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Low flying report

Doug Anderson/CRAC

This is an article written by myself regarding a feature in a previous RAANZ newsletter about some flying over an estuary by a bunch of pilots. The article criticised the pilots for disturbing the peace and low flying.
Well I was one on those pilots!

A little background leading up to this day-
Since I bought the 1st 2 seat Trike into the country in 1987 I have been training people in them for 33 years plus fixed wing for 25 years. Over the years we used this estuary area for landing practice on the beach and low flying training. We had an understanding that this was OK and over the the 30 years never had one complaint so assumed everything was alright. Over the last 5 years the amount of flying over this area has probably dropped by 70% compared with the past.

We had heard that there were some issues with pilots landing on the beach in 3 axis aircraft but assumed , probably wrongly, that this didn't apply to us trike pilots.

So moving to the day - honestly with the huge downturn in Trike flying in NZ as a whole- it was particularly unusual that 3 of us trike pilots decided to fly as a group to the beach. Looking back , probably the day lent itself to us not behaving as we should have.

We headed for the Ashley river mouth - chatting to each other on the Chat channel and decided to fly down to the level of the beach to potentially land but due to many other people and things on the beach we gave up on that, but didn't follow regulations and did low level turns over the sea. So as an Instructor I did not follow my own teachings and we all broke a few rules pertaining to CAA on this day. So it extended to low level runs over the beach, as we did not land, and low flying over the sea.

We never flew over people and horses on the beach as we always stick to our own rules on this, as we never want to endanger anyone else.

We have never upset any member of the public over the 30 years and very surprised when CAA got hold of me regarding this. I am sure many pilots over their history have broken some flying rules and may have been in a similar position as us and it is not much fun.

The complainants were working for the Waimakariri District Council and they were Park Rangers who look after the bird life in the estuary and surrounding area. As far as I know they are volunteers who take a serious view of disturbances to these birds and rightly so. On this day we feel we potentially did cause a problem. We were not the only ones flying on this day over or near the estuary as, when we went over the site, we saw a powered paraglider flying low over the estuary and landing next door to the estuary. So it was a bad day for the bird life with all 4 of us flying more or less at the same time - possibly never would have been an issue if there had only been one of us.

As all of you pilots would understand there is a camera with everyone these days and of course photos were taken and sent onto CAA with my Reg showing.

So after a chat to our Club and other pilots we have come to a con census that we will not fly over this area again, with landings and low flying, and if at all possible avoid it entirely. We also have written an apology to the Waimakariri District Council and to CAA regarding what we will do in the future.

