

Vintage Times

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Articles for Vintage Times are welcomed



The Vintage Glider Club International Rally at Spitzerberg, Austria

Saturday 30th July to Friday 5th August 2011

Report by Martin Simons (VGC Member 47)

The annual Vintage Glider Club traces its origins to an informal meeting of pilots and old sailplanes at Husbands Bosworth in England in 1973. On that occasion Christopher, son of the 1952 World Champion Philip Wills, was inspired to form the VGC as an international group to encourage and promote the preservation and flying of old sporting gliders of all kinds. Chris, after a long period of declining health, died in April, a few weeks before the 2011 rally. He is greatly missed but lived to see his dream become a vigorous reality.



The spectacular *Habicht*, flown by Christoph Zahn

The Vintage Glider Club has grown in strength and the annual rallies have been astonishingly successful. To attend a meeting of this kind, even without bringing a glider to fly, is like coming to a great and happy family reunion. The feeling of kinship pervades the gathering. People come to the VGC rally to fly, to admire and delight in the aircraft, but above all to meet old friends and make new ones.

This year the site of the meeting was at the Spitzerberg airfield in what is known as *Lower Austria*, meaning it is not part of the mountainous *Tyrol*. Spitzerberg lies south of the Danube between Vienna and Bratislava, somewhat nearer the latter than to Vienna.

To the VGC members who attended, lower is not an appropriate word. They will always think of this event as a *high* point in their experience. Thanks to the splendid efforts of the Spitzerberg crew, all wearing red shirts, the organisation worked perfectly. Key personnel toiled for weeks and months beforehand to prepare and to clear up afterwards. The local club members sacrificed a week of flying for us. Every aspect of the arrangements was close to ideal. If anything was not quite perfect, the friendly and energetic crew were quick to put it right; the camping facilities, the other accommodation, the meals and celebration and of course, above all, the flying. The weather was mixed with some heavy rain, but there was flying every day and some exceptionally good soaring. Nobody was disappointed.

Thanks to all!

This year 165 pilots registered 74 sailplanes. Strangers sometime ask if the VGC is for old pilots or old gliders. It is tempting to answer, *both*, but in the list of pilots dates of birth range from 1930 to 1990 indicating ages from 80 to 20

years. We were visited for several days by Fritz Ruth, who is 92! (He worked with the Hütter brothers who designed the *H-17s* and the *H-28*, which flew with us during the week.) There were many young children too. The VGC is for people of all ages.



Hutter 28

To date the gliders is not so straightforward. A few have been built quite recently from the original plans, rescued as these have sometimes been from damp and mouse-ridden lofts, or unearthed from dusty forgotten archives. The *Hols der Teufel*, which flew most successfully at this year's and several previous meets, was designed in 1927 but this example was built only a few years ago. The spectacular aerobatic *Habicht*, flown brilliantly as always by Christoph Zahn, is structurally new but several were used for displays at the 1936 Olympic Games in Berlin. The design is over seventy years old but the performance is thrilling. The pretty little *PIK 5* is likewise very new, but came off the drawing boards fifty years ago.

Some of the truly old aircraft, like the *Minimoa* and *Kranich 2*, pre 1938 in origin, may have been damaged and restored so often that, like grandfather's cricket bat, not much of the original structure remains. They still generate enthusiasm.

The *Phönix*, the first glass-reinforced-plastic sailplane from 1957, marked a most important turning point and rightly flies at our rallies. Several types which were designed and built later than 1957, but of traditional wood and fabric, are counted as vintage simply because they are not plastic. The all-metal Caproni *Calif A 21* was present, with a performance very little short of the modern composite structured, large span aircraft. This year for the first time two Schempp Hirth *SHK* sailplanes arrived and flew. In 1968 they were at the top of the competition lists. It may prove necessary soon to make a clear definition of *vintage*. These matters will have to be addressed eventually. Some very modern-looking gliders, like the *Libelle*, *ASW 17* and *Nimbus 2* are certainly candidates already for a *classic* category.

Chris Wills really started something great in 1973. The VGC has a new President now. The future looks good. Next year's meeting in Lithuania, with a special extension to the sand dune site at Rossitten, which was one of the great centres of the sport in the nineteen twenties and thirties, is likely to attract new members from Russia and all the Baltic states. The fortieth VGC Rally in 2013 will be at Lasham in England.

