ANODE

Inside this issue:

Special points of interest:

- Contact details on back page (corrected & updated Jan 2010)
- Ham-Comp Latest on web site.

Editor's Comments

Volume 10, Issue 9
March 2010

A 'warm' Welcome to all the new members [see list on web-site]

Zs6wr.co.za

The "previously named Official Web Site" has now become a link to the ZS6WR.co.za site. [see below]

Anybody else having trouble waiting to get to the page?

To: All members, Sandton ARC and West Rand ARC

This is a call to all members of both clubs to volunteer to operate ZS10WCS during March 2010.

The Sandton and West Rand clubs have the honour of jointly running the ZS10WCS station during the month of March 2010. For anyone not yet aware of it, this special event station is being run by various clubs to celebrate the 2010 FIFA World Cup South Africa, to be held in South Africa from 11th June to 11th July 2010. You will notice that the word "Soccer" does NOT appear in the title of the event! The official web site can be found at http://www.fifa.com/worldcup/.

Dates and times

In the lead-up to the event, we are requested to be on the air as much as possible over the weekends. Operation during the week is only required

ZS6WR Club Committee meeting minutes

DATE: 4 March 2010

Present
- John Brock
- ZS6GRL, ZS6ARQ, ZS6C

Apologies
- ZR6RON, ZS6CRW, ZS6WWJ,

Next Club Meeting : Monday 5 April 2010
Next Committee Meeting : Thursday 8 April 2010

Confirm Minutes : Geoff ZS6GRL

Seconds Craig : Romeo ZS6ARQ

ITEM NO.	TOPIC	ACTION BY
1.	**Reflective tape** Ron Has some navy tape to ZR6RON	
2	**Bicycle race** Date to be announced	
7	**Braai** John Friend was approached ZS6FJ Diagram to be check	
4	**ZS6ARQ – Romeo** Fox to be build after the Field day.	
5	**www.zs6wr.co.za**	

ZS6WR Club Committee meeting minutes

(continued from page 1)

This to be official. John Broke approached for one website only.

6   **Viberplex Key**
PVT to check electronics & replace cable and

7   **Field Day**
Team work and support out standing
Reports suggest that ZS6WR in first place again

8   **ZS10WCS**
Joop want to print card at the back and operator being WARC to be checked and cleared by Dennis and Peter Herst.

9   **Power supplies**
ICOM PS 25 will be returned
Johan ZS6JVV to be contacted for a donation.

10.   **General**
10.1 ZS6GRL
Roster for payment.
License numbers schedule
Old Call to be removed from SARL ect
Draft a letter to all for membership
Club grounds and lawn moving. Quotes for
L.O.T.W has been loaded with all logs on hand. Old logs still required
Member list and detail to be place on Private area of website.

10.2 John Brock
ANODE weekend. Contributions required
ZS10WCS article.
New Members list.

10.3 Phillip
Spares for Amp and sound card interface RTTY operation will start on Sunday afternoon
QRZ.COM Mailbox address to be change by ZS6C

[any errors or omissions, please contact the secretary.]

So when you are needing some relaxation, why not take up R.F. Chess?

Taken from the WATTS Newsletter...

Queer thing: An Indian found that nobody can create a FOLDER anywhere on the Computer which can be named as "CON". This is something funny and inexplicable? At Microsoft the whole Team, couldn't answer why this happened! TRY IT NOW, IT WILL NOT CREATE A "CON" FOLDER

Answer: This is an old one! Try any of the "reserved device names", like; AUX, LPT1, COM1 etc. "Windwoes" has just not allowed the use of these names since Windows 3.1. DOS would never allow you to do this either!

Queer thing: For those of you using Windows, do the following:
1.) Open an empty notepad file
2.) Type "Bush hid the facts" (without the quotes)
3.) Save it as whatever you want.
4.) Close it, and re-open it.
Noticed the weird bug? No one can explain!

