Newsletter of the West Rand Amateur Radio Club.

February/Februarie 1998.

Nuusbrief van die WesRand Amateur Radio Klub.

Forthcoming National Events:

MARCH '98.

7th & 8th ARRL DX SSB Contest.

7th & 8th RSGB CW Contest.

14th & 15th CQ WPX Phone contest.

APRIL '98.

5th Hamnet Simulated emergency contest 40M.

9th SARL 80M QSO Party.

25th Marconi day.

This happens to be your magazine. I need contributions to make it work for you. If you have any input please forward it to the Editor.

Constructive criticism is welcome, negative criticism will be trashed!!

EDITOR.

BULLETINS:-

Sundays @ 11h30 SAST

145.625 FM
7.066 LSB
10.135 USB

FROM UNDER THE CHAIRMAN'S TABLE.

Hi there fellow hams,

I have always enjoyed being a ham. I have especially enjoyed being with other Hams at club meetings and learning more about my hobby from my peers. I still enjoy, but now find there are less members available to share in the enjoyment and to share in the experience. Are you among the missing fraternity?

Please come back and help to make the club "YOUR CLUB". Help to make the hobby "YOUR HOBBY", and help to make the league "YOUR VOICE". Remember there is nothing to complain about, there is just "US", so lets "GET IT TOGETHER".

Wal.

Visit the SARL Website at:

WWW.SARL.Org.Za

BIRTHDAY LIST: MARCH 1998.

1 - Marie-Louise (XYL Arie ZR6UY)
3 - Cynthia (XYL Viv ZS6CAA)
3 - Craig ZR6CG
5 - Simone ZS6SIM
8 - Celeste ZS6MCN (Daughter of Gus ZS6AXQ)
8 - Garth ZS6BXT
15 - Wally ZR6ARX
19 - Des ZS6DED & Jill ZR6GMD's Anniversary
23 - Erika (XYL Theuns ZS6MJR)
29 - Gunther ZS6BWV
29 - Dirk ZS6AU

STAN SMITH PONDERS ABOUT SCANNERS AND OVERCROWDING.

My thoughts are to build and attenuator in a small box which could fit between the scanner and the whip BNC sockets. But I would like to make the attenuator "Frequency specific" so that whilst scanning I do not lose the RX sensitivity in the other bands/frequencies.

You will loose some signal across all your frequency range when you add anything in line with your scanner and aerial. This is known as insertion loss. Also it is neigh on impossible to filter just (one single) frequency of (say) a 25KHz channel space without also reducing neighbouring freqs to some degree (perhaps up to +- 1MHz).

All is not lost though! - just a (little bit fiddly) to sort out first time around. The solution is called a "stub filter" ..... Here"s the rundown:-

SHOPPING LIST:

1 X Length of good 50 ohm coax cable with (V.V. IMPORTANT!) A KNOWN velocity factor (Calculate the length of the cable using the formula given in the description).

1 X Standard 50 ohm BNC "T" Piece connector.

1 X Standard 50 ohm BNC Plug.

METHOD:

Take your BNC plug and fit it onto one end of the length of cable. Put the BNC "T" piece Adapter on top of your scanner. Plug your aerial into one side of the "T" piece. Plug your piece of wire (with BNC Plug) into the other half of the "Y" piece.

Now you have to calculate the length of the stub you require.

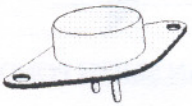
243/(freq of TX) = ¼ wavelength (in feet).

Multiply this by 12 for inches then by 2.54 for centimetres.

Take this final figure and multiply it by the VELOCITY FACTOR of the cable.

This length is the "theoretical ideal" length of cable to attenuate your signal. I recommend that you cut your length of cable a little longer to allow for mistakes.

3/ .....



WORKED EXAMPLE:

If the freq. Was "165.000" MHz and the velocity factor was "0.712"

243/165 = 1.472727 feet.

1.42727 feet = 17.6272727 ins = 44.8 cms.

44.8 cms X 0.712 = 31.96077 cms.

Okay - Tune your Radio to the target freq. And chop a little bit off the open end of cable left on your "stub" (maybe cm / time) whilst listening to the target signal. When you have the desired level of attenuation - stop cutting! Then make sure that the open end of your stub does not short out between the outer and the inner. If you find the signal is increasing again, you've gone too far!

Start again with another length of cable!!!!

HOW DOES IT WORK:

Thousands of frequencies waft down your coax from your antenna and see a nice 50 ohm terminal (your antenna socket) to drop into. However, the target signal sees the stub length as a better option that your receiver - so the signal gets "absorbed" by the stub and only a small part of it reaches your receiver.

THE TRADE OFF?

The notch will be around 2MHz wide but will be less deep on the edges as per the centre. Also at multiples of the target frequency the notch will work but will give more attenuation with a narrower bandwidth. Other than that - should work a treat.

This article contributed by Lance - ZS6ZN

4/ .....

