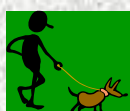


# Ridgeway Repeater Group

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## Newsletter

### August 2014



## MARSH RAMBLINGS



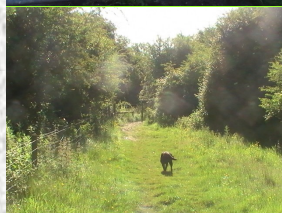
An illustrated walk over Freemans Marsh, just west of the town of Hungerford by Neil M6CUE

Twice a day, every day, we (my K9 companion "Gizmo" & I) would sally forth over the Marsh, I would cross the river bridges, he would paddle through the rivers, then, when we reached a bench, I would sit & call out on TD on from the Wouxun KG-UV 6D handy, then it was home to breakfast, or, tea (him & I). A lovely walk during the summer, but a bit bleak during the winter months, or, even during summer if it was wet.



The first gate leading onto the Marsh, from Marsh Lane.

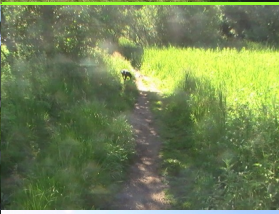
My late walk buddy "Gizmo" who died on June 16th, so sadly no more doggie walks at the moment.



The entry into the "Black Hole", radio signals can enter here & never be heard again. Dogs, Cattle, & humans seem to be alright though. Marsh Lock Swing Bridge, along with some natural obstacles, which will move if handled correctly.



One of my best spots for qsos on TD, it's a memorial bench placed here by relatives of a couple who walked the marsh daily. One of the smaller bridges on the marsh, this one is over the river Dun, just before turning to start the homeward journey.



A wooden "kissing gate", the gate is hinged on a slight angle so that it closes itself behind you once you've gone through it. Part of the footpath back towards home, at this point earlier in the year it was flooded to a depth of at least 10" OK if you had good wellies on.



On the way home we'd pass through the grounds of the parish church of St. Lawrence,

The entrance gate originally had a gas lantern on each side, those were replaced by a centrally positioned electric lamp. Two minutes from here & we were home.



# Chasing Weather Balloons

## by Richard G4MUF



Strictly, we chase radiosondes using their 400 MHz transmitted signals. It is a hobby combining several facets:-