Answer: Definitely a "BUG" [Sorry, "Issue"] in Notepad. But Wordpad opens it correctly...

Queer thing: Again this is something funny and can't be explained? At Microsoft the whole Team, including Bill Gates, couldn't answer why this happened! [really?] It was discovered by a Brazilian. Try it out yourself? Open Microsoft Word and type; ' =rand (200, 99) ' And then press ENTER and see the magic?

Answer: Oh for crying out loud! Have you never used Word to generate multiple paragraphs of dummy text? Its a built-in function of Word.

But then again...

Microsoft Windows Millennium (2000)

This might be the worst version of Windows ever released--or, at least, since the dark days of Windows 2.0. Windows Millennium Edition (aka Me, or the Mistake Edition) was Microsoft's follow-up to Windows 98 SE for home users.

Shortly after Me appeared in late 2000, users reported problems installing it, getting it to run, getting it to work with other hardware or software, and getting it to stop running. Aside from that, Me worked great.

To its credit, Me introduced features later made popular by Windows XP, such as system restore. Unfortunately, it could also restore files you never wanted to see again, like viruses that you'd just deleted. Forget Y2K; this was the real millennium bug.

Disney The Lion King CD-ROM (1994)

Few products get accused of killing Christmas for thousands of kids, but that fate befell Disney's first CD-ROM for Windows. The problem: The game relied on Microsoft's new WinG graphics engine, and video card drivers had to be hand-tuned to work with it, says Alex St. John. He's currently CEO of game publisher WildTangent, but in the early 1990s he was Microsoft's first "game evangelist."

In late 1994, Compaq released a Presario whose video drivers hadn't been tested with WinG. When parents loaded the Lion King disc into their new Presarios on Christmas morning, many children got their first glimpse of the Blue Screen of Death. But this sad story has a happy ending. The WinG debacle led Microsoft to develop a more stable and powerful graphics engine called DirectX. And the team behind DirectX went on to build the Xbox--restoring holiday joy for a new generation of kids.

Microsoft Bob (1995)

No list of the worst of the worst would be complete without Windows' idiot cousin, Bob. Designed as a "social" interface for Windows 3.1, Bob featured a living room filled with clickable objects, and a series of cartoon "helpers" like

Great IT Disasters and other things

Chaos the Cat and Scuzz the Rat that walked you through a small suite of applications. Fortunately, Bob was soon buried in the avalanche of hype surrounding Windows 95, though some of the cartoons lived on to annoy users of Microsoft Office and Windows XP (Clippy the animated paper clip, anyone?).

Mostly, Bob raised more questions than it answered. Like, had anyone at Microsoft actually used Bob? Did they think anyone else would? And did they deliberately make Bob's smiley face logo look like Bill Gates, or was that just an accident?

{—}

Tip 5: Exploding batteries

Even technical people can say, think, and do the darnedest things. Design and plan accordingly, particularly your power supplies.

I'm sure you've heard the old axiom that it is impossible to design an idiot-proof device, because nature continues to develop better idiots. Unfortunately, the general idea stated there is applicable even to highly technical people. With power electronics, my two pieces of advice are:

Design connectors and switches so that it is impossible to miswire things.

Recognize that the impossible is inevitable and design the circuit so that it will survive miswiring.

I have about a million stories on this topic, more's the pity, but here's one of my particular favourites. I was working with a product (not my own) that had a lead-acid backup battery. The board had two sets of spade lugs on it to support two batteries in parallel if necessary. The positive lugs were mounted vertically; the negative lugs ran horizontally. Investigating an unrelated problem, I watched a QA technician set up the board. She plugged the negative lead into one of the negative lugs, then brought the positive lead from the battery up to the other negative lug on the board! As it approached, it spat sparks and the technician jumped. Then, gathering her resolve, she pushed the lead firmly onto its connector. The battery cables were instantly called upon to deliver several dozen amps; they fried off their insulation, burned a pattern on the desk, and sat there glowing sullenly until someone managed to tug them off the battery with a pair of pliers. The coolest part was the way a perfectly defined smoke shape went up to the ceiling, preserving the exact shape of the cables as they were lying on the desk (highly theatrical).