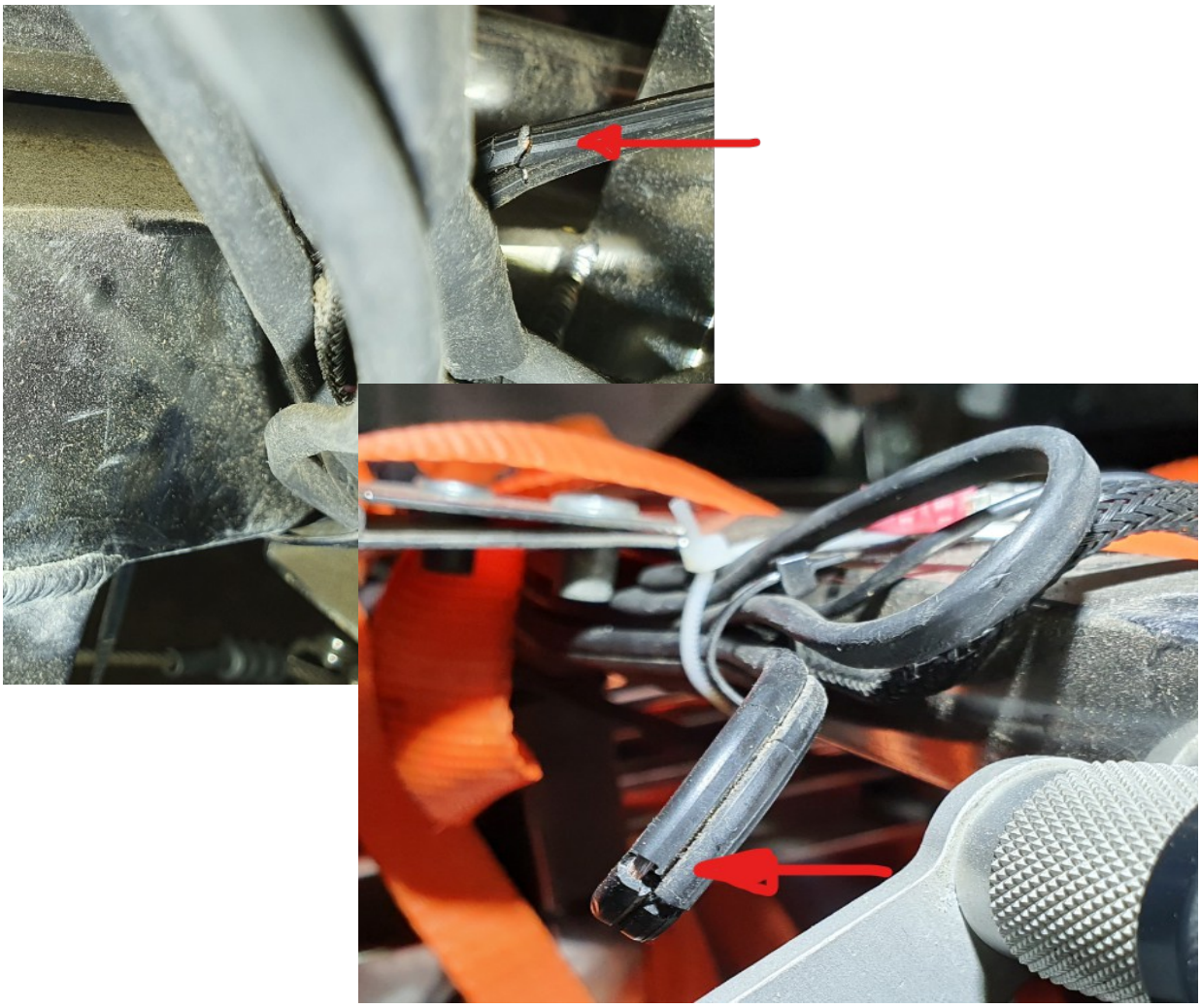
I hope that my article finds you all well and gives you food for thought after our experiences

