers demonstrated an oil and filter change. This requires some specialist equipment, and there was a feeling among some of



Airways Sector Manager, John McKenzie, explains the new VFR Flight Plan.

the pilots present that investing in this equipment might not be worthwhile for the private aircraft owner and the task would be better left to a Licensed Aircraft Maintenance Engineer (LAME).

John McKenzie explained the new VFR Flight Plan. This was reinforced by one of the participants filing their flight plan over the Internet for their return trip to Dunedin. The use of specific transponder codes for individual aircraft was also discussed, and several pilots indicated an interest in using this.

CAA consultant, Brian Souter, then talked about GPS, beginning with a brief history of the technology. He highlighted the pitfalls of relying entirely on GPS. Pilots need to be prepared for failure in the GPS system. Pilots need to know their GPS equipment thoroughly – for example it should be routine to programme an alternate destination should conditions require this.

CAA Sport and Recreation Manager, Rex Kenny, was impressed with the genuine interest of participants.

“There was a good mix of GA and microlight pilots, and they were really focused on the presentations. Their feedback was of interest to the CAA as well as Airways. It was a great venue, allowing people to fly in, and the locals made their hangars available for us to use. We’ve already had expressions of interest from other areas, such as Central Otago, Foxpine, and Te Kowhai, to host further ACE Days,” said Rex. ■



CAA Field Adviser, Bob Jelley, explains the process of an oil and filter change.

Under the proposed changes to Part 43, anyone wanting to carry out pilot maintenance will need to receive appropriate theory training and also hands-on practical training under supervision. The ACE Day presentation covered the theory aspects only. Once practical training is received a logbook endorsement could be entered by an appropriately qualified person.

Following lunch, Airways Sector Manager,

New Rotary Wing Manager



John Fogden

An industry judged on its professionalism, not its accident rate – that's what the CAA's new General Aviation Rotary Wing and Agricultural Operations manager John Fogden is striving for.

John, 46, replaces Andy Redfern, who left the CAA in February to return to operational flying in the Middle East.

John began flying in 1976 and holds a New Zealand CPL (H) with about 9000 hours. He has broad experience in most areas of the New Zealand helicopter industry and has also worked in South Africa, Australia and Papua New Guinea, often in management positions on large-scale operations. His 26 years of experience covers agriculture, forestry, search and rescue, emergency medical services, venison recovery, tourism and scenic flying, corporate, VIP and general charter, as well as company management.

A CAA field safety adviser since 1997, John is looking forward to continuing to work with the industry and putting that experience to good use.

“Like most helicopter pilots, I have to confess to more than just a passing interest with the industry. It's simply a way of life. It has provided me with some very privileged times and experiences, both in New Zealand and abroad, and it has always dovetailed neatly into my hankering for the outdoors, the early mornings, wildlife, and the rural side of life,” he says.

“The challenge now is to get all responsible players to come on board with CAA to set the standards and work towards one goal – safety and professionalism. We'll be calling on some old and experienced friends and acquaintances from industry to continue some of the recent initiatives like the Aviation Safety Forum, the Tourist Flight Operators Group and the AIA/Airways-sponsored 'Raising Your Game' programme.

“Our first task is to complete the certification process successfully for all commercial operators. Up to now, it's been a demand on both time and resources within the General Aviation Group. Beyond February 2003 we'll be able to redirect much of that operational and technical experience towards our prime function of assisting the helicopter and agricultural sectors of the industry to raise their profiles and safety culture above the minimum required by the Rules, to a level where it is our professionalism that is measured against the rest of the world, not our accident rate,” he says.

Longer term, John will take control of the introduction of tamper-resistant Time-in-Service Recorders. He also wants to revisit the idea of industry-based safety counsellors to provide a mentoring function for less-experienced and sole-charge pilots to spread the knowledge gained from working with more experienced company pilots in a large organisation. ■

Safety Culture



In September 2001 the CAA hosted a very successful Safety Forum, *Towards 2005*, in Wellington. The major themes that emerged from this forum were:

Training Skills Attitude Culture

The CAA believes that, of these, culture may be the one that has the most influence on aviation safety outcomes. The CAA has adopted a strategy that will seek to generate a favourable 'culture shift' in New Zealand aviation over the next three to five years. An initial part of this strategy will involve the establishment of an effective way of measuring safety culture in the New Zealand aviation environment.