The failures here were:

Connectors for positive and negative battery straps were not keyed.

There was no diode on the inputs to protect against this sort of thing. (There was a reverse battery protection diode, but it was downstream from the input terminals; the terminals were just hardwired in parallel. Adding a single diode and altering the wiring a little would have prevented the problem I described).
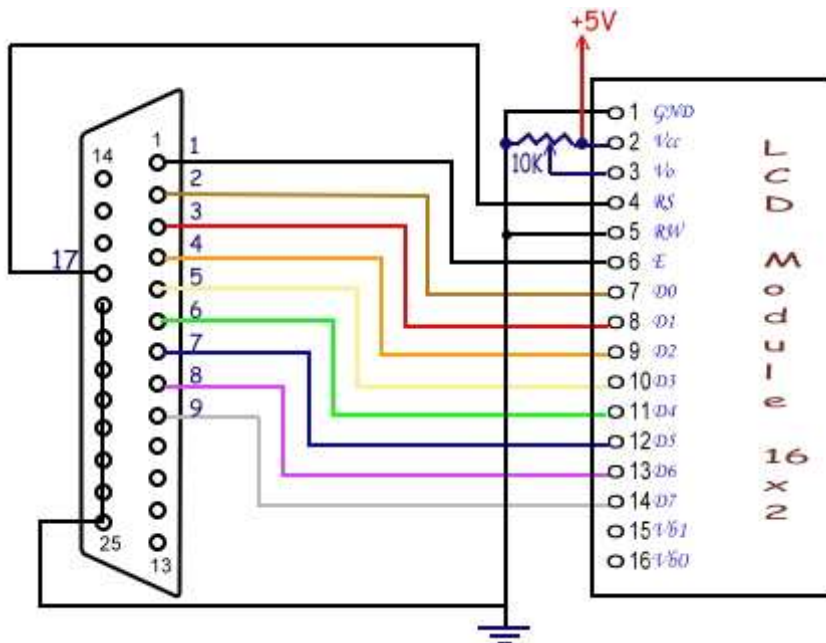
Almost an incidental issue, but the technician's training was obviously somewhat lacking.

Taken from:

Don't let these disasters happen to you: The top five engineering hints you'll rarely hear

By Lewin Edwards (sysadm@zws.com), Design Engineer, Freelance

How to check that LCD Panel

I came across this in my search for interesting articles for the Anode. The author [ ], has detailed several methods of "talking" to an Liquid Crystal Display (LCD) panel. All of which use the "common" HD4470 display driver chip.

This (circuit above) looked the most promising and simplest to set up. You could even use the 'game port' to supply the 5 Volts needed to energise the display panel.

Of course the printer port has been retired on new computers.

The USB port is taking over the functions of all the ports on the personal computer. But you cannot just plug an LCD into a USB port. You will need some interfacing circuit to do the translation from serial data to parallel connection on the panel.

You will need some software to do this. So here is a starter program, written in C.

```c
#include <dos.h>
#include <string.h>
#include <conio.h>
#include <time.h>

#define PORTADDRESS 0x378 /* Enter Your Port Address Here */

#define DATA PORTADDRESS+0
#define STATUS PORTADDRESS+1
#define CONTROL PORTADDRESS+2

void lcd_init(void);
void lcd_write(char char2write);
void lcd_putch(char char2write);
void lcd_puts(char * str2write);
void lcd_goto(int row, int column);
void lcd_clear(void);
void lcd_home(void);
void lcd_cursor(int cursor);
void lcd_entry_mode(int mode);


void main(void)
{

    lcd_init();
```