Defect report- MTO Sport wiring

Peter Blaymires

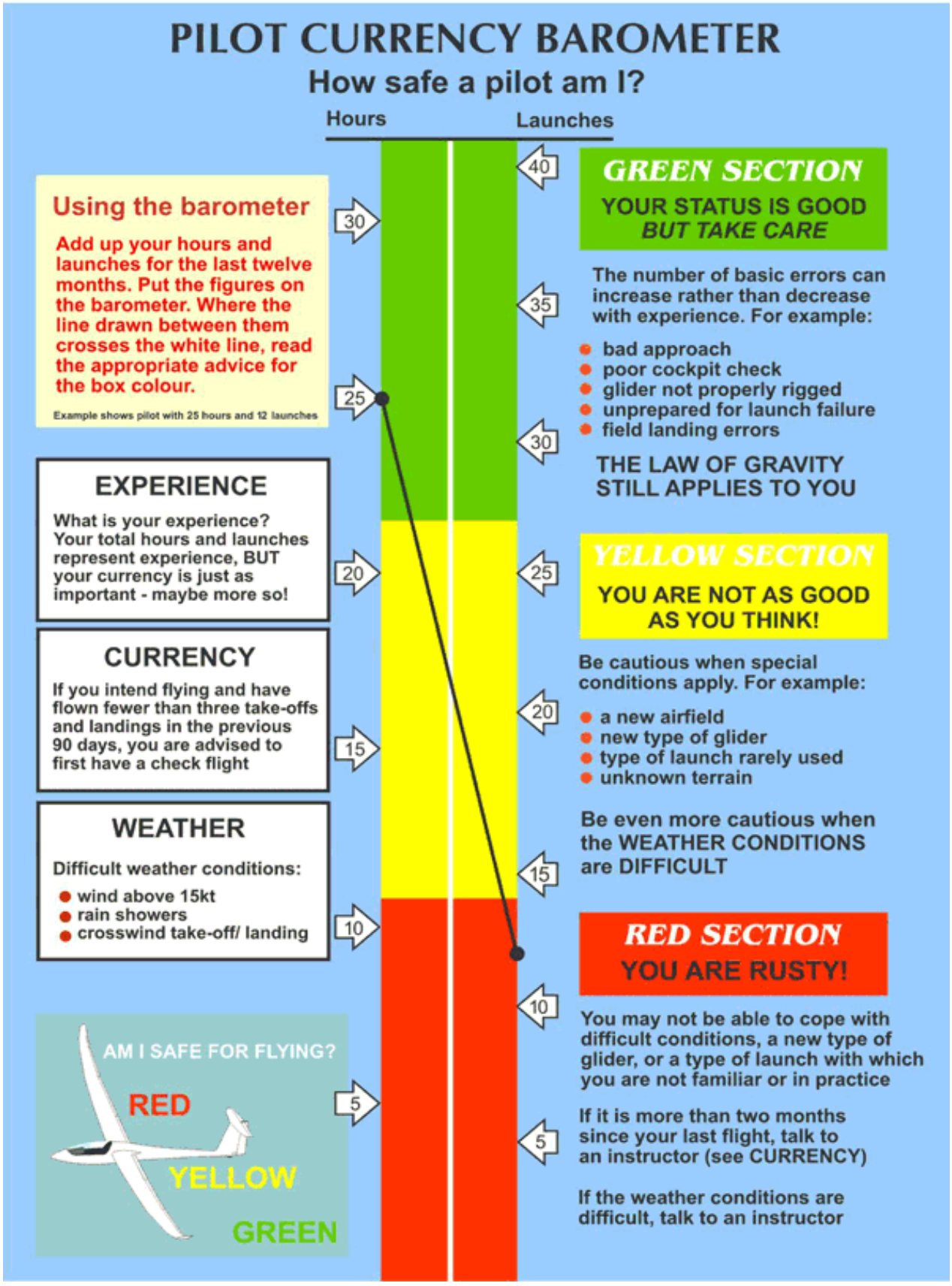
I found cracking in the auxiliary wires yesterday for the heated jackets on TCG. They are the only wires that I can see a problem with.
It's a 2014 Autogyro MTO sport. Can you please let the other owners know.

"I have got the fairings off my Autogyro at the moment and have been giving it a detailed inspection. I have found cracking on the wires to the auxiliary plugs for the heated jackets.
For some reason Autogyro have used a rubber cable for this only. It's perishing, and bare wires are showing. I cannot find any issues with other wires.
It can be isolated at fuse F6 20amp I believe."



Post-COVID19 flying?

SAFE FLYING!



Incident report

Incident Details

Microlight type/model	Aeroprakt A32 Vixen
Place of incident	NXZZ
Other aircraft involved	none
Describe the incident	Returning from a flight to the Cavali Islands, I joined at 1500 ft on the base leg for 02. I selected half flap and and called finals on the approach with the throttle closed. I went over the markers at the end of 02 at about the right height BUT my speed of 55 to 60 knots was too high and I should have made the decision to overshoot. The first time the wheels touched the ground was not hard but then everything went wrong after that and the next time we hit the ground hard. It is all a bit of a blur between the two. On the second landing the plane immediately started to swing to the left and I had great difficulty in correcting the swing. The plane then swung to the right and I had to use a lot of force on the rudder to control the swing. I braked and came to a stop near the marker boards but found that I could not steer the aircraft so stopped the engine. Willy came over and we towed the aircraft back to the hangar. The front wheel spat has been broken and there is obviously a major problem with the front strut. [redacted] PIC
Describe the affect on safety	Club audit procedure in progress and recommendations will be made in due course.