Day by Day

Saturday 30th July:

Since members and sailplanes were still arriving and registering, some formal ceremonies were postponed till Sunday. The visiting pilots and crews were welcomed by Rudi Wenighofer and Andreas Baumann of the VGC Team Spitzerberg. After a late briefing some flying took place. Launches by aero tow and winch were available.

Sunday 31st July:

The Rally was dedicated to Chris Wills. A memorial ceremony occupied most of the morning. Speakers from four countries told of their admiration for Chris and his friendship. Accompanied by an accordion player and a female singer, one of his favourite songs was sung.

Jan Forster, Chairman of the VGC, spoke about Chris's contribution to the vintage movement and his brother, Justin, told of his early life and subsequent career. Chris will be greatly missed.

After briefing flying began in moderately dull weather. A Farmer's Market and wine tasting was arranged during the day.

Monday 1st August:

The weather was overcast early but there was some flying and soaring after a clearance in the late afternoon. This was followed by the traditional 'International Evening', every nation offering a selection of foods and drinks for the multitude to sample. The celebrations continued long into the night.

Tuesday 2nd August:

The VGC Council meeting was held during the morning. Details of this meeting appear in the minutes kept carefully by Didier Fulchiron. Again the day began with overcast skies but conditions improved later. There was some flying but not very much soaring.

Visits to local archaeological discoveries and reconstructions of the Roman town of Carnuntum were organised. A cruise on the Danube to Bratislava and return to Hainburg was arranged

Wednesday 3rd August:

The VGC Annual General Meeting took place after briefing. Nick Newton was elected as President, Graham Saw taking his place as one of the three Vice Presidents with Harald Kramer and Neelco Ossinger. As well as confirming the general recommendations of the Council, special attention was drawn to the On-Line soaring competition which has a large international following and which in future will have a special division for Vintage Gliders. Members are encouraged to enter their flights to help achieve recognition for the Vintage movement.

A very good flying day with thermals to cloud base about 5000 ft. followed and many flights of more than an hour were made.

A display of model aircraft was held during the afternoon with some very fast and rather scary powered models allowed to operate even while full sized gliders were flying and landing nearby. The scale model sailplanes were much more attractive to the knowledgeable spectators. Afterwards Christoph Zahn in the *Habicht* performed his spectacular aerobatic routine, accompanied by music, to close the day's flying.

Some local excursions to wine taverns were arranged for crews and visitors.

Thursday 4th August:



Hols der Teufel

Very bad weather prevailed most of the day with heavy rain showers and overcast skies. Despite this, flying became possible for a time in the afternoon and the opportunity was taken for the *Hols der Teufel*, piloted by Christoph Zahn, to land safely, after a winch launch, on the rough ground on top of the Spitzerberg hill. After this the glider was catapulted off by bungee to glide

down to the main airfield. This exercise was repeated. Less determined people missed this display, having departed on various excursions. The National Evening was a celebration by the Austrian hosts, with band, meals and dancing until after midnight.



Schemp-Hirth SHK from 1965, L/D about 38:1

Friday 5th August:

This was the best soaring weather so far. Early morning mist, caused by the high humidity of the previous day's rainfall, evaporated soon to clear the skies. Thermals at first were very feeble but as convection began there was some over development. By early afternoon thermals to near cloud base at 5000 ft were plentiful and many long soaring flights were made. Launching continued into the evening. A double aero tow with the Habicht flown by Christoph and a *Meise*, flown with bare feet as usual by Ulf Kern, was arranged, with another display of aerobatics by the Habicht on the way down after release at about 6000 ft in clear sky. Some members enjoyed a bus tour of Vienna. Several fine scale model gliders were flown before dusk.



The PIK 5c, designed in Finland in 1946

Saturday 6th August:

Dawn came with clear sky. As before, overcast developed but soon the clouds dispersed and the day turned out to be good for soaring. Most pilots and crews were now packing up for departure but those not anxious to leave had good flying. Many of the crews who had been working all week, were at given the chance to fly in aircraft unfamiliar to them, especially the Slingsby T-21s

which were kept busy all day. There was a large attendance by the general public. An *Antonov 2* biplane owned and flown by Peter Gabriel flew in. The *Antonov* spent the whole day carrying members of the public on joy flights around the district, up to twelve passengers at a time. The local Harley Davidson motorcycle enthusiasts brought their glittering and powerful machines for an impressive static display. Among them were several remarkable vintage machines.