How to check that LCD Panel

```
    lcd_goto(1,1);
    lcd_puts("Welcome To");
    lcd_goto(1,0);
    lcd_puts("electroSofts.com");

    while(!kbhit() ) //wait until a
    key is pressed...
    {}

}

void lcd_init()
{

    outportb(CONTROL, inportb(CONTROL)
    & 0xDF);
    //config data pins as output

    outportb(CONTROL, inportb(CONTROL)
    | 0x08);
    //RS is made high: control
    (register select)

    lcd_write(0x0f);
    delay(20);
    lcd_write( 0x01);
    delay(20);
    lcd_write( 0x38);
    delay(20);

}

void lcd_write(char char2write)
{

    outportb(DATA, char2write);
    outportb(CONTROL,inportb(CONTROL)
    | 0x01); /* Set Strobe */
    delay(2);
    outportb(CONTROL,inportb(CONTROL)
    & 0xFE); /* Reset Strobe */
    delay(2);

}

void lcd_putch(char char2write)
{

    outportb(CONTROL, inportb(CONTROL)
    & 0xF7);
    //RS=low: data
    lcd_write(char2write);

}
```

```
void lcd_puts(char *str2write)
{

    outportb(CONTROL, inportb(CONTROL)
    & 0xF7);
    //RS=low: data
    while(*str2write)
    lcd_write(*(str2write++));

}

void lcd_goto(int row, int column)
{

    outportb(CONTROL, inportb(CONTROL)
    | 0x08);
    if(row==2) column+=0x40;
    /* Add these if you are using LCD
    module with 4 columns
    if(row==2) column+=0x14;
    if(row==3) column+=0x54;
    */
    lcd_write(0x80 | column);

}

void lcd_clear()
{

    outportb(CONTROL, inportb(CONTROL)
    | 0x08);
    lcd_write(0x01);

}

void lcd_home()
{

    outportb(CONTROL, inportb(CONTROL)
    | 0x08);
    lcd_write(0x02);

}

void lcd_entry_mode(int mode)
{

/* if you dont call this function, entry
mode sets to 2 by default.
mode: 0 - cursor left shift, no text
shift
1 - no cursor shift, text right shift
2 - cursor right shift, no text shift
```

How to check that LCD Panel

```
3 - no cursor shift, text left shift
*/
outportb(CONTROL, inportb(CONTROL) |
0x08);
lcd_write(0x04 + (mode%4));

}

void lcd_cursor(int cursor)
{

   /*
   set cursor: 0 - no cursor, no
   blink
   1 - only blink, no cursor
   2 - only cursor, no blink
   3 - both cursor and blink
   */


   outportb( CONTROL, inportb
   (CONTROL) | 0x08 );
   lcd_write( 0x0c + (cursor%4));

}
```

If you can't type it in, or you need it explaining, come to the next Ham-Comp Meeting at the club house. I will be happy to demonstrate this and explain the circuit.

JB

Editor's Comments

from 1st June, but of course you can operate at any time convenient / when the bands are open. In practice this means that we should be on the air from early Saturday morning each weekend until late Sunday evening … bearing in mind that North and South America are some hours behind South Africa, we should stretch operations as late as conditions allow each Sunday evening.

Modes and bands of operation

All legal modes are permitted… In fact, we would like to encourage as many modes as possible, e.g.: Phone; CW; RTTY; PSK31; Satellite; etc. Anyone for SSTV?

As this is not a contest, we can operate on all legal bands from 136 kHz right through to mi-

crowaves! The following preferred frequencies have been publicised on the entry for ZS10WCS on QRZ.COM: No specific frequencies have been allocated for other bands. Obviously there are standard frequencies for some of the special digital modes.

Band	CW	SSB
80m	3510 kHz	3780 kHz
40m	7010 kHz	7080 kHz
20m	14010 kHz	14180 kHz
15m	21010 kHz	21280 kHz
10m	28010 kHz	28480 kHz

'Editor's Comments

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QSL details

All stations logged will automatically receive a special QSL card via the Bureau.

