November 2018

Welcome everyone to another edition of Outlanding. As you can see, the year has flown by as this is the Christmas edition. It also means that we are officially into summer so make the most of the long days and the awesome flying weather that we will have this season. Yes, I'm still the optimist!

The next edition will come out at the end of January, so if you have anything for inclusion please have it to me by the 20th of January.

Merry Christmas everyone. I hope that you all have a wonderful festive season.

Cheers, Trace.

What's inside?

CFI Report *by CFI Bill Kendall*

Firstly, I would like to cover an incident that has occurred since the last Newsletter and one in particular that could have had a serious outcome. Now that we are flying GME while GTG is in the paint shop, pilots are being very complacent in regards to the two aircraft types.

There are major differences between the two and that is why in our training we must do a type rating on each type getting to know their little idiosyncrasies and handling characteristics.

In this case the differences that have caused concern was the position of the Ballast Weights, hence the reason for sending out the British Gliding Review of Safety around Ballast Weights which high lights some very pertinent points. 22kg of weight was left in the glider and rather heavy people were flown or attempted to fly from the front seat and in one case found it difficult to close the canopy because of the weights.

It is imperative that **ALL** club members using weights in ME, where they are under the seat, must **remove them** from the aircraft if not required for the next flight and if they are, then it is the next pilot's responsibility to remove them. Which brings me to the next point. These weights were left in ME over a few days and were not removed during the DI, which they should have been. So are you looking under the seat cushions looking for FOD (foreign object debris)?

The seat cushions should be removed and that would bring the weights to your attention and thus remove them so that the aircraft is in a state of readiness for the day. There are no short cuts to a DI folks. Student or instructor do it right! I am looking at a way to high light the fact that weights are under the seat, but will run it past Trace once he is home. The C of G limits for the aircraft would have been dangerously out of the control envelope thus would have impacted on the pilot's ability to control or trim the aircraft, and if the pilot had to carry out an emergency manoeuvre then the outcome could have been disastrous. This incident warrants an OP's 10.

IF YOU PUT THE WEIGHTS IN; TAKE THEM OUT AFTER YOUR FLIGHT

Well Christmas is just around the corner and unfortunately the weather has not been the best in the lead up to it with a number of flights being turned down. For example the ATC Cadets and a number of Huka Lodge flights being cancelled so let's hope it improves before the 25th.

So from me everyone have a great festive season with a very MERRY CHRISTMAS AND A PROSPEROUS NEW YEAR.

Thank You

To all of you wonderful people in the background that helped to make the CPSC another fantastic week. Without you, the competition pilots would never get off the ground. Your efforts and support were, and always are, very much appreciated. Thank you.

Minor Defects

Please ensure if you find a defect when carrying out a Daily Inspection or during a flying day that it is recorded into the correct defect section of the Tech Log. This will ensure that the defect will get the attention it requires. If in any doubt ask the duty instructor.

Central Plateau Soaring Competition *by Hugh*

Always a great start to the soaring season, this was once again an enjoyable week at Centennial Park. It has to be said, however, that Clouds and Camaraderie have been more in prominence than Soaring and Scoring at this year's Central Plateau Champs.

Practice day on Saturday 3rd. November dawned overcast and rainy and stayed that way pretty much all day. Most people took good advantage of a no-fly day to settle in and do all their nonflying preparation to campsites, gliders, equipment and facilities, so the day was not wasted.

Sunday was to have been Day One but again the weather gods said No, this time with very strong winds. Some brave souls went flying, but not many. The Plateau Poet was moved to write some of his Vulgar Verse about one of them…

Neil tested himself in a gale
And returned looking just a tad pale
But from over the Pinus
With a groundspeed of minus,
Landing back was a Pass, not a Fail!

Monday 5th might have been Guy Fawkes Day, but no fireworks on the scoreboard as again it was not possible to task due to the weather. However it was flyable, and several gliders took advantage of a chance to have a look around the local area. Some were even able to experience a bit of wave flying which was a bonus.

At last, Tuesday dawned fine and beautiful and a task was set. Conditions were testing with lots of blue holes, but with generous AAT circles around Galatea and North Arm it was a good task which allowed the experts to spread their wings and the "newbies" to still have a chance to get around.

There were good examples of both, and just enough landouts for the task-setters to know they had got it about right! Two of those landouts were on the Rangitaiki airstrip, and aerotow retrieves were requested. Here's what happened…..

"Leave the air-tow retrieving to me,
I know that strip well," said young "T".
Well he flew all around it
And eventually found it,
"But somebody moved it!" Said he.

Day winners were Trev Terry and Rob Lyon in the Duo Discus, with Tim Bromhead second. The day was rounded off nicely with about twenty pilots and partners enjoying dinner at the local Cossie Club - along with lots of noisy Melbourne Cup fans.

Wednesday the 7th again looked good, although Skysight warned of overdevelopment late in the day. Contest Director John Etches got the field away as early as he dared and another AAT task was attempted, this time using Rerewhakaitu and Te Awa Camp as turn points. The winner of the day, Bill Kendall in his Discus CS, very wisely took notice of Skysight, got around the course quite quickly without penetrating too far into the circles and landed back safely to complete his first day win in competition. Second was Tim Hardwick-Smith. Bill and his wife then capped off a very successful day by hosting a beautiful roast meal in the clubhouse.

Unfortunately Thursday saw a return to the earlier conditions of low cloud and drizzle, so again a no-fly day. There was some competition with a close finish on the golf course, and again a chance for others to catch up with rigging, repairs and routine maintenance. Most of the activity this day, however, revolved around preparations for a superb barbecue dinner in the main hangar, hosted by Trev Terry and his family in honour of Trev's 75th birthday. Congratulations Trev. You have been and still are a big part of the gliding community both locally and nationally, and the tributes paid to you at the dinner were richly deserved.