The day ended with the formal closing ceremony and annual dinner, with the ringing of the VGC bell to mark the end of the rally. The bell and the VGC Flag were handed on to the Lithuanian group who will organise the next rally in 2012.

Sunday 7th August:

The official Rally was over and most members left early. Some remained to take advantage of a good morning sky. Many of the weary crew who had helped so much to make the meeting a success, took flights in the *Antonov* over the Danube before rain developed again in the evening. The last of the visiting gliders were towed away in their trailers. *Parting is a sweet sorrow* but we will meet again in another place.



Minimoa majesty



COMING EVENTS for your diary

Vintage Gliders Australia Annual Rally



BORDERTOWN 2012

7th to 15th January

It's on again - all welcome!

Contact Ian Patching 03 94383510

MELBOURNE CUP VINTAGE RALLY

Vintage Gliders Australia will be holding a rally at **Bacchus Marsh Airfield** over the four days from **29th October up to 1st November, 2011, Melbourne Cup Day**. Members and friends are welcome, and we hope many vintage gliders will be able to participate. Winch, aerotow and hangarage should be available, and good bunkhouse accommodation is also available on site (Bed and breakfast for \$14, BYO bed linen). For more information contact Dave Goldsmith on 03 5428 3358



AUSTRALIAN GLIDING MUSEUM INC OPEN DAY

During the VGA Rally, on Sunday October 30th, 2011, the Australian Gliding Museum will hold an open day

at the Bruce Brockhoff Annex,
Bacchus Marsh Airfield.

Annual General Meeting at 11am.

After the AGM a sausage sizzle will be held.

If the weather is suitable flights will be available in the Museum's Slingsby T31b in the afternoon.

All members and friends are invited.

LETTERS

FROM Ged Terry

G'day Dave and Jenne,

I thoroughly enjoyed the feature on the Hunter Valley Easter Rally (Vintage Times 122), especially as it rekindled many happy memories for me. Warkworth was the first Australian gliding site to be blighted with my presence (in 1982). I often flew there in my early gliding pilgrimages to Australia and was always made very welcome.

I remember too, a NSW SF27M pilot (name and glider registration now, sadly, forgotten) who made such long flights that he had over 100 hours on a single page of his logbook, whereas in England it took me nigh on a full logbook to record 100 hours! This - and the wonderful reception I always get everywhere - encouraged me to keep on visiting Australia.

Mention of the Central Coast Gliding Club and the Great Northern Road also brought happy memories back from over 25 years ago.

I've never been to Gulgong but it sounds well worth making a visit. So, locals, be warned... I wish I could have attended the Easter Rally. If only I could get to the next one,but, I WILL be at Bordertown.

Ged

WINTER CHEER FROM QUEENSLAND!

From John Zoanetti 24th July, 2011



In his Cobra, getting 9 knots at 5,500 feet!



A nacelled primary lifts off

LASHAM COLLISION

From David Bull, Lake Keepit Soaring Club



K13 Aileron still connected



K21 inboard leading edge



We had a mid-air last week (at Lasham) between a K13 and a K21 and thought you might like to see the pics. Both aircraft landed without further damage but when you see how close to the aileron horn the K13 lost its wing you'll realise just how lucky the crew were. The K13 was fitted with Flarm, I don't know about the K21, but it just goes to show how sharp your look out has to be to avoid accidents. This could easily have been a quadruple fatal.

Cheers, Clive

PHOTOS FROM ANDREW FULLARTON



Charlie Lambeth in the Golden Eagle



The Coogee, now owned by the Gliding Museum



ES49 VH-GLL, also now owned by the Museum

Dutch National Vintage Rally

Vereniging Historische Zweefvliegtuigen

Jenne and Dave Goldsmith in Holland



Jenne gets comfortable in the Prefect

The Dutch National Rally is the equivalent of our own Vintage Gliders Australia Annual Rally, held in recent years at Bordertown. The event is amazingly good fun, and the hospitality shown was exceptional. As at Bordertown, briefings are a real social event. President of the VHZ, Jan Forster, is a fun-loving guy who delights in producing unusual props and presentations to the delight of all.