Nelson Microlight Club fly-in breakfast some time ago.

RAANZ Instructional Techniques (ITC) course

Thanks to Andy Drain, the ITC course is complete, checked out and up and running.

It is a very interactive and informative course with test at the end of each module and on completion- the final test results are logged to the member's record in our database and will be indicated on the myRAANZ and findMember webpages.

We have altered our Exposition to no require that an Instructor must have completed that course prior to issue or renewal of their Instructor rating.

2.9.1.1 An applicant for an Microlight Instructor Certificate must:

- …..
- Have completed a RAANZ approved Instructional Techniques Course.

2.10.1.2 An applicant for a Senior Microlight Instructor Certificate must:

- …..
- Have completed a RAANZ approved Instructional Techniques Course

The ITC course is accessible to Instructors through this link.

You can never have too much horsepower (except on take-off)

John Issott/Parakai

The doyen of the acrobatic scene in the U.K. in the 60s and early 70s was Neil Williams. He wrote the text book on acrobatics, which is still relevant today.
In 1970 he had a wing on a Zlin fold on him. I went to watch the world acrobatic champs, as a fifteen year old, but wasn't there when this happened. This is the article from Flight magazine, which is a typical phlegmatic ex test pilot report. Like the guy who lost the wing, he never stopped trying to save himself and the aircraft. A lesson to every pilot. We, in many Microlights have the advantage of a full aircraft parachute, as our last line of defence.
Stay safe, Cheers John

By Neil Williams - British Aerobatic Team member

1970 World Aerobatic Championships, practising at Hullavington

The weather at Hullavington was good, with 2/8 of cumulus based above 3,500ft, 1,066m. The wind was south-easterly, 5kt to 10kt and there was no turbulence.

Because there were three static balloons flying in front of ATC, it was decided that we would use runway O5/23 as datum and fly our sorties over the grass, parallel to that runway. This would keep us well clear of the balloons and the wind was so light that it did not pose any problems.

Two Zlins were operational that day, with three pilots. I had flown one sortie and took off on the second with full fuel tanks at 11.35 a.m. The sequence was flown twice through satisfactorily and the aircraft was climbed, for the next and final run through. Everything progressed normally until the completion of the fifth figure. which was a vertical climbing half roll, half outside loop to a vertical dive and pull out to level flight at about 1,000ft, 300m. During this pullout, as the nose came up to the level attitude, with 5g indicating. There was a loud bang and a severe jolt was felt through the airframe.

I have heard eyewitness reports in which the aircraft is said to have "staggered". That is perhaps the best way to describe the immediate sensation following the failure. At the same instant there was a sudden and very peculiar increase in slipstream noise. and I found myself leaning against the straps to the left although, as I looked left, the aircraft appeared to be flying level. I had reduced power and centralised controls instinctively at the first signs of trouble.

The reason for the sensation of being pulled to the left was very soon apparent. Although the left wing was flying more or less level, the rest of the aeroplane was rolling left around the failure point. At this stage there was some degree of control over the aircraft, which was by this time beginning to lose height. I throttled fully back to reduce speed and thereby reduce the flight loads, but this caused the nose to drop further. Dihedral was increasing steadily and the roll and yaw to the left were becoming progressively more determined. Full power was then applied in an attempt to get the nose up, but this had no effect at all on the situation. By this time the aircraft was outside the airfield and losing height fast. It was my intention to try to keep the wings as level as possible and to try to achieve a shallow flight path with the intention of arriving, if possible, right way up in the most convenient field available. It was, however, apparent that if control was being lost at that rate, it would have gone completely before reaching the ground. In fact all control was finally lost at about 300ft, 91m.

