

SHACKNEWS

HIGHVELD AMATEUR RADIO CLUB

PO Box 1111, Bedfordview, 2008

August 2004

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COMMITTEE



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Sunday morning BULLETINS - 145.7875 MHz & 7062 KHz @ $\pm 08h45$.

COMMUNICATION IS THE NAME OF THE GAME

Meeting The meeting held on Saturday 7 August did not see a good turn out of members. Wonder what happened to all the others? ZS6JPY OM Koos gave those present an insight to the workings and happenings of the VHF/UHF repeater workgroup.

In Germiston there is a parrot repeater on 70.150Mhz FM, 12.5Khz bandwidth and 2.5Khz deviation. Try it out. If you happen to have a rig with 1266.2Mhz try test it by listening on 144.4Mhz. This will be linked shortly to the East Rand repeater on 145.675Mhz. The Alberton club repeater 145.6125 is linked to the Sasolburg 438.600 repeater and this takes you to the 145.625 repeater in Warden and also to the Kroonstad repeater on 145.6625. More links are in the pipeline.

OM Gavin also gave a demo on PSK31 using MIXW software. A new mode to try out when conditions are not good????? All that is required is an older Pentium PC with soundcard, simple interface to the HF set and the software.

SSC Meeting I heard that meeting held at the QTH of OM Sean was not well attended. Not to sure what the topics of discussion were but the tea and cookies would have been great.

Division 6 VHF/UHF Workgroup I attended this meeting held on Saturday 14 August. Counted 16 amateurs present from clubs as far away as Secunda. Lots of discussion around repeaters, repeater licences (sore point) and many items regarding repeaters. An interesting program called "Radio Mobile" was demonstrated which when fed all the info about a particular transmitter draws a signal footprint in various colours that represent signal strength.

Will give more feedback at the next meeting (AGM).

Some of the digital modes found in the MixW program

PSK31 (Just a few highlights)

PSK31 is based on an idea by SP9VRC and developed by Peter Martinez, G3PLX, who also developed AMTOR. Based on RTTY, PSK is used for live keyboard-to-keyboard QSOs at 50 WPM (31 Baud) and uses "Phase Shift Keying" to signal mark and space values, instead of changing the frequency.

DSP is used to change the phase by 180 degrees when a switch from mark to space is needed. DSP analysis by the program instantly detects this "Phase Shift".

PSK works in a very narrow bandwidth, which sharply reduces noise and QRM. This narrow signal also makes it an excellent QRP (low power) mode, with between 5 and 10 watts producing excellent inter-continental paths in some cases.

The front-end DSP filter and pulse shaping keep the waveform compact, approximately 40 Hz at -3dB and 80 Hz at -40 dB. Pulse shaping uses a raised cosine to ramp amplitude during phase transitions and leaves the amplitude at full value during no phase reversals.

PACTOR (Just a few highlights)

Specially designed for operation in noisy and fluctuating channels, is an improved half-duplex synchronous ARQ system combining the reliability of Packet with the fixed AMTOR time frame.

Principal design considerations

PACTOR comprises all-important Packet (2-way) characteristics:

- fixed timing structure and full synchronism to ensure maximum speed
- fast and reliable changeover / break-in
- required bandwidth less than 600 Hz
- 100% ASCII compatible (true binary data transmission)
- extremely low probability of undetected errors (16 bit CRC)
- independent of shift polarities
- no multi-user overhead in a narrow-band channel
- inexpensive hardware
- high operational comfort (built-in message storage system, etc.)
- listen-mode (monitor)
- FEC-mode (CQ-transmissions etc.)

THROB

An experimental program using 9 tones and FFT detection

AMTOR

This is a specialized form of RTTY. The term is an acronym for AMateur

Teleprinting Over Radio and is derived from the commercial SITOR system (Simplex Telex Over radio) developed primarily for Maritime use in the 1970s.

In the late 1970's, Peter Martinez, G3PLX, made several changes to the SITOR protocol, which rendered it suitable for amateur radio use, and called it AMTOR.

AMTOR improves on RTTY by incorporating a simple Error Detection technique. The system remains relatively uncomplicated but AMTOR performs well even in poor HF conditions. While there can still be some errors in AMTOR data, the Error Detection gives excellent results for normal text mode conversations because of the high redundancy in plain language text.

There are two modes used in Amtor: ARQ and FEC. MixW currently supports the FEC mode only.

NOTICE OF MEETING
The Annual General Meeting of the Highveld Amateur Radio Club will be held at the Germiston Methodist Church office, Lady Duncan St Germiston on Saturday, 4 September 2004 at 14:30
Nominations for the committee must be in writing and must be received by the secretary not less than one week before the AGM

<u>HIGHVELD AMATEUR RADIO CLUB</u>
COMMITTEE NOMINATION FORM
I.....hereby nominate
Name:.....Callsign:.....
to serve on the committee of the Highveld Amateur Radio Club
I confirm that I have received the agreement from the above person to serve on the Committee
Signed:.....
Callsign:.....

NOTICE OF PROXY
I.....hereby give my proxy

to.....

in order that he/she may vote on my behalf at the Annual General Meeting of the Highveld Amateur Radio Club

Signed:.....

Callsign:.....

Child support entries

The following are all replies that British women have put on Child Support Agency forms in the section for listing father's details: These are genuine excerpts from the forms.

I cannot tell you the name of child A's dad as he informs me that to do so would blow his cover and that would have cataclysmic implications on the British economy. I am torn between doing right by you and right by the country.
Please advise.

Peter Smith is the father of child A. If you do catch up with him can you ask him what he did with my AC/DC CDs?

I don't know the identity of the father of my daughter. He drives a BMW that now has a hole made by my stiletto in one of the door panels. Perhaps you can contact BMW service stations in this area and see if he's had it replaced.

Regarding the identity of the father of my twins, child A was fathered by Jim Munson. I am unsure as to the identity of the father of child B, but I believe that he was conceived on the same night.

Help I need articles for Shacknews. Believe me when I say it is difficult to put a newsletter together. Finding material related to the hobby is at times difficult and I do not always have the time to look for something interesting. So whatever you might have let me have it either by mail or hardcopy. Thanks on advance.

73

Berridge