HydroStart 6 drum winch

For the 2011 Rally, from 2nd to 5th June, the venue was the AC Salland airfield. This is located in a typically Dutch picturesque area near the city of Zwolle, about 2 hours north-east of Amsterdam. Owned by the gliding club, the wide field has all over grass and a thin bitumen road down the centre for the cable tow-out truck. Six cables can be towed out simultaneously with the swinging arm of the tow truck in locked out position. Winches available were one each of a 2, 4, and 6 drum, with stranded wire or synthetic rope on the drums. About 100 launches a day were carried out, and we observed only one cable break (on the wire). The large clubroom just accommodated the crowd at briefings, and the club hangar and workshop next door catered for only a small number of the visiting gliders. Many gliders were derigged each evening, with the next day's rigging party a not unpleasant activity in the mild weather conditions.



A welcome spot for relaxation, around AC Salland's pie cart

Accommodation included the usual variety, from motorhomes and caravans to camping in trailers. Jenne and I stayed in a comfortable Bed and Breakfast about 15 minutes drive from the airfield. Breakfast, lunch and dinner were catered for at the club.



The Ka6's were a popular choice

Gliders present this year displayed a wide variety of shapes and colours, with the Ka6 and Ka6Es the most numerous. Some pilots saw the good weather forecasts and brought their "classic" Ka6 to fly crosscountry, rather than bring their "real" vintage glider. From a total of 28 gliders, represented were the Mucha, SlingsbyT38 Grasshopper primary, T30 Prefect, T8 Kirby Tutor, T21b Sedbergh, T31b Tandem Tutor, T34 Sky, Motor Tutor, Bocian, Ka4, Ka6, Ka6E, K7, ASK13, Phoenix, Cobra 15, Doppelraab and Kranich II.



A colourful Ka4

The rally begins with the ceremonial displaying of the warning sign "Flying Wood!" for all to see. At the ten o'clock briefing, after the weather forecast is digested, tasks for 15 metre and open class are announced. The open class task, usually a run around local castles and landmarks, is for those sporting an open cockpit! Photo verification is used.



Slingsby T21b Maintenance

Jenne and I arrived early on 3rd June, to find the rally in full swing, and some familiar faces from previous times present. Over the Dutch tradition of plenty of coffee – and Jenne's green tea! – we renewed friendships and were introduced to anyone nearby. The acceptance and welcome for visiting glider pilots seems universal, and Eric Munk, who travelled Australia and spent two years at Tocumwal, commented to many on the wonderful welcome he had received at Australian Gliding Clubs, even stopping his interstate bus to get off when he noticed gliders launching in a nearby gliding club!



Slingsby Tutor "the Pink Panther" gets a mascot

The airfield filled with colourful gliders, as the clear skies and warm weather tempted pilots to fly. With launching in full swing my camera was working overtime when I noticed Jenne climbing into the front seat of a Bocian! That was quick! Over 2 hours cruising with Hans Dijkstra, and admiring some spectacular and historical

landmarks, had her smiling from ear to ear. A delicious dinner, many stories and a few drinks rounded off a very pleasant day. Although the Dutch language was the order of the day, and Jenne was delighted with the patience she received in trying to get some practice in speaking it, most were very happy to practice English when they got the chance.



K13 lift-off

The next day the weather was a repeat of the previous, and we each flew the Slingsby Prefect, Jenne having half an hour. It flew very nicely, with no canopy or windscreen and only a light breeze the whole panorama was there to be seen! I was also delighted with the opportunity to fly the historic Slingsby Sky, of 18 metre span and often mentioned in Philip Wills' books. A late thermal soon had me at 1,080 metres and admiring the beautiful countryside. Returning to assist the scheduled de-rig, another nice thermal was just too tempting to pass up!



Eric Munk briefs for the Slingsby Sky

Unfortunately the last day of the rally was cancelled as the rain came down. Packing up the remaining gliders and drinking lots more coffee and tea, we reluctantly said our goodbyes with the hope of joining in again in the not too distant future.

We would like to thank all the rally participants, both for their efforts to run the rally and for always doing their utmost to make us feel at home. We especially would like to thank Hans Dijkstra, Eric Munk and Erwin Janssen for

opportunities to fly their gliders, and Jan Forster and others for their friendly support. In May, 1991, Marijke Waalkens kindly took us for a flight in her unique Doppelraab. We look forward to responding with similar hospitality when she visits Bordertown 2012!



