

HORSHAM AMATEUR RADIO CLUB

# *HARCNEWS*

## *Coming Shortly*

April 1st Club Night Bring, Show and Tell

April 15th Social Evening Rising Sun Horsham

*April 2004*

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## Another contest from the contest manager!

On Sunday 13th June there's a low power Practical Wireless contest for anyone interested (everyone).

It takes place on the 144MHZ band between 09:00 and 16:00 UTC and maximum output power is 3W. Last year the number of QSOs ranged from 5 to 229.

We're also doing well in the 80m Club Championship and have climbed to 13th place!

De Montford Uni ARS are in the lead, which explains why they are so low on the university league tables.

We currently only need 40 points to climb another place and hopefully when the results of the SSB contest go through we will maintain our winning streak. Each session is from 20:00 to 21:30 UTC, so when the clocks change it will be 09:00 to 10:30 in BST.

## March Meeting: Junk Sale

Even though there was not a huge number of items for sale, the Club managed to make a very useful profit of £123 on the sale of junk, food and raffle profit combined, and there was almost time for a curry afterwards!

One of the highlights must have been a reel of RG213

size 50 ohm coax cable. Also to be bargained for were three inkjet printers, a linear amplifier with power supply, cw qrp transmitter, red insulating tape, two video recorders and of course the famous 'special bonus' items that our auctioneer, Tony, G3NPF, manages to create!

# Alister's Archives

## by Alister Watt G3ZBU

As you will be aware, it is a simple matter to connect soundcard to transmitter for PSK31 and RTTY modes. In fact the hardest thing is to decide whether audio attenuation is required or not. Some rigs expect a few millivolts from a microphone or external input, yet others have a dedicated high level input for hf packet modem use.

Second hardest thing is to solder up a transistor and two resistors to a COM port to drive the PTT signal. It is possible on some rigs to forget all this and rely on VOX automatic transmit/receive switching.

I have actually had proper QSOs (non-contest that is!) in these modes recently and it is surprisingly good fun. To a certain extent it is like CW without the hard work!

RTTY seems to be reasonably happy even if not tuned in exactly. MMTTY has a spectrum display so all you have to do is align the mark and space tones with two lines in the display ( 270Hz apart ) and that's all there is to it.

Most software RTTY programs transmit both tones while the operator is considering which key to press next, so it is very easy to spot RTTY from any other mode because of two spectral peaks 270Hz apart.

Small amounts of drift do not matter. I leave the AFC modes off otherwise one ends up transmitting on a completely different frequency.

PSK is a different matter in that frequency stability is more important. Instead of

tuning the rig's frequency, which is left alone, so one searches the audio pass band for single spectral peaks and simply click on one of them with the left or right mouse buttons.

WinPSK has two channels, so you can almost simultaneously call CQ on one and search and pounce on the other. Because rigs tend to be synthesised nowadays and go in 10Hz steps, which is too coarse, the WinPSK software is able to lock exactly onto the correct frequency.

A final factor to consider is whether to use USB or LSB. The FT990 will only switch to LSB in PKT mode, and all TTY software is probably selectable.

Finally a few words on PIC programmers. PICs are very popular microcontrollers used in the PicATune, many electronic bug keys and loads of other projects. At work we have two different 'Universal Programmers', which are theoretically capable of pro-

gramming all PICs, but some of the 'A' series pics are not supported.

Manufacturer 1 suggests buying a new unit, which is about 500 pounds, manufacturer 2 offers a new internal pcb for about half that. Oh dear! But all is not lost because the newer PICs are serially in-circuit programmable with plenty of free software and interface circuits available on the Web.

What caught my eye last week was something I liked the sound of, because it was called the 'el cheapo' programmer. It is connected to the PC's parallel printer port, and consists of 7406, two pnp transistors, 3 leds, some resistors and 5V/12.75V power

But there are even cheaper interfaces! They simply use the PC's serial port if it can provide 12V, a few diodes and resistors. With luck, I should be able to bring some of this along to the Bring/Show/Tell meeting coming along very soon!

# INTERNATIONAL LIGHT- HOUSE/LIGHTSHIP WEEKEND 2004

This highly popular annual August event attracts hundreds of amateur radio stations at lighthouses and lightships (369 in 2003) in 48 countries. It is organised by Mike, GM4SUC, and Kevin, VK2CE is the webmaster. This year the period of the event is from 00:01 UTC on Saturday 21 August until 23:59 UTC on Sunday 22 August 2004.

The event is NOT a contest. It is a special event weekend when each group decides how it will operate with regard to modes and bands. Participants are not committed to being on the air during the entire period - operate as much as you can. There are no restrictions on aerials or power. We wish operators to enjoy themselves and have fun while making contact with as many stations as possible whilst giving priority

to other lighthouse/lightship stations. Please take some time to work the slow operator, the newly licensed and QRP stations.

As available space in many lighthouses is filled to capacity, participation in this activity does not have to take place inside the tower itself. Field day type set-up at the light or other buildings next to the light or adjacent field is OK. Permission MUST be obtained from any interested parties.

The International Lighthouse/Lightship Weekend is used to obtain maximum exposure for our hobby. We invite the press and, QTH permitting, also the public and try to underline the parallel between the international aspects in lighthouses, lightships, and amateur radio. As from last year, the World Lighthouse

the World Lighthouse Day is held on the Sunday of the event and lighthouse keepers/managers/caretakers all around the world open their lighthouses to the public. <http://www.lighthouse.fsnet.co.uk/events/intlighthouse-day.html>

We use the event segment of the 5 Classic bands, consider the following as a range of suggested frequencies.

CW

80m: 3.510 - 3.540 kHz

40m: 7.005 - 7.035 kHz

20m: 14.010 - 14.040 kHz

15m: 21.010 - 21.040 kHz

10m: 28.010 - 28.040 kHz

PHONE

80m: 3.650 - 3.750 kHz

40m: 7.040 - 7.100 kHz

20m: 14.150 - 14.290 kHz

15m: 21.150 - 21.250 kHz

10m: 28.300 - 28.400 kHz

To assist other stations in the identification of lighthouse/lightship stations, we request that participating stations using CW add LS after their callsign at a lightship and LT at a lighthouse. SSB and oth-

er modes should use LIGHT, LGT, LIGHTHOUSE or LIGHTSHIP after their call. UK stations normally obtain a GB callsign with the letter L in the suffix and USA stations can request a Special Event callsign from the ARRL.

A list of the lighthouses of the world, with their Amateur Radio Lighthouse Society (ARLHS) Number can be found at <http://arlhs.com/awards/arlhs-numbers.htm> If you decide to join us, please register on-line at <http://illw.net/index.html> with details of your name, callsign to be used, lighthouse/lightship, Country, qsl route etc.

So come and join us in the fun of the weekend, establish a station at a lighthouse, lightship or maritime beacon. If you are unable to find a lighthouse/ship you can still join in the fun by contacting the special stations. The more the merrier.