At this stage the aircraft had turned left nearly 90° from its original heading, and was banked 90° to the left (at least the fuselage was). I thought the wing had folded to about 45° but it was probably less than that, if one takes into account the fright factor. Full right aileron and rudder were being held on and the throttle was wide open as the bank reached 90° left and the nose finally dropped. The sideslip was very high, and the instinctive reaction to pull the stick back only worsened the situation. I had heard a report from Bulgaria some years ago where a top wing bolt had failed on an early mark of Zlin whilst under negative g and that the aircraft had involuntarily flick rolled right way up, whereupon the wing came back into position, and the aircraft was landed by a very frightened, but alive, pilot. I had guessed by this time that a lower wing bolt had failed and that I was faced with a similar situation, albeit inverted.

It seemed that if positive G had saved the Bulgarian, negative G might work for me. In any event, there was nothing else left to try. I centralised the rudder, rolled left and pushed, still with full throttle. The wing snapped back into position with a loud bang. which made me even more concerned for the structure. Immediately the negative G started to rise and the nose started coming up. Altitude was very low by this time and I had no instrument readings at all. For just a moment I thought I was going into the trees, but then the nose was up and the machine was climbing fast, inverted. I was just beginning to think that I might make it after all when the engine died. I checked the fuel pressure - zero. A check around the cockpit revealed the fact that the main fuel cock had been knocked off. This could possibly have been the result of the jolt which accompanied the initial failure. I think I was probably thrown around in the cockpit and may well have accidentally knocked the cock then. I selected reserve fuel and almost immediately realised that this position would take fuel from the bottom of the gravity tank, which was of course now upside down. I therefore re-selected main tank and after a few coughs the engine started and ran at full power.

Inverted circuit

I was quite low again by this time and initially started to climb straight ahead. I then turned back

towards the airfield and continued the inverted climb to 1OOOft, 305m. By this time, the remainder of the team had been very quick off the mark and had alerted crash facilities. I throttled back to conserve fuel as I knew the gravity tank was only good for about 8 minutes safe inverted flight. I then turned the aircraft in steady flight and held the stick between my knees (no aileron trimmer) whilst I used both hands to tighten my shoulder harness even more. Had a parachute been carried I would have climbed as high as possible and used it.

I then considered using undercarriage and/or flaps, but rejected both. Flaps were no use to me whilst inverted, and I could not fly right way up anyway. Also if only one flap extended it would cause an immediate loss of control. The undercarriage required more thought. If I could make an inverted approach with a last minute rollout and if the aircraft arrived on its wheels damage might be minimised. However, if the gear fully or partially collapsed the aircraft might turn over. Also, and this was the biggest argument against, the Zlin undercarriage usually extends with a fairly solid thump.

I did not know exactly what damage had occurred and I was concerned in case the strain of lowering the wheels might remove the wing altogether. It was just as well that I left the wheels up, because the failure was not the wing bolt after all, but in the centre section inboard of the undercarriage leg.

I also considered four possibilities for landing, namely, inverted ditching, deliberately crashing inverted into trees to take the impact, inverted crash-landing on the airfield, or an inverted approach with a last minute rollout and hope for the best.

The last seemed to hold the best chances for survival, but I then decided to experiment to see which way was the best to rollout; if the rate of fold of the wing was sufficiently slow it might have been possible to exercise some control over what was obviously going to be a belly landing (I hoped). A rollout to the left was attempted, and the wing immediately started to fold, with the result that the inverted flight was quickly re-established. The rollout to the right was not investigated, as the left wing was obviously being weakened by these manoeuvres. Also the supply of adrenalin was getting rather low by this time.