Meteorology by interpreting the upper wind flow to deduce where it is going, as well as studying the cross-section of temperature and dew-point at different heights. Operating "Sondemonitor"(SM) software so as to get the audio from the radio into the soundcard. DF-ing or foxhunting to find the sonde. A bit of map-reading, and of course a nice walk on unexplored paths and tracks looking for the tell-tale bright red parachute lying there. Oh, and some GPS understanding helps. Its getting-up time and I wonder which sonde to follow. A glance at the clouds' movement gives an idea of the winds. Best use high cloud as its more representative. Of course I may have looked at the TV forecast the night before, or at online wx maps, to get the drift. The surface wind arrows are not always useful, and its better to look at the forecast animation showing the blobs of cloud or rain movement. There is even a balloon trajectory url which does it all for you! Then I choose which sonde launching station might send one in my direction. Camborne, Aberporth, Larkhill, Watnall and Herstmonceux are the regular choices, plus occasional odd ones from Cardington or Reading University. Then its to the shack, tune in to the signals, get SM running, turn the log-periodic to the right direction. The balloon goes on rising till it bursts at between 40,000 and 100,000 feet. Then a small parachute opens to slow its fall-rate. Sometimes a sonde might past over here, so I have to swing the LPY to get a good recording of its descent. Instead, I might use a discone so that I don't need to be in attendance or worry about the direction but it has less gain than the LPY's beam. SM is very flexible, and once I left it running for several days while we are away and come home to find 4 or 5 recordings awaiting me. We then retrieved three of them in one day. SM is created by COAA of ship-plotter and plane-plotter fame, and Bev Ewen-Smith who wrote it has been very diligent in listening to users' input, and then he produces a new version with the changes in it. When recording has finished, I put a cross on the OS map and we decide on a day's outing. Sometimes we set off in the car soon enough for the sonde's batteries to be still live. As we get to within 1 Km of the estimated landing site, the sigs are usually picked up on my FT 60. This applies if it is lying on the ground. If it is stuck in a tree or hedge the range can be up to 10 Km. When S9 is on the LCD, I turn the squelch out, remove the antenna, and continue looking, listening for the sigs to return. When that happens, we are within about 50-100 metres' range, and then, there is the parachute on the ground, with 30 metres of string leading to the little white box which is the sonde (Vaisala RS92 SGPA is the type used in UK). Its 'DF' alright, but Distance Finding rather than Direction Finding. If it is not heard at all, someone else must have picked it up. A farmer, or a dog-walker are obvious 'culprits', or even another sonde-hunter. There must be people who happen to see it actually descending on its chute, and immediately go and get it. When I have been successful, I record the find position on GPS to compare with my estimate. On other hunts, it may be up to a week later, plus or minus other domestic duties. Then the sonde batteries will be dead, so its down to eyeballs only, and the chances of another person having removed it increases. An important factor is:- How accurate is my estimated landing point? Or rather what is the possible margin of error? The main factor is how much of the final descent did I miss due to hills, and sheer distance. The nearer to home, the nearer to ground my recording will reach. We have found one up to 68 Km away, at which range I would have lost the signals while it is still 2000-3000 feet in the sky. There are several ways of estimating where it may have drifted during the 'black hole'. The rate of descent, the wind speed and direction can be allowed for. SM reports the sonde's height in two formats:- GPS height and Pressure-altitude height. Both can be made use of. There is an option to view the descent in Google Earth, so one can try and project the descent on and down to the ground in 3D. In the case of the Larkhill launchsite, it is sufficiently near here that, provided I record it right from launch, I can study the rise part of the record, and knowing the exact position of the launchsite, enable me to 'reverse-engineer' the same movement applied to its descent back to ground. Some people prefer to chase while recording in a vehicle so as to be on-site when it comes down. Getting visual with it as it descends slowly on the chute makes it quicker to retrieve. Sonde-hunting is a much bigger hobby in Europe where this mobile recording is popular, and there are forums where retrieval data are logged, and they help each other to find them. One German hunter actually caught it in his hand, like fielding a six in cricket. My memories, and notes made at the time, of some of the situations in which the sonde was found remind me of Charlie Drake's TV sketch "The loneliness of the long-distance golfer". Floating in a fishing lake with chute strung up in a tree on an island; in a snow-drift in someone's front garden with the string stretched up over the roof like a inverted-L wire; Chute stuck high up in a forest, with sonde hanging down to 3 metres above ground (got it by snagging it with a long stick); a few times the chute and sonde were in different fields strung across a hedge; a couple of times the string was over telegraph wires! a few times the string frayed due to movement of the string by wind. (cont. on next page, with pics)



Then the chute could drift some way further away. I recorded some of the find experiences on video, placed on YouTube:-

Sonde find with G3TSD

<http://www.youtube.com/watch?v=cfzBP5wTdPg>

Watnall autosonde Sonde find Littleworth

<http://www.youtube.com/watch?v=Q4tKURQC06>

Watnall autosonde find Littleworth pt 1

[http://www.youtube.com/watch?v=pNfDMj7V\\_58](http://www.youtube.com/watch?v=pNfDMj7V_58)

Hackpen Larkhill sonde find

<http://www.youtube.com/watch?v=DRiYV6vMDLM>

Bibury Larkhill sonde find

<http://www.youtube.com/watch?v=bmCQdVt2HFY>

Sonde in tree at Westwoods

<http://www.youtube.com/watch?v=q5L3i4P2ASc>

Sonde in tree at Westwoods

<http://www.youtube.com/watch?v=xPaFxin95CE>

Richard G4MUF



Above left is the Radiosonde, lower left, the chute it descends on along with fragments of its ascent balloon & spreader. Above Richard (G4MUF) with his find, see the YouTube link above for the video.

# Shack Spot by Neil M6CUE, & John G10QV



On the left is a photo of our shack stack, from top to bottom, a Hansen FS-200 PWR/SWR Meter, Wouxun KG-UV920P for 2m/70cms, Icom IC2900 2m Multi Mode, Kenwood TS480SAT for HF. All stacked up on a side table in our kitchen, squeezed in between the washing machine & the wood burning stove, small, but, perfectly formed huh!. The small globe speaker left of stack is the external speaker for the 480. The 290 also has an external speaker, out of shot. The 920P has three speakers, two internal & the third is the speaker mic, the third one can be turned off with a slider on top of the mic. We know it's not huge, but if you ain't got the space, then you can't have the kit



Left, & below left, are photos of our Antennas, a 5/8 over 5/8 dual band VHF/UHF co-linear, approx. 8ft off the ground, & a 10m HF fibreglass fishing pole whip by Pro-whip Antennas UK at ground level up. The back corner of our home is to the right of the bottom photo. Just like the shack, we haven't got much space out back either, no room for masts & beams, or, G5RVs, so it's a case of slimmish & tallish.





# KAY-YACKING on the Kennet & Avon Canal

## by G1OQV & M6CUE

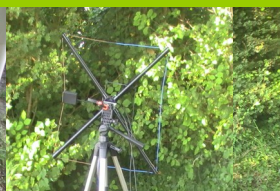


On one Tuesday evening in July, John (G1OQV) set out along the Kennet & Avon Canal, before starting his journey he had a qso with Richard (G4MUF). Travelling East with me M6CUE walking along the towpath acting as support crew, navigating the locks as we went, John having to vacate the kayak, then hauling it from the water, walking it round the lock & depositing it back in the water. Before paddling back West, John had a qso with Rob (G4XUT), who I'm sure was stifling a chuckle as he was in qso. After being out for nearly three hours we decided to head home. John was using a Baofeng UV82 on it's own whip antenna.

## MY NEW PORTABLE KIT

BY NEIL (M6CUE)

I'm now working portable from various locations around Hungerford, the bulk of my kit ((consisting of a Leixen VV898 mobile dual band 2m/70cms, 10w/4w transceiver , 7Ahr 12V lead gel battery, fist mic, power lead, camera tripod, a Sotabeams 2m/70cms MFD (Multi Function Dipole)) is mainly carried in my rucksack, the antenna (a 2m/70cms mini beam array) is carried, ready assembled in a separate bag. Taking around 10 mins to set up it's easy to assemble, & also multi-functional, polarisation/beam heading is set by using the pan/tilt on top of the tripod, so ideal for satellite work which I hope to do in the future. The Leixen VV898 is available from ML&S & Moonraker Antennas, the 2m/70cms antenna array from Alton Antenna Arrays (they also make 4m & 6m models).



Photos above l—r, the Leixen VV898 (tiny isn't it), front view (all buttons, no knobs to twiddle), lead gel battery (foam block carved out to house battery, protects battery base against wear & tear), the Alton Antennas 2m/70cms Mini Beam Array, Array on camera tripod, finally left is the Sotabeams 2m/70cms MFD (Multi Function Dipole) strapped to one arm of the bench with one of the Velcro straps supplied, guying kit also included.



## Echolink on TD



Besides Rob G4XUT, we now have Andy GOUWS as a holder of the necessary NoV for Echolink on TD, this means that Echolink can be available on TD whilst Rob's on his hol's & vice versa. If there's anyone else in the group who'd like to run, or, could run Echolink on TD, please ask Rob for details of what you have to do regarding the NoV paperwork & how to set up sysop mode.



## Dates for your Diary



**Sunday 10th August ——— Fight Refuelling ARS Hamfest, Cobham Sports & Social Club Ground, Merley, nr Wimborne, Dorset, BH21 1RJ. Gates open 10.00am, Entry £3.50p, U14s free. Refreshments available.**

**More info on <http://www.frars.org.uk>**

**Sunday 24th August ——— Milton Keynes ARS Rally, Longueville Hall, Hammond Park, Whaddon Road, Newton Longville, MK17 0AT. Gates open 10.00am, Entry £3.00p More info at <http://www.mkars.org.uk/mkars/rally>**

**Sunday 19th October 2014 ——— Chippenham & DARC 'Mini' Indoor Rally, Neston Village Hall, Pool Green, Neston, Corsham Wilts. SN12 9SN. Doors open 10.00am, Entry £1.50p, U16s free. Refreshments available.**

**More info from Jon Wheeler [g0ive@btinternet.com](mailto:g0ive@btinternet.com)**

**Editor's note :- The natter net on TD & the activity day are still works in progress. Hopefully there will be more info in future newsletters.**