Friday was again a "no-fly" day - the only bright spot being a good forecast for the following day.

And so it was. On Saturday 10th a task was set which combined convergences and thermals, and which, after a good day's flying, had a rather surprising result: Mike Strathern in his K6 used all his experience to win the day and beat Trev and Rob into second place, and that in fact turned out to be the placings of the overall competition, with Tim Bromhead third. Well flown, Mike, and thanks for coming to Taupo and beating us at our own game in the oldest glider in the fleet! It's not only in the workshop that Mike has proved the truth of the old saying that a bad workman doesn't blame his tools!

So perhaps the weather was a bit disappointing, but the competition overall certainly was not. Thanks to all the backroom organisers, CD John Etches, radio operators Mavis Oates and Tim Norman and the many volunteers; it was a great week with great food (thanks ladies!**)**, great fun and true gliding camaraderie.

ZK-GTG

LOOK what Ken's done!
Ken and his team are busy prepping TG before painting. Here are some progress pictures of TG's refurbishment.

What is a Variometer

A fast response rate of climb instrument usually scaled to match typical glider rates of climb and descent (+/-10 knots). The variometer makes soaring possible by displaying the glider rate of climb to the pilot in near real time, enabling the pilot to manoeuvre the glider so as to remain in rising air. Variometers come in many types, some sense the airflow from a capacity bottle or flask (as the outside pressure increases or decreases due to altitude changes, air flows in or out of the flask to equalise the pressure) either mechanically or electrically, others measure the air pressure directly using silicon pressure transducers and compute rate of climb electronically from the changes measured. All instruments suffer from lag and vario's can have around 1 to 3 seconds of lag.

Mechanical Vario

Mechanical vario's do not require electrical power to operate. Mechanical vario's don't have all of the fancy features that most electric versions do, but because they don't rely on electricity to power them they are, at the very least, a good back up in case of a power failure.

Electric vario

As the name applies, an electric vario requires power to operate but in doing so gives the pilot some other features.

Audio – To allow better lookout, electric vario's can give out an audio tone that changes as the lift increases or decreases.

Averager – Some electric vario's can give an average climb rate over a 20 or 30 second time period. This will give the pilot a more accurate actual climb rate as it is averaged over about one thermal turn. Some instruments will also give a bottom to top average (from when the glider starts turning to when it exits). Most basic electric vario's will show the average climb rate on the dial when holding down a button while the audio remains as a standard TE (Total Energy) vario. Higher end vario's will have a separate LCD screen showing the average climb rate.

Netto Vario

A Total Energy (standard) variometer as described above can be further improved as the standard vario will, in still air, not take into account the sink rate of glider at the speed being flown. As a glider increases airspeed, its sink rate also increases and this will show up on a standard vario as sink. A netto vario knows the polar curve (sink rate at various speeds) of the glider and is plumbed up to sense the airspeed. The end result is that the gliders sink rate is removed from the vario reading at all speeds. What this does is to help the pilot to pick the best path through the air in cruise (which is the path with the most and fastest rising air and ***OR*** the least and slowest sinking air). It also helps a pilot to decide whether or not to turn in lift while in a fast cruise as a standard TE vario won't show the full strength of the lift. For example, 8 knots of lift may only show up as 3 knots due to the gliders sink rate at high speed.

Relative Netto Vario *(or Super Netto)*

There is one disadvantage with a netto vario and that is if we fly through our thermal rising at 8 knots we see 8 knots on the netto vario regardless of the airspeed we are flying at. This is fine until we begin to turn and thermal as a netto vario is only set for straight line flight and by turning, the gliders sink rate has increased for the same airspeed. A relative netto vario will compensate for the circling sink rate of the glider. What this means is that in "still air" while cruising, the vario will read about 2 knots down at all speeds. Not perfect for cruising but will still work fine if the pilot takes it into account. The up side is that the vario will show what the climb rate will be if the pilot decides to turn in lift.

Static Ports/Pitot Tube/T.E. Probe

A pitot tube collects airflow for instruments such as the ASI and measures forward airspeed. They are usually situated either in the nose or half way up the tail fin. When testing for ASI operation the pilot should blow gently into the tube from an inch away. Do not close your lips around a Pitot tube and blow as instrument damage will occur. Blockage can occur from insects or mud wasps building nests inside and the pitot should always be covered when the glider is being stored.

A static port is basically a small hole in the side of the fuselage that measures static air pressure. These ports can be on both sides of the nose around the canopy and/or half way down the tail boom. Static ports should always be clear of blockage.

The TE probe is used by the vario and measures lift. The back of the tube will have two small holes that measure the air pressure and should always be clear of blockage. To test, loosely clasp hand around TE probe and gently suck into closed fist. The lowered air pressure will show up as lift on the vario. Do not close your lips around the TE probe and suck or blow as instrument damage will occur.

Farewell

To our resident "Flying" Doctor!

Gerold is heading back home in mid-December and has plans to return back to Taupo around April/May 2019. We look forward to seeing you then ☺

*task*Pilot

The 2018-19 league has commenced so don't forget to update your *task*Pilot class in your profile. The classes are;

- Pre QGP - Tauhara Class,
- QGP but not holding a Silver C badge – Tarawera Class, and
- Silver C and higher – Tongariro Class.

Upcoming Events

Just a quick reminder about the following events.

- Christmas party at Centennial Park – 15th December
- Christmas Camp – 26th December to 12th January 2019

Humour

Merry Christmas and Happy New Year