Coincident with the decision to develop this strategy, the CAA was approached by Dr Gurjeet Gill from the School of Aviation at Massey University. Dr Gill was looking for support for a research project involving the assessment of safety culture

in aviation organisations in New Zealand. The project is financially supported by Massey University's research fund. Recognising the possible synergies between her research proposal and the CAA's business strategy, we have enabled her to reach a wide audience by including the research questionnaire with this issue of *CAA News*.

Please take the time to complete and return the questionnaire to Dr Gill. By taking part in the survey, you will be making a valuable contribution towards the CAA's vision for New Zealand aviation: "New Zealand aviation free from safety failure". ■

Young Eagles Update



Winners of the Ross Macpherson Memorial Young Eagles Flying Scholarships were announced at the Royal New Zealand Aero Club's (RNZAC) AGM on 21 June 2002. They are:

Scott Calder (Southland Aero Club)

Ryan Davie (Auckland Aero Club)

Kyle Newman (Marlborough Aero Club)

Jeremy Simmons (South Canterbury Aero Club)

Richard Ward (Canterbury Aero Club)

They receive \$1,500 worth of flying each, through their RNZAC clubs. The scholarships are open to young people over 15 years who are enrolled as Young Eagles. Clubs chose their own method for selecting candidates and can enter two, but only one from any club can be selected for a scholarship.

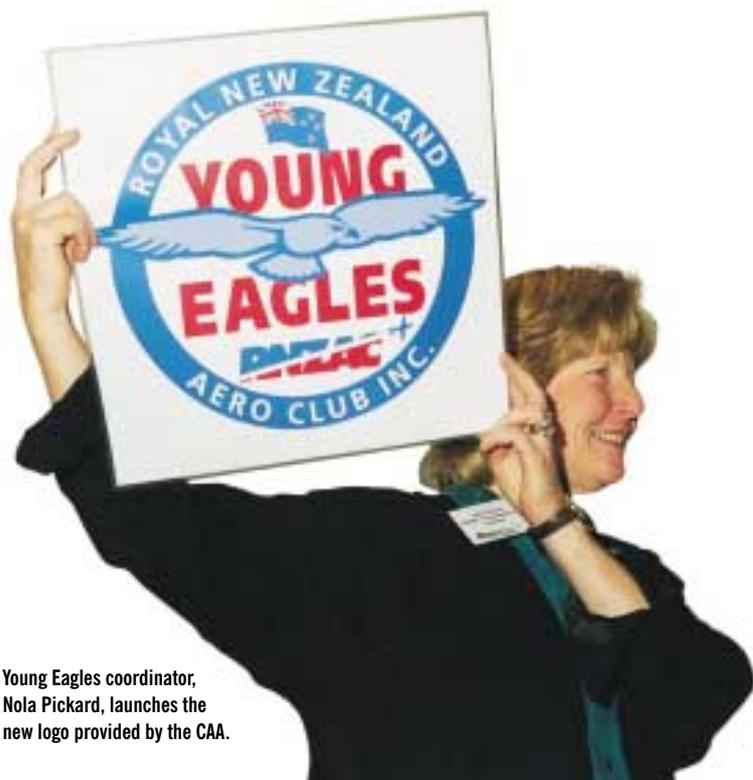
The RNZAC appoints a committee to judge the competition. Candidates are required to submit an essay of up to 500 words giving their reasons for wishing to learn to fly. The applications are also accompanied by the entrant's Young Eagles certificate and logbook, together with information about their club's Young Eagles activities and future programme.

Winners are expected to provide a report when they achieve their first solo, and when all the scholarship funds have been used.

