



LEEK & MOORLAND SCALE

Simon Cocker reflects on a hearty slopeside scale bash

words & photos » Simon Cocker

Our local club – the Leek & Moorland MGA – hosts an annual slope fun fly event, inviting model aviators of all skill levels to join together to celebrate the wonderful world of scale sailplane soaring. Every type of sailplane – vintage or modern, big or small – is welcome. The event is an excellent opportunity for camaraderie, and low key too, making for a relaxed and stress-free environment. The eclectic mix of characters makes for a fun day out with plenty of banter and laughter.

Proceedings for the 2017 bash, planned for an August weekend, were orchestrated by our club's ever-enthusiastic competition director, Ant Jervis, who ensured everyone enjoyed the maximum amount of flight time possible. Saturday was scheduled as an

informal fun fly, with the event proper to be held on Sunday.

The NW blow proved relatively steady throughout Saturday, our 'Gate' site providing enough lift to support all. Our SW slope (also known as the Mermaid Pool site) has a perfect landing area for big, expensive sailplanes with a safe overshoot option (if needed) back into lift. When Ant and I realised on Saturday morning that the weather forecast for Sunday revealed little-to-zero wind we opted to run the event there and then so alerted all present that cash prizes were up for grabs. It wasn't worth the bother of moving to the SW site and we decided to see how things worked out.

Top-landing on this slope is quite tight, with reed beds scattered about

that can initiate a dodgy ground loop, thereby presenting a high level of risk for the bigger, treasured models. Safe landing involves a short walk behind the slope onto a massive area of moorland, which proved to work perfectly well with assistance from a helper to negotiate the road, bank and rough ground, to an area where a smooth touchdown could be had.

This gently graduated (but far-reaching) bowl generates a wide spectrum of lift, providing ample airspace for up to six aircraft to fly simultaneously in relative safety. Vintage types tend to easily ascend and settle at height out of harm's way, whilst modern ships perpetually show off with fast passes, to feed their pilots' need for speed and aerobatics.



SKYLARK 4

Robbie Bridson was amongst those feeling the need for a little aerial action, uncharacteristically pushing his gorgeous Skylark 4 down to head height before delivering some low-level passes beside the launch area, punctuated by a series of graceful chandelles and a loop or two. At 5m span this is an imposing aircraft, its chunky fuselage adding to its presence as it sailed past the end of our noses in grand style. Robbie deservedly returned to North Wales with the award for the best-presented and finished scale sailplane.

SLINGSBY KESTREL

Brian Sharp made the trip from Scotland sporting an all-moulded, 4.5m Slingsby Kestrel, with which he orchestrated a fabulous set of flights throughout the day. This aircraft is a stunning rendition of the 19m span, high performance, single-seat, open class sailplane from the 1970s. It's a superb all-round performer too, enjoying effortless height gain in the gentle lift while circumnavigating the expansive flight arena with ease. Brian also demonstrated the outstanding braking and landing capability with the combined power of airbrakes and crow

braking. He was one of the few pilots who managed to execute a top landing onto the short slope area from a direct approach over the road and menacing dry stone wall, rightly collecting the Best Landing prize for his expertise.

NIMBUS 4

In the indifferent conditions that prevailed earlier in the morning local lad, Martin Lawrence, bravely flew a stunning 7m span, 1:3.5-scale Paritech-made Nimbus 4, recently purchased and refurbished.

It takes some nerve to commit such expense to uncertainty - this was his first flight with the aircraft - but the maiden trip proved to be a long, successful outing after a few airborne programme tweaks. We both use Jeti radio so were able to quickly access and navigate the programme to make in-flight adjustments for each other; a useful process for setting up a new model, particularly when elevator compensation is needed to tame the violent pitching change of crow braking deployment, making for a happier, safer maiden landing.

Whilst the flight aspect was fine, landing proved to be a different story due to an errant airbrake that decided to partly deploy and wouldn't retract. In

the panic to land the model safely with just crow braking, Martin forgot that the solution was to use both airbrakes rather than leave one to upset yaw and roll control. Masses of opposite rudder would have saved the day, however the model suffered a snapped wing tip upon arrival - a small price to pay though considering the major disaster that was trying to unfold.

Anyway, Martin was delighted to be recognised with the best flight of the day, the £20 awarded with this accolade covering the cost of the repair materials and a few shots of Jack Daniels to numb the memory!

ASW-24

Paul Carrington showed up with a sturdy ASW-24, after a 15-year hibernation from the sport. Aply assisted by his long-suffering flying buddy Mike Challinor, the pair finalised the radio set-up and C of G position on the slope side, absorbing a fair amount of friendly ribbing for such lack of preparation.

We emptied everyone's spare lead ballast into the nose of the lovely German-made model - believed to be a Rippin kit - and then estimated where the balance point should be. Paul was a successful competition F3B pilot





Ant Jervis with his 1:1 Gull before that exciting flight.



Ian Blackwell shows off his other regular hack the aerobatic Swift.



About to negotiate the road with the huge Nimbus 4



Paul Carrington programmes his new model.