To QSL direct, address the card to ZS10WCS, PO Box 1721, Strubensvallei, 1735, South Africa, and included a self-addressed envelope (DL size) and 1 IRC or US$1.

PLEASE ENSURE THAT ALL ENVELOPES ARE PROPERLY SEALED, AND THAT NO INFORMATION APPEARS ON THE OUTSIDE OF THE ENVELOPE INDICATING THE CONTENTS.

Electronic QSL cards must be sent to :-

wcs@sarl.org.za.

All QSL information will also be uploaded to Logbook of the World, and CQ Zone 38 QSOs will be uploaded to the SARL electronic QSL system.

We will need to provide a complete logbook in ADIF format to Dennis ZS4BS, who will coordinate all of the above.

All operators will therefore be required to maintain a complete log, and ensure that we can consolidate all logs after the end of March. It does not matter what logging program you use, and you can even log your contacts manually … Provided that all call signs are properly logged, are legible, and that times in UTC, Band and Mode are properly recorded.

Operating Schedule

The schedule will be compiled as soon as I have an idea of who will be able to operate, at what times, for which band and mode.

You may operate from your home station; from the West Rand club house; or even from the NARC station.

So far I have the following participants:

CW: Joop ZS6C, all bands

PSK31:   Geoff ZS6GRL, standard digital frequencies

RTTY: Phillip ZS6PVT

Phone: Roy ZS6RLM; Peter ZS6PHD

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The website has been updated.
See "News & Events" Cheers Geoff

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Watch the ISS being built

http://i.usatoday.net/tech/graphics/iss_timeline/flash.htm

The West Rand Amateur Radio Club
Established in 1938
KG33XU   26.14122 South - 27.91870 East

P.O. Box 5344
Weltevreden Park
1715

Phone: **082 342 3280** (Chairman)
Email: **zs6wr.club@gmail.com**
Web page: www.jbcs.co.za/ham_radio

Bulletins (Sundays at …)
11h15 Start of call in of stations
11h30 Main bulletin start

Frequencies
439.000MHz   7.6MHz split
Input: 431.4MHz (West Rand Repeater)
145,625 MHz (West Rand Repeater)
 10,135 MHz (HF Relay)

Radio Amateurs do it with more frequency!

Chairman	Joop Hesp	ZS6C	082 342 3280	zs6wr.club@gmail.com OR joophesp@telkomsa.net
Vice Chairman	Geoff Levey	ZS6GRL	082 546 5546	glevey@gmail.com
Secretary	Phillip van Tonder	ZS6PVT	083 267 3835 (H)	phillipvt@sse.co.za
Treasurer	Craig Woods	ZS6CRW	083 449-4886	craig.woods@absamail.co.za
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Member	Ron Eva	ZR6RON	082 902 8343	ronnie@calidus.co.za
SARL Liaison (technical)	Willem Weideman	ZS6WWJ	082 890 6775	willem@zs6wwj.co.za

West Rand members - we need your input!

To make this the best ham radio magazine in South Africa we need your input. Please submit articles, comments, suggestions etc.

Please send plain text with no formatting to the email address below.

In July 2003, we re-published an Anode Compendium on CD. It has the issues from July 2000 until June 2005. This included the new Adobe reader. It has been updated, check with the chairman for details.
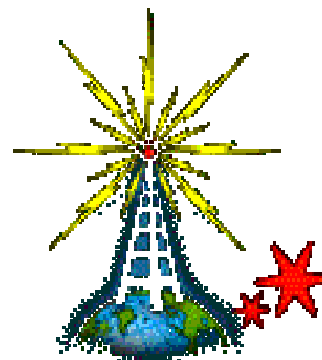
We need your input! Email us articles, comments and suggestions please. zs6wr.club@gmail.com