In order to involve them in more flying activity, future scholarship winners will be announced at the RNZAC National Competitions, rather than the AGM. It is hoped that the winning candidates will be able to attend the competitions and presentation, while joining in the activities of the national competitions.

In order to start this for 2003, the scholarship entries will be invited later this year, with a deadline for completed entries expected to be early 2003. The 2003 National Competitions will be held at Hamilton in February, hosted by the Waikato Aero Club. There will be up to 10 scholarship winners participating as this year's winners join the 2003 winners.

The RNZAC acknowledges the support of CAA, Aviation Services Ltd, Airways New Zealand, Aviation Cooperating Underwriters Pacific, Pacific Wings and Air BP. For further information on Young Eagles, see the RNZAC web site www.rnzac.org.nz ■



Young Eagles coordinator, Nola Pickard, launches the new logo provided by the CAA.

Part 91 Changes

Part 91 *General Operating and Flight Rules* has been updated, with amendment seven of the rule coming into effect on 1 July 2002.

Part 91 is one of the core civil aviation rules, prescribing the basic operating rules for aircraft in New Zealand. It aims to ensure the safe operation of aircraft, and minimise any endangerment to people or property on the ground. CAA Rules Project Specialist Bill Wilson says, "Some of the amendments are aimed specifically at addressing, or improving, the risk to aviation safety, and in some areas will also enhance security.

"The aim of the amendment was to revise and update the *General Operating and Flight Rules* with the changes that have been found necessary since these rules came into effect in April 1997. The amendments have stemmed from editorial and legal corrections, as well as issues raised in the application of Part 91, and Exemptions granted from some Part 91 requirements," he says. Consequential amendments to Parts 1, 19, 104, 108, 121 and 135 also from 1 July 2002, brought those rules into line with the Part 91 amendment.

"The scope of the Rule changes contained in this amendment to Part 91 will affect some operators more than others. Each operator and pilot has a responsibility to keep abreast of these changes in order to preserve the safety culture of the wider aviation community," Bill says.

Some of the changes:

The rule dealing with the carriage of personal electronic devices (91.7) has been amended to specifically prohibit the use of cellphones, and other devices that are designed to transmit electromagnetic energy, on any aircraft operating under IFR. Rules dealing with the carriage of firearms on aircraft have also been clarified.

The low-flying rule (91.311) has also been amended. In particular, rule 91.311(c) now provides additional flexibility for helicopters to operate close to obstacles.

Rule 91.505 has been amended to provide the option of a single diagonal shoulder belt for aircraft low-flying under 91.311(c).

Rule 91.529 has been amended to provide

greater flexibility for gliders and single-seat aircraft regarding the carriage of Emergency Locator Transmitters (ELTs).

A new rule, 91.112, transfers from Part 19 the requirement for operators (with the exception of some operating under Part 135) to keep detailed daily flight records, and to keep them for at least 12 months after the flight has been completed. More flexibility has been provided regarding the documents that are required to be carried in each aircraft.

Rules 91.313 and 91.425 regarding cruising altitudes and flight levels have been amended to allow the implementation of Reduced Vertical Separation Minima (RVSM) in the New Zealand Flight Information Region (NZFIR).

The requirement for a time-in-service recorder has been delayed because progress on trial devices has taken longer than expected. The rule will be implemented when appropriate devices are available.

The Rules and Amendments can be seen on the CAA website, www.caa.govt.nz, under "Rules & more". ■

From the Enforcement Files

The CAA takes enforcement action to ensure that the Rules are taken seriously, consequently reducing unsafe behaviour.

Breaching Civil Aviation Rule 47.121 *Obscuring identification*

Breaching Civil Aviation Rule 61.39 *Biennial flight review*

Taumarunui District Court – 14 May 2002
The defendant is the holder of a Commercial Pilot Licence (Helicopter), and operator of a Robinson R22 helicopter.