Martin and Simon with the 7m span Nimbus 4 about to take flight.



The 5m span Skylark is delightful to watch so effortlessly soaring in the light lift.

before his long sabbatical, hence the horror of his new ways. Nevertheless, his new model flew well (hard to believe it was a maiden flight) as it scythed across the slope after just two minutes in the air. The energy that this 4m span model amassed so quickly suited Paul's aggressive flying style.

LO-100

It was great to see John Minshell and John Beech who had travelled over from Clwyd to enjoy the relaxed flying atmosphere. John M flew his LO-100, a pretty sight to behold as the type is rarely seen these days. Beautifully finished, its light weight really suited the conditions.

ASH-26

Another newbie to the scene was the irrepressible Paul Carr, who spent more of the day chatting rather than flying his lovely Multiplex ASH-26. The model was sporting a nose-mounted SLS, a powerful motor lurking behind the innocent-looking fuselage.

I launched the ASH into the last of the afternoon lift and, when I finally left the slope for home, Paul was still hammering the sturdy airframe along the ridge at high speed whilst revelling in the endorphin rush.

SEAGULL

Ant confounded us all by producing a gull; not a Slingsby Gull, but a seagull at 1:1 scale in all-composite form. Great consternation ensued as this seemingly testosterone-laden bird shot around the sky. For me, the greatest entertainment was his expression of sheer terror as this aggressive little bird took him on a rollercoaster ride whistling over bemused grazing sheep before scything through a clump of reed grass. This reed butchering did, however, help to clear a spot for Brian to land his beautiful Kestrel later in the afternoon.

LEEDS POSSE

From Leeds came the posse of Ian Blackwell with his faithful Swift and ASW28, Merrill Liburd with an equally long-in-the-tooth ASH-26 from the Multiplex stable and the infectiously excitable Andy Shaw with a collection of models. These boys got stuck in and enjoyed a full day of flying fun and social interaction.

FAR-FLUNG

One of our most far-flung visitors was the delightful Antipodean Paul Chisolm, who resides in Auckland and was staying on the Wirral for a three-month visit to his relatives, making the most of

his trip by touring around a number of the UK events including the PSS meetings on the Great Orme. A delightful character and very active modeller, he offered to share some of his New Zealand news here in a future.

It was all great fun; good flying mixed with plenty of chatting and making new friends, we're looking forward to a repeat performance this August.

SAY NO TO RETRACT SERVOS

Retract servos are highly geared units that rotate through 180° and can provide around 6kg/cm of torque for applications such as pulling and pushing heavy undercarriage legs into their gear wells. However, if used in the wrong application, havoc can ensue; the damage to John Minchell's lovely DG-600 at Milson in an aerotow take-off mishap is such an example.

John released the line a moment after the wing tip touched the runway, causing the sailplane to buck violently sideways; as the tug progressed to flying speed, the DG-600 was being thrashed to smithereens against the grass runway as the tow line didn't release from the nose of the glider quickly enough; the retract servo employed as the tow release took almost two seconds to let go of the line. The pulling force from the



Brian Sharp here between flights with his lovely Kestrel - a delightful shape in the skies over Leek.



John Minshell with the bright LO-100 which is a regular hack model now.



Andy Shaw spreads his palm around the fat Gull ready to launch the all-moulded creature.



Tom Blackwell flew his 4m span ASW-28 many times during the day in the lighter lift spells.



The Slingsby Kestrel is a pretty design derived from the Glasflugel 304.



Andy Shaw with John Minshell's DG600.

tug is a full 56lb (25.5kg); add to that the braking strain of the sailplane, resisting that force by contacting the ground and there's even more harmful energy hammering into the glider's airframe. The sad remains of John's all-moulded machine lay strewn and forlorn beside the furrows it had dug during its death throes.

A retract servo is unstoppable once given the command to commence its 180° cycle. It can't be controlled in the computer radio set-up using sub-trim adjustment or travel adjust settings. If it's interrupted by a mechanical stoppage it will stall and soon burn out. In the case of an aerotow release it's imperative to have a high-torque, high-speed servo that will release the line in an instant whilst being under great load.

As a rule of thumb, the servo's torque output should be the same as the weight of the model. The geometry of the linkage should be as short as possible, so little movement is required to activate the release action. Also, it's advisable to use a metal servo output arm and fit the (heavy duty) linkage close to the servo output shaft for further mechanical torque advantage.

I try not to use a retract servo on a retractable wheel unit in a sailplane for

similar reasons. In almost all 1:3-scale applications I've found a Hitec 645 to be man enough to provide a lifetime of service.

Fema retract units have a simple movement with a spring assist, and the standard servo sweep covers the full range of the mechanism often allowing tuning with sub-trim. It's safer to set this up initially by reducing the servo travel by half to avoid any binding and then increase the range of travel at the Tx accordingly.

Digital servos will burn out quite easily if strained for too long, in fact not long at all. Due to their higher resolution, the expensive and precise types are frequently more sensitive to this occurrence.