Eric, Erwin, Jenne and Jan, VHZ President



Photo by ALEXANDER GILLES

Author: Stefanie Gester

It's worthwhile to fly vintage: Online Contest OLC offers Vintage Glider Club Oldtimer Scoring

It is an open secret that pilots fighting for valuable points at the www.onlinecontest.org platform often fly vintage gliders. Since September 2011 these flights are filtered and ranked in the worldwide vintage scoring. Following the established OLC rules flights with gliders made of wood and steel as well as early-generation composite types are ranked. The initiators are glad to offer this special scoring to all vintage glider enthusiasts and clubs not being equipped with state-of-the-art aircraft. You can find the ranking if you go to "Gliding" at www.onlinecontest.org. Scrolling further down leads you to the Vintage Glider Club logo and the scoring. The winners of this unofficial vintage class will be awarded at the annual OLC Symposium, for the first time in autumn 2012. Go ahead - fly vintage.

<http://www.onlinecontest.org/olc-2.0/gliding/index.html?c=C0&sc=&st=olc&rt=olc>

THE GREAT Ka7 RACE AT GULGONG

JANUARY 1989

From John McCorquodale

Cartoons by Howard Leslie



The following Ka7's were competing at Gulgong in wonderful conditions, although there were some storms during some afternoons. Sierra Juliet Hank and Anita Kaufmann

Papa Golf	Ray Ash, Fred Brown and Brian Hemmings
November Tango	Ken Knutsen and Dennis Meyer.
Quebec Papa	Harry and Wendy Medlicott
Charlie Quebec	Robert Hare and Henk Meertens.
Kilo Yankee	Several Cudgegong Gliding Club Members
Quebec Echo	Howard Leslie and Janet Laird



You will notice that the seven Ka7's are set out in a straight line in some photos, and in the shape of the number "7" in others. Those from a high position were taken from the roof of the hangar. The aircraft from closest to the hangar were Sierra Juliet, Papa Golf, November Tango, Quebec Papa, Charlie Quebec, Kilo Yankee, Quebec Echo.



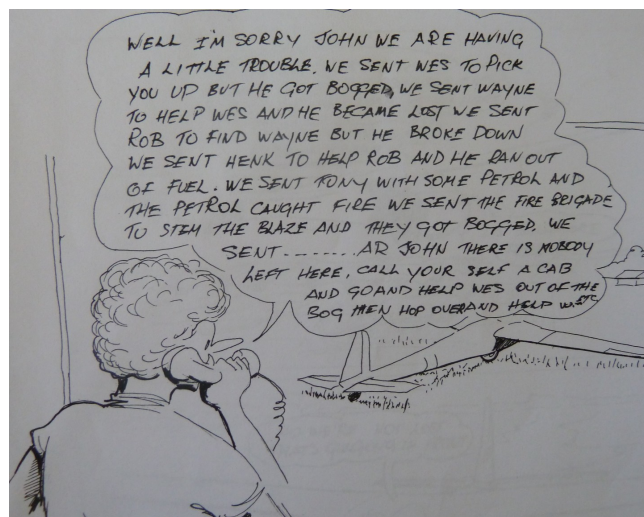
There were several very memorable flights had during that event. Ray Ash was flying with Brian Hemmings in Papa Golf, and while heading towards Mudgee, they got low, and decided to land alongside a high tension power line. On late final approach, Brian was flying from the front seat, with Ray looking over his left shoulder, and suddenly they struck a single wire which was not visible, it ran up the starboard wing, and shattered the rear canopy, and only that Ray had his head leaning to the left, he could well have been decapitated! They landed only to find that the cable when it touched the long dry grass in the paddock, set off a grass fire, which quickly got out of control, and with nothing to use to beat out the flames, apart from a hat, it looked quite difficult until the owner of the property came out to help!

The reason the wire was invisible, was that it was a single strand coming from the High voltage power line, down to a transformer mounted in a tree, known as a single cable earth return supply to the owner's home ! Howard and Janet were looking for a thermal, and spotting the fire, assumed that Ray and Brian had deliberately lit it for them to use as a thermal source ! Howard was to draw one of his classic cartoons depicting this event !