On 3 September 2001 the defendant applied black masking tape to the registration and nationality markings of the helicopter he operates, completely obscuring the markings. Both doors were removed from the helicopter. The defendant and an associate then flew for approximately one hour, landing at the back of his home address.

The defendant was about halfway through removing the masking tape when the

Police arrived in response to an allegation that the defendant's aircraft had earlier been involved in an illegal poaching operation.

Later, in response to questioning, the defendant said that he didn't want a local farmer to recognise the helicopter as his, as he had previously received a complaint from the farmer. The nature of the flight was described as a general scenic flight for the benefit of his passenger. He said that he was unaware that his associate had previously been issued with nine trespass notices regarding illegal poaching activities.

The defendant pleaded guilty to the charge and was fined \$1,000.

In sentencing, the judge said that covering up markings prevents the authorities from enforcing laws affecting the use of aircraft, and is a very serious offence. He said that the Civil Aviation Authority is charged with attempting to regulate aircraft, and people taking steps to keep themselves

anonymous or untraceable brings the enforcement of these regulations into grave difficulties. Consequently, there needs to be a firm penalty to reflect the fact that covering up of registrations marks is unacceptable.

The same defendant was due to complete a Biennial Flight Review (BFR) on 8 December 2000, but did not complete a BFR until 10 July 2001. During that time he flew as pilot-in-command on a total of 33 occasions. The defendant, who pleaded guilty to the charge, said that this was an oversight.

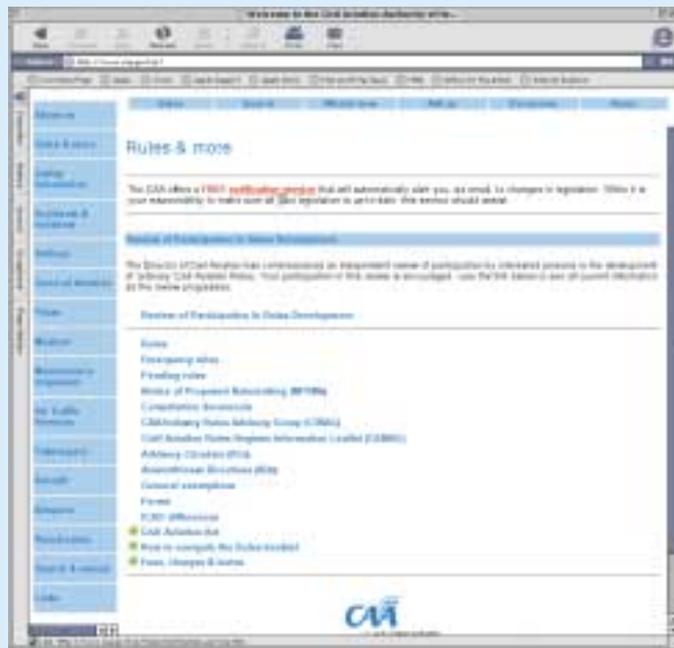
The judge fined the defendant \$700 on this charge and said that the purpose of rule 61.39 was to protect the pilot and to protect members of the public who fly with the pilot. He said that the defendant disregarded this rule for a lengthy period and conducted 33 flights over that time, which was serious.

The defendant was also ordered to pay \$200 court costs, relating to both charges. ■

Email Notification Service

The CAA has an email notification service. You subscribe to this service through the Rules page on our web site, www.caa.govt.nz. You can ask to be notified of new Rules, Airspace changes, Airworthiness Directives, and more. In March some data was lost from the server that distributes these emails, and we apologise if you have experienced any problems with this service. To overcome the problem, and improve our service, we are now using new software to send out notifications.

In July existing subscribers will receive an email seeking confirmation of the notifications to which they have subscribed. This is to make sure that the change to the new software will include all your requests. Once the new system is fully functioning, subscribers will be able to update their choices and change email addresses online, making the system much more user-friendly. ■



Review of Participation in Rules Development

In May, the Director of Civil Aviation, John Jones, commissioned an independent review of participation by interested persons in the development of 'ordinary' Civil Aviation Rules. Those who indicated their interest in participating in this review were invited to a meeting in Wellington on 13 June 2002.

