

# Essex Ham TX #01

# ESSEX HAM

Promoting Amateur Radio In Essex

[www.essexham.co.uk](http://www.essexham.co.uk)  

TX Date : January 2013

## Welcome to Essex Ham TX:

Welcome to a test transmission from Essex Ham! This is the first time that we've created a newsletter, and given the growing number of visitors to the Essex Ham website, we thought we'd put together a short bulletin to see if there was any interest in something more regular.

If you're a member of a local club, you'll probably be familiar with the concept of a ham radio newsletter. The thinking behind the **Essex Ham TX** is that we release a shortish edition to update our readers on upcoming local events being held by clubs in the Essex area, pass on information about anything that's likely to be of interest to amateurs in the local area, update readers on what's been going on, and include one or two articles of light reading to stimulate readers to try new bands, modes or aspects of the hobby.



The **Essex Ham TX** is free, and available to all online. It's available to download from [essexham.co.uk](http://essexham.co.uk), and is emailed to those who subscribe to our free mailing list. Please feel free to send a copy on to anyone you think might be interested. If you'd like to get future newsletters and updates by email, sign up free via the box on the [essexham.co.uk](http://essexham.co.uk) site.

The **Essex Ham TX** will be driven by you – if you're interested in a newsletter, tell us! If we see there a desire, then we'll do more. If you'd be interested in writing an article or having your event listed, please get in touch. Your suggestions, thoughts and feedback will drive this, and this first newsletter is an experiment to see if there's mileage in producing updates on a regular basis.

Here goes with TX #01!

Pete MOPsx

## Local Events:

Latest Events Calendar online at [www.essexham.co.uk/events](http://www.essexham.co.uk/events)

11 Jan 13	Chelmsford ARS	Club Night: Harry Heap, G5HF SK - Reminiscences of Harry
16 Jan 13	Havering ARC	Club Talk: "Wireless for the Blind" by Simon Parsons
01 Feb 13	Thames ARG	Club Night: Open Night and Show-and-Tell
03 Feb 13	South Essex ARS	Canvey Rally. Doors open 10:30 at Paddocks Community Centre, Long Rd, Canvey Island
08 Feb 13	Chelmsford ARS	Club Talk: Vintage Wireless and Electronic Equipment
09 Feb 13	Thames ARG	Two Tree Island Field Day – Weather permitting
12 Feb 13	South Essex ARS	Workshop evening - Tips and Hints on "How to solder"
13 Feb 13	Harwich ARIG	Talk by Harwich RNLI
13 Feb 13	Havering ARC	Club Talk "Apocolypto: Revealing the unreadable" By David Mills G7UVW
01 Mar 13	Thames ARG	Club Night: Talk on Chain Home Towers, by Andy G1GKN – 8pm at Jubilee Hall, Canvey Island
03 Mar 13	Bredhurst RTS	Rainham Rally, Rainham Kent
03 Mar 13	Cambridge ARC	Cambridge Rally – Details at <a href="http://www.cdarc.co.uk">www.cdarc.co.uk</a>
08 Mar 13	Chelmsford ARS	Club Talk: Professional Aerials for Radio Amateurs
12 Mar 13	South Essex ARS	Club Talk: "The Night Sky" by Bruce G1JJS
13 Mar 13	Harwich ARIG	Club Talk: SDR by James MOZZO

Got an event to add? Go to [www.essexham.co.uk/events](http://www.essexham.co.uk/events)

## Monday Night Net:

If you're one of the regulars on the Monday Night Net – Many thanks. If you're not, why not?

### What is the MNN?

This is something started by Pete M0PSX in 2011. The net was originally run on a Thursday, and was intended to help out the new M6 Foundation licensees. As you may recall from when you passed your first radio exam, making that first contact, or that first expensive purchase from the local emporium can be tricky, and it's helpful to get some friendly advice first. The net was intended to give the new M6s a chance to have a chat amongst friends, get advice, and keep in touch with the people they'd trained with.

It became evident that there was a lot of interest, not just from the M6s, but from lots of amateurs in and around Essex, and it's not uncommon for the Monday Night Net to get upwards of twenty people swapping ideas, helping each other, and generally chewing the fat. The net is welcome to all, so please give it a try!



### Joining the MNN:

The net usually takes place on a Monday evening from 8pm on the Danbury Repeater, GB3DA. The Net has a moderator, who holds a list of participants and tries to let each person on the net talk in rotation, so that everyone knows when it's their turn to talk, and everyone gets a chance to have their say.

**GB3DA Details:** Listen on 145.725MHz. Transmit on 145.125MHz with CTCSS of 110.9. Note that there is a 90 second timeout

*Thanks! Our thanks to the Essex Repeater Group for allowing us to run the Monday Night Net on the GB3DA repeater. If you use the repeater, please consider joining the ERG, or making a donation. More details at [www.essexrepeatergroup.org.uk](http://www.essexrepeatergroup.org.uk)*

**For more details about the Monday Night Net, go to [www.essexham.net](http://www.essexham.net)**

## Recent Essex Activities:

### Thames ARG – Digital Modes Talk:

On Friday 14 Dec 12, The Thames Amateur Radio Group held a night covering the various digital modes. Pete M0PSX and Tom 2E0TNC (pictured here) talked the assembled audience on Canvey through the basics of how to connect a computer to a radio, then explored data modes including WSPR, JT65, RTTY, PSK31, SSTV and APRS

If you could make the talk and you want to find out more about getting started with data, see our Getting Started Guide here: [www.essexham.co.uk/data](http://www.essexham.co.uk/data)