Analogue servos are far less expensive, less electron hungry and considerably more tolerant to this type of abuse. I often still use Hitec analogue servos for aircraft of lesser performance where the expense of digital power, accuracy and speed isn't essential. The great advantage of Hitec digital servos, however, is their ability to be programmed before persuading them otherwise by the radio programme. My old HFP-20 Hitec digital servo programmer enables all of their digital servo range to be reversed in direction,

for example. A case in point being the Valenta 213 and the huge Paritech DG-1000, where two servos are ganged together in parallel to serve one flying surface. The flaps on the DG-1000 use a pair of HS-7955 high torque servos, also carefully tuned to operate in harmony.

The latest version of the servo, the HFP-30, offers overload protection where the servo can be commanded to reduce its power draw under excessive strain by up to 50%, preventing a burn-out in a stalled scenario. Being brand loyal here has made a servo programmer an invaluable tool and justified its expense.

WEATHER WITH YOU

Looking back over the collection of photographs I've amassed during the course of 2017 reminded me that we were blessed by some ideal weather windows. That said, I often hear disparaging remarks from model aviators expressing their disappointment of the year's flying opportunities; indeed life is full of so many responsibilities that can displace the chance to catch the moments that enable a decent flying session.

Often, though, such chances are missed due to poor preparation, which occurs when you take your eye off the





Keith Rathbone, leader of our Leek slope club with his venerable Robbe-made Calif.



Sport models were allowed over the lunch break, this is a rather sexy Pace XL flown by Martin Lawrence.



Paul Carrington and Mike Challinor with the robust ASW-24 before the maiden flight.



Paul Carr with his ASH-26 before his memorable flight.

weather forecasts or fail to charge your radio gear in time; always being prepared is the key to successfully catching the 'big wave'. There is of course the omnipresent work/career hindrance that can be a killer for any thought of an impromptu flying escape, although with a little pre-planning a day off here and there will catch that big wave if you're sufficiently determined.

So, with the 2017 season done and dusted, thoughts turn to soaring activities this year. I hope to make the Rhossili Down pilgrimage to South Wales, making amends for missing it in 2017. The Glider Fair in Schwabmunchen is also on the radar; a Mecca for sailplane enthusiasts. I plan to visit some new slope soaring sites around the UK and perhaps a few in Europe. Fingers crossed there'll be plenty of good flying weather to take advantage of.

As always, feel free to get in touch via flyersanonymou1@aol.com. ✈

SLOPE ODE

Over the past few years I've become close friends with Andy Gough. An active flyer on the Leek Moorlands, he's developed an addiction to slope soaring and we share a similar outlook on the universe. Signing off this month's missive is an *Ode to Glider Guiders*, Andy's take after people watching on our local slopes.

Some smell of petrol,
some, other kinds of fuel,
but the glider guider smells of neither,
he's a different kind of fool.
There are many types of aerial riders,
some rich and some quite poor,
but they all become as equals
as they're blown around the moor.

Many are the type with flying wings,
they cut them out of foam,
they bash the things together
and then they zoom off home.

Then come the older men with bobble hats.
Takes hours to rig their planes.
They drink some tea, talk and talk,
then strip 'em down again.
"Not flying today?" Someone asks,
"Nope!" they reply.
"Got to go home to mow the lawn
whilst the weather's dry."

There's those with planes of glass,
with carbon everywhere.
They make a whoosh as they speed past,
but their smiles are really rare.
These boys are proper serious
every time they're out to fly,
from ground level to tiny speck,
they eat up all the sky.

But when things go bad they never laugh,
whilst others think it's funny,
as they gather around the hole in the ground...
my crashes cost less money.
Watch out when the big scale gents turn up
with gliders that are vast.
They fly and fly till darkness falls,
or while the lift still lasts.

The boys with tiny wings
walk down the slope and glare,
as they retrieve the broken model
that's just run out of air.
Up above, still gliding,
with nothing gone awry,
the huge scale model soaring high,
caressing cloud and sky.

There's always those that know it all,
to them it's all a doddle.
Yes, you've guessed, they never fly...
They rarely bring a model.

Gotta love the guy with everything,
his glider gleaming white,
but fly it? What? When someone asks,
he shivers with sheer fright.
He'll find a fault or other glitch,
so all's not up to par.
For him and his hangar queen,
it's straight back to the car.

Then we have the special guy
who's never on his own,
he's spent six months' wages
on the precious airframe alone.
A thousand pounds on servos
and a tranny worth a stately home.
This model comes out once a year,
but it does the biz,
then the next eleven months
bragging just how good it is.

Finally of course there's 'radio failure dude'
who's so often found,
at the bottom of the slope
with his glider in the ground.
One moment of joy as the glider flies
and then once more it's downed,
as the sorry plane meets soil and rock,
at twice the speed of sound.

We all share a common bond,
whether balsa, glass or ply,
to gather on that windy hill
and make our gliders fly.
We dress in gear to keep us warm,
some dress up like blimps.
Some wear hats and scarves,
and some dress like big soft wimps.
It doesn't really matter
what's used as warmth providers,
we'll never budge, it's wrong to judge...
We're all just glider guiders.