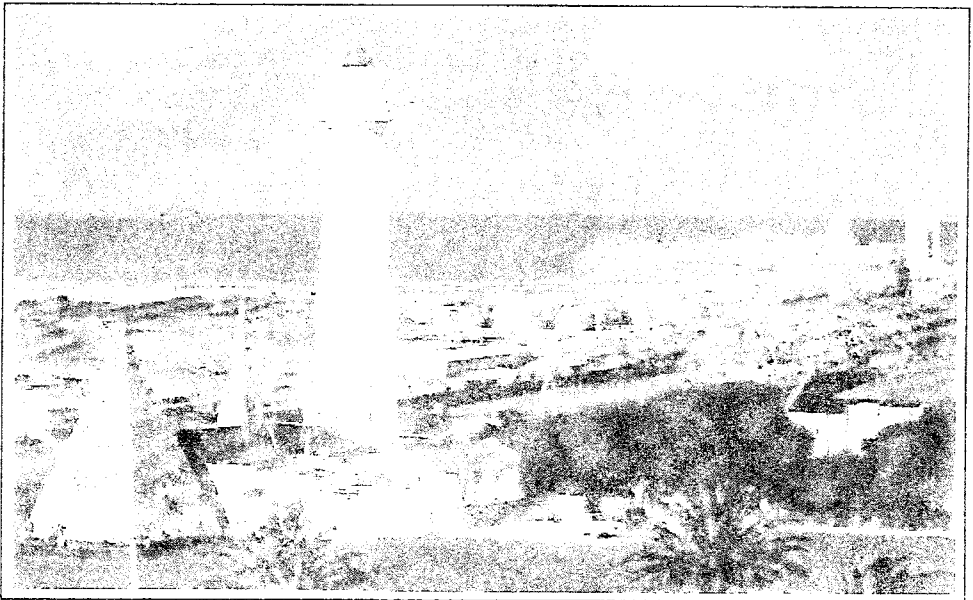




QSA PE



THIS NEWSLETTER IS PUBLISHED BY THE
PORT ELIZABETH AMATEUR RADIO SOCIETY

Web site: pears.8m.com

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July 2002

NOTICE OF MEETING

The monthly general meeting of the PORT ELIZABETH AMATEUR RADIO SOCIETY will be held on **WEDNESDAY, 17 JULY** 2002 (NOT the usual FRIDAY evening) commencing at 20:00 (8pm) in the Municipal Disaster Management Centre, Westview Drive, Mill Park, Port Elizabeth (Civil Defence Centre).

This will be the last evening on which to impart knowledge of the route and the various marshall points, so all concerned with the rally should be present.

Tea, coffee and biscuits will be provided by OM Bill ZS2ABZ.

Wrinkly Ravers

The next rave will be held on **Thursday, 1 August 2002** at

The July Rave was held at Guidos and 18 Wrinklies - amongst them Peter ZS2PL - turned up for a little chat before the eats started. Unfortunately, Mel got hers a little

late - last time it was Garth.

For the next time we have cornered SAN FRANCISCO, of the William Moffet Centre, to the right (as you look at the building) of the Pick & Pay Centre.

See you there from 12.30 pm!

HAVE YOU JOINED THE SARL YET?

We are quite proud of the volume of PEARS members who joined the League in the initial stages, but not so on the subsequent occasions. As mentioned in QSX in May, the recovery of the SARL, especially following the *reduction* in subscription fees, is dependent upon a sufficient number of new members (300) coming into the organization in the first few months.

A great onus rests on all existing members, in their own interests, to encourage as many people as possible to join or rejoin the League. The SARL AGM decision to *reduce* subscriptions rather than increase them requires an all-out effort by all present operators to increase our numbers to the required level or beyond..

This is the challenge to all – join up a fresh applicant without delay! You'll see the results in real terms.

QSX by E-MAIL! If you want to receive QSX by e-mail (Pdf format) *instead of by post* please let the Editor know and provide your e-mail address. QSX will also appear on the PEARS web site (pears.8m.com) in future, but only several weeks after publication date. You will need Adobe Acrobat Reader.



The Chairman's Chat

They say that bad news is always accompanied by good news – the good news being that some of our members are on the road to recovery. Jim ZR2JRD is back in the Gamtoos with his refurbished plumbing, Neville ZS2NV is sounding better every day, Tim ZR2TW will soon be up on his roof again after having fallen off, and Garth ZS2HB is back in the saddle with QSX after his mild (fortunately) stroke. The thing that always strikes me at times like these is the support that the 'victims' receive from their fellow hams. One of the facets of Ham Spirit. Great stuff!

Speaking of ham spirit and such things, have YOU joined the SARL yet? We were all *grootbek* in saying that we would join if the subs came down, etc etc. Well, most of that has happened, but judging by the SARL news bulletins there hasn't exactly been a stampede by Div 2 hams to join. Folks, the bottom line is that if SARL numbers do not grow sufficiently then the SARL is in serious trouble. For the mathematically minded –

(SARL in trouble) = (amateur radio in trouble)

So please do consider joining / rejoining, and give the SARL a fair chance of recovery. We were successful in bringing down that which we did not like, but the *quid pro quo* is that we now help to rebuild the desired edifice.