A wide inverted circuit was made for the grass strip parallel to runway 23. As the crosswind was insignificant this afforded the best approach, clear of buildings and balloons. The threshold was crossed at 112 mph., 180 kph. at about 200ft, 60m with the throttle closed. Petrol and switches were left on in case it was necessary to overshoot; also the canopy was retained, since I did not want my height judgement affected by slipstream. The possibility of a jammed canopy was considered, but the hood is very light, and I felt that I could break my way out if necessary. A slow inverted flare was made and the aircraft was levelled as near to the ground as possible.

Low, low rollout

As the speed fell to 87mph., 140 kph. a full aileron rollout was made to the right, and just a trace of negative G was maintained in order to hold the left wing in place. The aircraft responded well to the controls at this stage, but as it approached level flight the left wing started to fold up again. The nose was already down as a result of the slight negative G, and subsequent examination of the impact marks showed that the left wing tip touched the ground during the roll, although this could not be felt inside the aircraft. As the wing folded the aircraft hit the ground hard in a slight nose down, left bank attitude. I released the controls and concentrated on trying to roll into a ball,

knees and feet pulled up and in, and head down protected by arms. I had a blurred impression of the world going past the windscreen sideways and then with a final jolt, everything stopped. I released the harness, which had done a very good job, and then found that the canopy had sprung 6in, 15cm open and jammed. I didn't bother to investigate this, as the petrol tanks had split! I gave the canopy a resounding blow and it flew open first time. I felt mildly surprised that everything was still working as I evacuated the area, and having decided that the aircraft was not going to burn, and having also collected some semblance of breath and composure, I returned to the aircraft and made all switches safe. The crash services were on the scene very quickly, which was most encouraging. Fortunately they were not required.

The aircraft was a complete write-off, but on reaching into the cockpit and checking the, seat, it was as solid as a rock, all the straps were intact, and on moving the control column, both ailerons worked in the correct sense. True, there was a failure, but it is a tribute to the Czech designers and engineers that the aircraft could be flown at all.

It was a nasty experience, but a lot can be learned from it, notably that the aileron was acting as a geared tab, as the wing folded. This resulted in the left aileron being pulled down, since the aileron rods were intact, and as the wing moved, the aileron was applied without any movement of the stick. Any attempt to apply right aileron merely worsened this situation. I could have saved myself a lot of problems by rolling left immediately the failure occurred. It seems also that the damaged wing must be towards the ground during any rolls, either in or out. The ability to fly over an airfield with crash facilities is absolutely essential. This time assistance was not required, but lives have already been saved by this.

This situation may never be repeated but if such an accident does occur again the information in this account may be useful.

I hope it will never be needed.

Membership changes

Cassian Steidle	Waikato Microlight Club	Intermediate	Upgrade
David Hopkins	Associate	Advanced National	Upgrade
Robert Hyland	Gyrate Flying Club	Advanced National	Upgrade
Kevin Maurice	Gyrate Auckland	Advanced National	Upgrade
Geoffrey Maurice	NZ Autogyro Association	Advanced National	Upgrade
Guy Martin	Canterbury Recreational Aircraft Club	Advanced National	Upgrade
Nicolas Peillex	Parakai Aviation Club	Advanced National	Joined
Terry Easthope	Golden Bay Flying Club	Senior Flight Instructor	Upgrade
Francois Buys	Parakai Aviation Club	Intermediate	Upgrade
Graeme Wilton	Mercury Bay Aero Club	Novice	Joined
Craig Fullerton	NZ Autogyro Association	Novice	Joined
Andrew McAllister	Associate	Novice	Joined
Cliff Vernon	Bay of Islands Aero Club	Novice	Joined
Jeff Bonnici	Parakai Aviation Club	Novice	Joined
Antony Griffin	Parakai Aviation Club	Novice	Joined
Michael Edwards	Whangarei Flying Club	Advanced National	Joined
Brian Fletcher	Feilding Flying Club	Advanced National	Joined
Ben Friskney	NZ Autogyro Association	Novice	Joined
Thomas Hallam	Associate	Novice	Joined
Warwick Stephens	Canterbury Recreational Aircraft Club	Novice	Joined

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