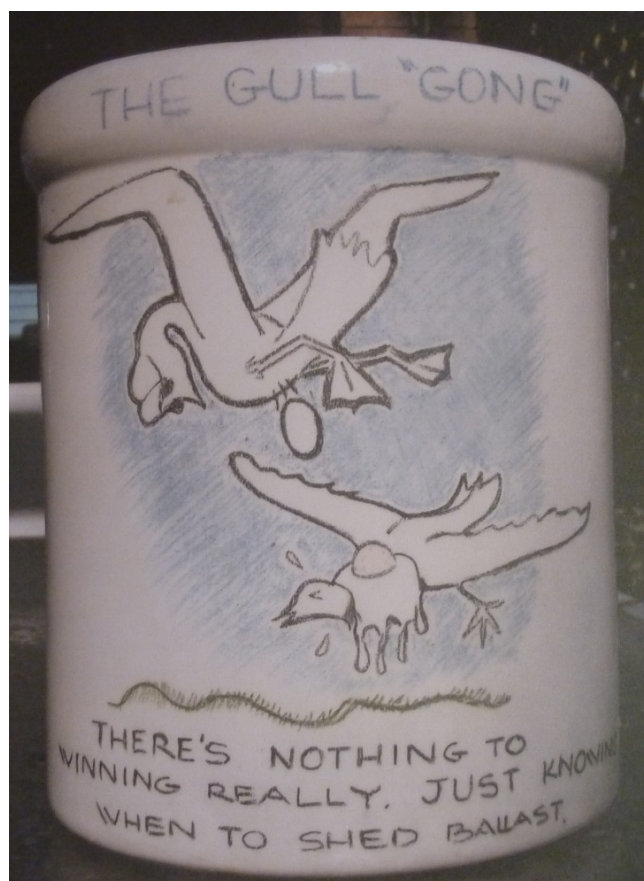


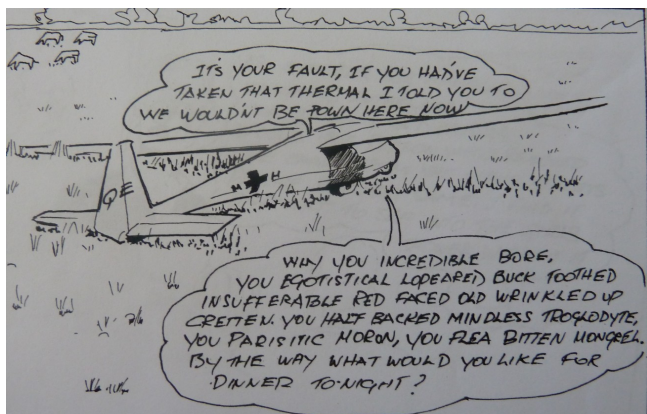
Not much sympathy for Ray Ash!

I was flying a Club Pilatus, and did my first 50 Km flight cross country from Gulgong. On another day I outlanded just near Birriwa silo. I managed to call back to the Gulgong base, to ask for a retrieve, which proved to be many hours later, after many attempts, with the retrieve vehicle getting lost, or bogged or for other various reasons ! Howard's cartoon took some poetic license but proved to be a litany of reasons as to why it took so long, considering the distance was not that far, less than 20 Km !



A lot of the cartoons say it all, and although the names and the people were real, Howard's ability to see a funny situation, with some embellishment, made for some wonderful stories about a fabulous Ka7 Regatta !





HOMEBUILT SAILPLANE CORNER

Correct Weight ?

By Peter Champness



Measurement of weights* is often required in gliding:

The weight of the whole sailplane and its major components is usually obtained using calibrated scales maintained by the state gliding organizations.

Smaller items such as cockpit instruments or quantities of epoxy glue can be measured using scales of various sizes (eg. kitchen scales) but quality scales are expensive to buy and the accuracy is generally not known.

At one time I tested a range of bathroom scales in a shop, by weighing myself on each scale and compared the result. I found that the results varied by 5kg between the highest and the lowest, which at my then weight of about 85kg represents a variation of 6%, which is quite a lot. The price of the scales varied by a lot more than that. The most expensive was three times the cost of the cheapest. However as I did not know my own weight exactly, I had no way of knowing, at the time, which was the most accurate.