At the meeting, John Jones outlined his reasons for the review and explained the terms of reference. He introduced the independent reviewer, Mary Scholtens, who then spoke about the process she would follow.

The first phase is to collect submissions by the deadline of 31 July 2002. Those making submissions can indicate whether they wish to meet with the reviewer. Mary asked that all content be in the written submissions initially, with the meetings serving to expand on, or clarify, matters. She said that she is particularly interested in submitters' actual experiences in the rule-making process.

Through the next phase, during August and September, the reviewer will meet with interested parties. Mary explained that she will be corroborating the submissions.

In the final phase, through October, Mary will review all the information, seek further information where necessary, and prepare her report based on the Terms of Reference.

The reviewer has requested five reports from the CAA giving background information to matters in the first five terms of reference. These are on the CAA web site, www.caa.govt.nz, under **Rules & more**.

Mary said that she will be seeking to balance a transparent process with one which ensures that people are able to express their opinions freely. In order for the process to be as open as possible it is intended to put all submissions on the CAA web site. People making submissions are encouraged to be as free and frank with their comments as required.



Submitters can request confidentiality, however, and in these cases their submissions will be sent to Mary Scholtens unopened and will not be placed on the web site.

John Jones gave an assurance that the final report would be publicly released.

Submissions close 31 July 2002.

Information about the review, including the Terms of Reference, can be found on the CAA web site under **Rules & more**. This page will be maintained during the review, and there will be alerts on the **What's new** page as information is added.

For further information, contact the Review Coordinator, Bill Wilson:

Tel: 0-4-560 9666

Fax: 0-4-560 9418

Email: wilsonb@caa.govt.nz ■

MEDICAL MATTERS

Another couple of months have passed and we are now into our fourth month of the new medical certification system. Some concerns arose about the new system that required further consultation. Below is a short update on medical issues.

The Medical Unit has received many questions because of the changes in the system. I thought it a good idea to share some of those questions and answers with you in this issue of *CAA News*.

In future issues of *CAA News*, I am planning to introduce articles written by aviation specialists. We will also offer suggestions that may help pilots understand a little more regarding their medical certificates, and why the Medical Unit does what it does. We will be introducing a different topic each issue, and I hope that this is both informative and useful. Feedback on this idea would be appreciated.

Some topics that you may see in future issues are:

- Hay fever
- Asthma
- Hearing

And of course there are many other topics.

Dr Dougal Watson
Principal Medical Officer

Frequently Asked Questions

Q. How can I change my address?

A. There are a number of ways (below), but your change of address must be in writing. Send by:

Post: P O Box 31-441, Lower Hutt, or

Fax: 0-4-560 9470, or

Email: med@caa.govt.nz

It is important that you notify us as soon as possible. After every issue of *Vector/CAA News*, over 200 magazines are returned to the CAA because the address is wrong.

Q. How do I get a replacement medical certificate?

A. If your medical certificate has been lost or stolen – report this to the police. Then send a written request for a replacement to the CAA, accompanied by a copy of the police report and the \$50 fee for issuing the replacement copy. This takes about three to five days.

Q. How is my medical progressing?

A. This depends on what stage it is up to. If your assessment is not a Central Medical Assessment, contact your Medical Examiner. If the assessment has been sent into the CAA for a Central Medical Assessment, contact us using the information on this page. The turn-around time for the processing of these assessments is four to six weeks. We are trying to reduce this, but it depends on the additional information required.

Update on Medical Issues

Since the introduction of the new medical certification system on 1 April 2002, concerns have developed about some legal aspects and the administrative burden on the Medical Examiners and the CAA Medical Unit.

In order to address these concerns, a meeting was held with representatives from the Combined New Zealand Aviation Medicine Forum, the Aviation Medical Society of Australia and New Zealand (AMSANZ), Crown Law, the Ministry of Transport, and the CAA.