AR K.

The official "over" in CW. I always imagine that my earlier thoughts on CW was a reflection of the thoughts of all my Ham friends. I loathed the practicing bits and it took me 7 years to convert from professional ZR to the coveted ZS. Strangely I never got into debates about the necessity (or redundancy) of this method of communication. I do not intend to do that now or ever.

And then I finally got that ZS and it was great and I could talk to the world and I did not need to sweat for 12 wpm because that was in the past. Ham life carried on normally until one day the "bug" bit me. I discovered CW!

Now don't get me wrong, please ..... I am a rank novice at this game in comparison to the big guys, but I plead a passion for it. When O.M. Roy does his thing with that keyer I stand around like a grade 1 with all my nerves on end and admiration pouring. It is music and it has it's own rhythm. For this reason I started this column (with the blessing of the Chairman) and I hope to contribute toward the art of CW. Maybe some of the old brass pounders will come out of the covers and get a polish as we go along.

TIP FOR BEGINNERS:-

Learn from my mistakes. Always use a letter speed higher that what you want to achieve when learning the sounds in CW. Some fundi's recommend as fast as 20 wpm letter speed. If you don't you will have to get used to the new sound every time you increase speed.

I have a good CW program that runs under Windows and does sound and speach through either the PC speaker or a sound card. Good training stuff. If you provide me with a 1.44mhz stiffy I will copy F.O.C.

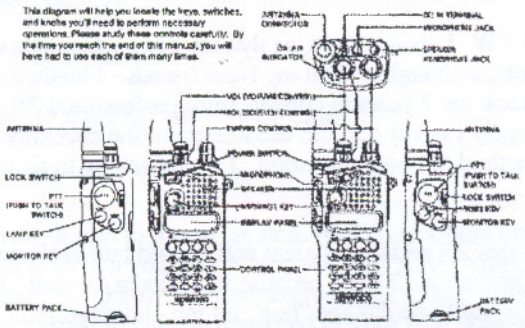
Tel: 083-300-4554.

73 de Theuns ZS6MJR.

5/ .....

SWOP SHOPPE:

1) Kenwood TH28A Portable 2 metre. - Theuns ZS6MJR.



Articles for publication and items for Swop Shoppe to Editor.
Email: Theuns@Mweb.Co.Za - Tel: 011-475-6491.

REGULAR HAPPENINGS:

1) Beginners classes in preparation for the exam at the Clubhouse on Wednesday @ 19h00.

2) Club meeting every 2nd Saturday of the months @ 14h00 SAST at the Clubhouse.

3) Morse classes every Tuesday @ 19h00 on 145.625mhz - ZS6ENK.

4) 2nd Monday of the month Chris Botham will run a technical and construction workshop at the Clubhouse from 19h00.

SUPPORT YOUR CLUB!

FROM THE WEATHERMAN ON 52-MHZ.

Every day, weather satellites launched by the United States and the former Soviet Union circles the Earth sending back a flood of data describing the weather as it unfolds here on Earth. Since the space race between the United States and the Soviet Union began over 30 years ago, the development of reliable weather satellites has been given high priority. Only satellites can provide the needed daily coverage of the entire planet to monitor ever-changing patterns.

Luckily for radio amateurs and other weather enthusiasts, much of this fascinating flow of data from the weather satellites is available free of charge to anyone with the inclination to collect it. This free imagery was first available from TIROS VII, launched in December 1963. TIROS VII carried automatic picture transmission (APT) equipment and offered professionals (and amateurs!) The opportunity to receive imagery directly from the orbiting satellites at virtually any location. Back then, you could purchase the required equipment for an APT ground station for only "a few tens of thousands of dollars"! [1] Interested amateurs quickly studied the requirements for APT reception and within two years of the launch of TIROS VII, Wendell Anderson, K2RNF, described the construction of an APT for $200 in the pages of QST! [2].

Although weather pictures are now easily accessed by tuning your TV to the weather channel or getting on the Internet, I still enjoy pointing my antenna skywards, collecting a bit of the data stream and putting together a picture of our Earth, complete with today's weather! The pictures are usually better than those available on the services - and the price is certainly right.

If you're new to weather satellites, look at the Weather Satellite Handbook and The Satellite Experimenter's Handbook. [3] [4] The needed radio receivers and antennas are described well in these two sources. With regard to image display, however, you want to be alert to recent developments that make displaying weather-satellite imagery easier and more practical than ever before.

Courtesy of Chris - SR6AVA.

7/ ....

Don't say I never take you out for the day ...

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Sarel	- Member	- ZS6APO	- 768-2091
Keith	- Member	- ZS6AGF	- 679-1156
Steven	- Member	- ZR6SJK	- 887-3820 (W)
Dave	- Member	- ZR6AOC	- 475-0566
Johan	- Technical	- ZS6JVV	- 955-2788
Chris	- Member	- ZR6AVA	- 673-2726
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