Fish scales (spring scales) can be used for measuring the force required to operate a Tost release during the testing procedure and kitchen scales are useful to measure the weights of instruments or other equipment which may be added or removed from a glider. These can vary greatly in price, depending on perceived quality, but I have yet to see any of them sold with a calibration certificate. Even if they came with a certificate should we believe it?

The answer to all these problems is to test the scales with a known weight or a set of known weights. When beam balances were common, one could obtain sets of standard weights in various sizes (they came with the scales). Unfortunately they are now rare and have become collectors' items, hence expensive. They are also usually in pounds and ounces, which is inconvenient as our scales are now in grams and kilograms. New standard weights are available but still very expensive.

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Above is an old ad that I thought might be of interest. It's from the August 1931 edition of "Flying", the magazine of the NSW Aero Club.

Andrew Fullarton

Fortunately there is an alternative for the smaller weights, COINS. Coins are stamped from uniform strips of metal using carefully made punches and dies and one can expect them to be very uniform in weight. My coin collectors' handbook gives the following weights for Australian coins:

1c	2.59g
2c	5.18g
5c	2.83g
10c	5.66g
20c	11.31g
50c	15.55g
\$1	9g
\$2	6.60g

A kilogram of coins is not too difficult to accumulate, especially if like me you accumulate loose change. After use as standard weights they can be spent again, so the cost is effectively nothing.

So for kitchen scales and spring scales we can calibrate them using coins as standard weights. It does not matter if the scale gives wrong readings as long as it is reliable, that is that it gives the same wrong reading when measuring the same weight time after time. Then it is just a matter of correcting the indicated weight. That is usually most easily done by drawing a graph using the known weights on the x-axis and the indicated weights on the y axis. The graph will usually be a straight line, even for very cheap scales so long as the maximum weight for the scale is not exceeded.

For heavier items bathroom scales will usually suffice, as most will weigh up to 120kg. That is enough to weigh each wing of a sailplane. Weighing a single seater fuselage might require two scales with a bridge between.

I have weighed my glider trailer both with and without sailplane using a steel beam supported at one end on a jack and the bathroom scales at the other. The beam was placed under the trailer axle closer to the jack end and the scale reading multiplied by the ratio of the distances on each side of the axle. Using "V" blocks as pivots improves the accuracy of the measurements.

Coins are inconvenient to use as test weights for bathroom scales but a bucket of water can be used instead. Pure water has a density of 1.000kg/litre (by definition). Fresh water is almost the same. The small amounts of impurities can be ignored for this purpose. Hence 1 litre of water weighs 1 kilogram. Weigh the bucket using your calibrated kitchen scales, and then add water using a measuring jug. The full bucket holds 20 litres so weights up to 20.3kg

can be created (plastic bucket weighs about 300g). There could potentially be a problem with the accuracy of the measuring jug. However I tested two jugs against on another by filling one to the 1 litre mark and then pouring it into the other and found the variation was not measureable (less than 1%).

Testing the scales beyond 20kg requires the use of some other objects, each less than 20kg, which can be weighed separately to establish their weight, then loaded on top of one another on the scales.

Mike Burns has made himself a test weight of 40kg (if I remember correctly), which consists of a can filled with concrete with a handle cast into the top, which he uses to test his glider weighing scales prior to use.

If you are interested in weighing you glider or parts thereof you can hire scales from the state gliding organisation. Or get your own! Most households already have kitchen and bathroom scales. They can be purchased at discount stores for less than \$10 for kitchen scales and less than \$20 for bathroom scales.

*Weight vs. Mass: My physics teacher at school said weight is the quantity measured by a spring scale and mass is the quantity measured by a beam balance. Weight is actually a force equal to the mass times gravity. If gravity varies, eg. on the moon or at the bottom of a deep hole, then the weight will be different. Mass is something else which stays the same regardless of gravity. The term weight has been used here since all the scales described measure the extension of a spring.

Question: Will a mass weigh more at the top of a mountain or at the bottom of a deep hole?

*Until next time, enjoy the spring thermals!
In the next issue we hope to bring you full details of the Bacchus Marsh Rally and Open Day, Vincenzo's spectacular photos of the 2nd International Vintage Glider Meeting "Ugo Zannier", and an article from Allan Ash. Maybe some of our members will have some great flights to tell us about! We hope to see many members at the VQA Rally at Bacchus Marsh!*

Dave and Jenne G