### Chelmsford ARS – eBay for Amateurs:

On Friday 07 Dec 12, Belinda Sanderson, wife of our RSGB Regional Rep Mark M0IEO, held a talk on how to sell your unwanted ham radio kit on eBay. The talk included a live demo of how to create an eBay listing, as well as a bunch of useful tips on how to make successful sales and purchases online. More at [www.g0mwt.org.uk](http://www.g0mwt.org.uk)

**Want to tell us what you or your club's been up to? Go to: [www.essexham.co.uk/contact](http://www.essexham.co.uk/contact)**

# Give it a try: Work the ISS

## An introduction to working the International Space Station, by Pete M0PSX

For many amateur radio operators, myself included, there's a fascination with the idea of trying to chat to the astronauts 200 miles above us hurtling past at 17,000mph. Many of the astronauts on-board the space station have amateur radio licences, and the ISS is equipped with a Kenwood D-700E 2metre/70cm rig. There are times when the ISS amateur radio station is pretty active, either for schools contacts, QSOs, data, and for images from space. So, how can you work the ISS? Well, there are several ways that you can try to make contact. Here's some basic information to get you started:



## Tracking the ISS

The first step when considering listening to (and working) the ISS, is to find out where it is. On a good day, it'll only be overhead four times per day, and for no more than 10 minutes. Some passes offer a better chance at reception than others, depending on height over the horizon.

To check where the ISS is, and for information on when it will next be visible, take a look at [www.isstracker.com](http://www.isstracker.com), or check out the Orbitron satellite tracking package for Windows.



## Listening to schools contacts

This is something that anyone in Essex with even a basic handheld 2 metre rig can try. The ISS routinely makes contacts with schools around the world as part of the ARISS programme (Amateur Radio ISS). It's a case of find out when the space station is overhead, and when the crew has a scheduled schools contact, and listening in. You can do this on a standard 2 metre rig, by tuning in at the right time to 145.800MHz. Typically, they will be audible for around 10 minutes, and you'll hear the "downlink", i.e. the answers from the crew on the ISS (the questions will be uplinked by the school, and not audible to us)

To find out when a scheduled European pass is upcoming, sign up for the free newsletter here: [www.ariss-eu.org](http://www.ariss-eu.org)

## Working the ISS via Packet

When the ISS rig is not in use for voice contacts, it's normally operating as a packet Digipeater. This means that assuming you're able to transmit a data packet in the right format at the right time, the ISS can re-transmit your packet across Europe.

Operating Packet can be a little tricky to set up. Normally, you will need a packet TNC (Terminal Node Controller) and some software that can send suitable APRS packets on demand. I've had some very good success with a TNC Digitracker and the UI-View software application.



To the right, you'll see a screenshot of UI View showing the stations that have sent or received packets via the ISS during a single pass. For details on how to set up your station for working packet to the ISS, see [www.essexham.co.uk/ariss](http://www.essexham.co.uk/ariss)

## Images From Space

Now and again, the ISS enables its SSTV equipment. A camera pointing out of the window transmits slow-scan images back down to earth, and it's possible to receive and decode these images using a 2 metre rig and some free SSTV software, such as MMSSTV

To the right, you'll see a picture that I was able to capture and decode in November 2012. For details of SSTV from the ISS, go to [www.essexham.co.uk/ariss](http://www.essexham.co.uk/ariss)



Hopefully, this gives you an idea of what is possible. All I have left to do, is work out how to get that all-too-rare voice contact!

## Worth A Look:

### 100 Years of the RSGB

To celebrate the centenary of the RSGB, a special callsign is active throughout 2013. Try to work G100RSGB and enter the contest. The callsign is moving around the UK and will be in our region between July and August. Details at [www.rsgb.org/aboutrsgb/rsgbcentenary2013](http://www.rsgb.org/aboutrsgb/rsgbcentenary2013)

### 5MHz Experiment

If you hold a Full licence, you can try some experiments on 5MHz, a band not normally allocated for amateur use. This gives you the opportunity to work an unusual mode, and to try to make contact with various military cadets around the UK. You'll need to apply for a Notice of Variation, which you can do quickly and easily on the RSGB site. Details at [www.rsgb.org/spectrumforum/hf/5mhz.php](http://www.rsgb.org/spectrumforum/hf/5mhz.php)

## Training in Essex:

### Foundation Courses:

- **Chelmsford Amateur Radio Society:** 10 Jan 13 and 05 Sep 13 ([www.g0mwt.org.uk](http://www.g0mwt.org.uk))
- **Loughton & Epping Forest:** Weekend Course 26-27 Jan 13 ([www.lefars.org.uk](http://www.lefars.org.uk))

### Intermediate Courses:

- **Loughton & Epping Forest:** 02 Mar 13 ([www.lefars.org.uk](http://www.lefars.org.uk))
- **Chelmsford Amateur Radio Society:** 14 Mar 13 ([www.g0mwt.org.uk](http://www.g0mwt.org.uk))

### Advanced Courses:

- **Chelmsford Amateur Radio Society:** 24 Oct 13 (Revision course - [www.g0mwt.org.uk](http://www.g0mwt.org.uk))
- Distance learning course run by Steve Hartley G0FUW starts in Jan 13. Contact him via QRZ.com



Know of any local training courses? Tell us at: [www.essexham.co.uk/contact](http://www.essexham.co.uk/contact)

## And Finally...

This is the first newsletter from Essex Ham, and we'd love to know if you're reading this, and you'd like to see more of these. We'd welcome your suggestions, and also your submissions for future newsletters.

Please get in touch via the email form at [www.essexham.co.uk/contact](http://www.essexham.co.uk/contact) - or if Twitter's your thing, send us a Tweet @EssexHam. Alternatively, as we're all about RF... have your say on the next Monday Night Net.



Thanks for reading!

Pete MOPsx