It was significant that everyone at the meeting agreed on the objectives of the medical certification process. The issues are about how to implement the changes brought about by the Civil Aviation (Medical Certification) Amendment Act 2001.

Easing the administrative workload for Medical Examiners and the CAA Medical Unit is a key factor in improving the process. It is proposed to do this by clarifying some legal interpretations, making delegations from the Director of Civil Aviation to the Principal Medical Officer and Senior Medical Officers, and the CAA producing clear guidelines on the information required from Medical Examiners.

Sample General Directions (see *CAA News* May/June 2002) were made available for feedback, and with some minor adjustments there was agreement that they were appropriate and complied with the Act.

Through this cooperation with representative industry and medical groups, we hope to end up with a medical certification system that meets safety objectives and which all participants feel is fair and workable. ■

CAA Medical Helpdesk:

Tel: 0-4-560 9466

Fax: 0-4-560 9470

Email: med@caa.govt.nz

Web: www.caa.govt.nz

Aeronautical Charts

The visual terminal charts and four topographical charts are being replaced by a new series of charts called “Visual Navigational Charts” (VNCs).

The current charts have problems that became apparent last year, and in order to ensure they are correct, and incorporate suggestions from consultation, it has been decided to delay the new series of charts. The current visual terminal charts (VTCs), and topographical charts effective 06 SEP 01 will continue to be current until the new VNCs become effective, at a date in 2003 yet to be determined.

It is important to retain and use your current charts “Effective 6 SEP 01”, until the new VNCs are issued in 2003.

The new charting series will use new technology, which will enable past problems to be solved, for example, the management of information common between charts.

A uniform scale of 1:250,000 will be used over the whole country, and for the first time some areas will have enlarged inserts. The VNCs will be issued on A1 size paper, folded to A5, and will be printed both sides. Two 1:1,000,000 planning charts will also be available, which will cover the North and South Islands.

There has been significant consultation with many sectors of the aviation industry, resulting in excellent feedback and suggestions. Examples are the marking of significant mountain pass heights, and the placing of aerodrome and frequency information on the charts.

The cost of the new charts is expected to be very reasonable, and Aviation Publishing advise that it is likely that each sheet (double sided) will retail at \$12.00, including GST.

For more information on charting redevelopment, see the CAA web site www.caa.govt.nz, under **Airspace/Charting Standards**. Alternatively, contact Len Wicks: wicks1@caa.govt.nz.



Some new features:

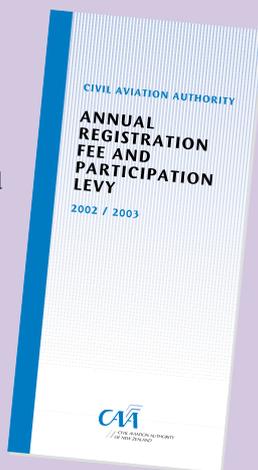
- 
Wire hazard
- 
Changed MBZ
- 
Mountain passes

Levies

Your invoice for annual registration and participation levy, together with an explanatory brochure, will have arrived by now.

All owners of aircraft that don't pay a passenger levy pay a participation levy. The levy remains unchanged from last year. As always, it will help fund the CAA's safety investigation and analysis, safety education, surveillance and spot checks, as well as enforcement, making it important it is paid promptly.

Levies – whether they be passenger levies, aeronautical information service levies (AIS) or participation levies – make up about 70 percent of the CAA's funding. CAA also charges



for services such as certification of aircraft, issuing of licences and audits, and receives government funding for rules development and policy advice.

One change that has been made is to the passenger levy. From May 1, it was reduced from \$2.15 to \$2.00 (GST incl) per passenger. For the first time the levy is now paid on a “per sector” rather than a “per trip” basis.

The new levy reflects recent changes in the airline industry. Previously only named airlines paid the levy, meaning some new ones were exempt until the order was changed.

The passenger levy was first introduced in 1993. It is up to airlines whether they include the levy in the ticket price. Children under two years are exempt from the levy.