VW rally time, and I'm sure PEARS members will again distinguish themselves. Also a time for the adrenalin junkies to volunteer for duty in the likes of Car Zero etc.! And thanks to Chris ZS2AAW for doing the organising once again. For those that do not know it, a lot of time and background work goes into the planning of our comms. Hard work for everybody participating, but it's fun.

73 & 88,

Beavan ZS2RL

Car Thieves

An item on the Hamnet bulletin of Sunday, 30th June mentions that a play car thieves are using is to have a very far gone pregnant woman, apparently in distress, standing alongside a road. When a car stops to render assistance, armed men come out of the bush and steal the car.

Another play is to have a large dog, apparently injured by a passing car, lying next to the road. Again, when a motorist stops to assist, the armed men emerge from the bush and commandeer the car.

This means that we need to be very careful about rendering assistance. If in any doubt whatsoever, play it safe and do not stop. By all means report the situation to the S.A. Police Services.

Operating

I notice that there are still a number of people, on two meters in particular, whose operating practices leave something to be desired. The biggest fault is giving call signs. This is done fast and/or indistinctly.

I recently heard stations giving their call signs five or more times before I

could make out what it was.

I would like to think that us amateurs are in the forefront when it comes to communicating, but a few days ago I heard a lady make an announcement, in English and Afrikaans, on the NEARNET system which was done so beautifully and professionally that she puts quite a few amateurs to shame with the rapid, and sometimes questionable improvement in communications.

It would not surprise me unduly to hear the following scenario: Man in emergency situation phoning a disaster centre. "Please send help, my house is being burgled by armed men, and I have locked myself in the bedroom. Any minute now ----".

Disaster management centre: "This is Disaster Management. Our operators are busy right now. Please wait. You are number nine on the list."

Let us hope that we never reach this stage of "advancement".

73

Al ZS2U

Provincial Director,

Hamnet East Cape/ECARES

QRP OPERATORS


AL AKERS, ZS2U

We have a few QRP operators active already. Listen out for them on 7030 kHz CW and also tune around the band a bit. Give some calls as well. It would be rather futile if everyone just listens.

Allan ZS2R is active from about 16h00 onwards. No doubt others who have not yet retired would also be active from about 16h00 onwards on weekdays.

Retired amateurs would probably be active any time of the day.

All amateurs could well be active any time of the day during weekends. As far as I know there are active QRP operators in Gauteng and Natal too and maybe elsewhere.

Are you aware of the PEARS QRP 20 award? To obtain this award you need to contact amateurs in at least twenty different maidenhead locator grid squares using a maximum power of five watts. 

SARL MATTERS

EFFORTLESS WAY TO JOIN THE SARL

Now you can join the SARL online and get instant access to the members only pages. This is the simplest method yet to join the winning team.

If your information is in the call book then its even easier, the site does all the work for you by filling in the form with the details from the call book. All you need to do is dot the I's and cross the T's.

Visit the SARL website at www.sarl.org.za to be one of the first to join this way.

MEMBERSHIP LUCKY DRAW!

A pleasant surprise is awaiting three new members who join the SARL before July 12. Three items have been donated to the SARL for which three names will be drawn only from those who join before the 12th of July.

The items are: A home alarm system; A telephone intercom system and; A universal remote control system for TVs etc

Lucky draw prizes are kindly sponsored by Commco

IT'S ALIVE!

AMSAT-OSCAR 7 Satellite returns from the dead! The Amateur Radio satellite world is abuzz with news that the nearly three-decades-old OSCAR 7 satellite suddenly has come back to life.

First heard on 21 June by Pat Gowan, G3IOR – who copied and downloaded CW telemetry on 145.9738 from the bird – AO-7 subsequently was monitored by

several other AMSAT members.

AO-7 was launched 15 November, 1974, and it remained operational for more than six years.

NEWS ITEMS


It has been brought to the attention of SARLnews that comments have been made about the large number of news items from overseas sources which are being used.

Listeners must remember that if no news items of interest to radio amateurs are forwarded to the compilers they are forced to make use of other sources in an attempt to keep the service going.

Where are all the clubs? Why are there no items about the activities of the clubs being sent to SARLnews or are we in our winter hibernation period?

A relay marathon is being held shortly which, we are given to understand, will be the longest ever held in the world. Are no amateurs involved in this project? Is the communication being left to the cellphone industry or are there other instances involved who are going to give this very important service?

It is realized that the radio amateur usually keeps his involvement in providing communication hidden in cases where disaster has struck or where it is needed at sport functions. To be given any kind of recognition, the roll of the amateur has to be brought to the attention of the public at large.

Please let us know what is happening in the field of amateur radio so that we can share it with others. 

MINUTES OF THE MONTHLY MEETING OF THE PORT ELIZABETH AMATEUR RADIO SOCIETY HELD AT THE DISASTER MANAGEMENT CENTRE, MILL PARK, ON FRIDAY 21ST JUNE 2002

1. PRESENT & APOLOGIES

As noted in the attendance register.
ZS2HB

2. WELCOME

The Chairman, Beavan welcomed all present and introduced Mr Hugh van Niekerk of SA Weather Services, our guest speaker for the evening.

3. ACCEPTANCE OF PREVIOUS MINUTES

Proposed - Bill (ZS2BY)
Seconded - