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## Main Page

### Welcome to George Smart's Homepage!

Hello and welcome to George Smart's space on the Internet. This site documents many of my projects in the form of articles.

The site navigation is a little confusing and for that I apologise. I can't find a nice way to make the page navigable; the search box in the top right may help. None of the URLs have changed, and no Wiki managed pages ever get deleted -- they are all here somewhere!

If you spot any dead links or problems with the site, then please do [Contact Me](#) - likewise, if you have any better ideas about how to organise the data on my site, I'd like to [hear from you](#). I have limited time and so don't always check things as thoroughly as I should!

### Recent News

So I've decided to have a blog-style few entries on the homepage of the website. I'll see how up to date I can keep this. Given that the page used to change every year or so!

**Wednesday, 14 December 2016.** Today, around mid-day, I completed the viva-voca for my PhD. I passed the viva with minor corrections. These small changes will be made quickly, so I can progress with obtaining the formal qualification from the university.

**Thursday, 26 November 2015.** After what seems like an age since I last updated the 'recent' news, I finally thought of something to go up here! Today I met with Ian of Icom UK over lunch who presented me my D-Star QSO Party prize! It was good to have an in depth chat with Ian, and hopefully many more to come. Makes a change from me bending Don's ear! See the [official Icom UK tweet here](#). Thanks!



**Monday, 3 August 2015.** After drying out from the RSGB IOTA contest last weekend, we took the gear out again 1-2 August, where I worked a few new contacts 7Q7BP on CW was a firm favourite as well as KH6/AA1LC in Hawaii, CY0/VA1AXC on Sable Is., 8P6FX in Barbados and CP6XE in Bolivia. During the weekend we turned our hand towards the RSGB low-power backpackers contest working a few on 2m. After the contest, HA6KVC/P was coming through nicely via Meteor Scatter on FSK441. I have decided to read up a bit more on this interesting mode... Watch this space!

**Thursday, 18 June 2015.** Having attended a short talk by [Steve M0SHQ](#) at [Essex Ham](#) about operating Amateur Satellites, and seeing Steve work the ISS via APRS, I decided to have a go myself. I built the dual-band beam he recommended several times, but the design always measured up poorly. In the end I tweaked the design somewhat, and come up with something myself - it's all credit to the original designer, I just optimised it with some antenna modelling software. Details on the antenna can be found here: [Dual Band Satellite Yagi](#).



Visit to Seattle

**Monday, 13 April 2015.** Today I arrived in Seattle. It's my first visit to the United States. I have come for the [IPSN'15](#) conference, part of [CPS Week 2015](#). I have added a couple of days extra on to the trip to explore a little.



GB7KH D-STAR Repeater

**Thursday, 19 March 2015.** The D-STAR repeater project [GB7KH](#) is well under-way with the repeater on soak test at my home. See [the repeater project website](#) for more information.



DVRPTR\_V1 inside board

**Monday, 02 February 2015.** Over the past week or so, I have been playing around with DStarRepeater and ircDDBGateway to learn a bit about DSTAR repeaters, given the progress [GB7KH's](#) NoV is making. I have made a simplex hotspot with my FT817 and a soundcard interface, although I can see that there is certainly room for improvement. I have ordered a [DVRPTR\\_V1](#) GMSK interface which has been dispatched so that will replace the soundcard, lowering the CPU load. I am to have the system set up on a Raspberry Pi 2 B, which was released yesterday (maybe today actually). I think I now understand how to tune up those Chinese notch filters, too.

**Sunday, 01 February 2015.** Today my Icom IC7000 and associated separation kit sold on eBay. I have wrapped them up for posting. I'll be sad to see the IC7000 go, since it's been my main workhorse for a long time - It's been everywhere, that radio; from university to touring around Europe! I've replaced it with the IC7100 for DSTAR use, as well as an IC7700 (which I have had for a while).





QSL Card M1GEO

**Tuesday, 30 December 2014.** Another batch of QSL cards arrived for M1GEO, MQ1GEO and MO1GEO this morning in the post. I had unfortunately run out so I have ordered another batch. They will take a week or so to arrive. I'll get them out as soon as I can. I also ordered another batch for GB0SNB too, while I was at it!

**Tuesday, 23 December 2014.** Today I finished my 4 month stint at ARM Ltd. During my time I haven't done much with the website, but I have been working on my implementation of a fully KISS compliant [Arduino TNC](#) as well as using [DSD 1.7](#) to [decode digital modulation](#) such as D-STAR and DMR (and others) using my [FunCube](#) and RTL-SDR receivers.

**Saturday, 11 October 2014.** Purchased an Icom ID-5100 and fitted inside the car.

**Tuesday, 23 September 2014.** I have made a few changes to the mail server configurations for the domains I host. I was receiving around 100 spam emails per day, because I was worried about missing mail. Under these new settings everything seems fine still, but just in case you email and get no reply...

**Monday, 8 September 2014.** Today I started an internship at ARM Holdings for 4 months so my regular activities will be somewhat interspersed for the foreseeable short-term future. Lets see what the next few months have in store for me!



18 MHz Station

**Sunday, 24 August 2014.** This weekend we reconfigured our 14 MHz homebrew Yagi to operate on 18 MHz instead. This was for the [Havering & District Amateur Radio Club August Work The World Weekend](#)



14 MHz Homebrew Yagi

**Sunday, 20 July 2014.** Took the 14 MHz home-brew beam (right) out this weekend for [LEFARS](#) annual field day at Alymers Farm. Conditions were not so great, but we managed to work some nice DX including [VK6](#), plenty of North America and Canada, and several more rare locations.

**Thursday, 10 July 2014.** Ordered a 144 MHz Anglian Transverter from [Sam, G4DDK](#), as well as a [DEM L144LNACK-2N](#) low noise preamp for 144 MHz. I am very short of time of late, but it is my intention to experiment with some EME operation this summer and winter, so I figured I had better start buying...



Driving through the Swiss Alps



Driving to Italy

**28 June -- 2 July 2014.** Drove to the [Ham Radio Friedrichshafen International Exhibition](#) for the second time, this time leaving a few days each side to recover from the long drive. In the first spare day we drove into Italy (right), stopping in Liechtenstein (to say we had been). Going, we drove over the Alps (left) and returned back via the tunnels through the Alps (as it was dark). Utterly amazing drive!

**Tuesday, 10 June 2014.** Working late from Monday evening till Tuesday morning to get some of the Contiki timer issues fixed. I think I have corrected a bug with the Contiki *rtimer* code for the TelosB mote, but that remains to be seen. The code functions great in the simulator with the modded timer library, but *still* doesn't work on hardware.

**Sunday, 8 June 2014.** Over the weekend I worked on my 1.25 kW solid state PA based on F1JRD's design from Dubus. I bought the kit at the Friedrichshafen Hamfest last year and built it up late 2013 but due to problems, I never had more than around 40W output. This weekend, with a new set of capacitors from ATC I rebuilt the output matching and fired it up once again. With my 1kW/50V power-supply I can get around 600W output, which is more than enough. This is still a work in progress, but things are moving forward with the project. [Design information here.](#)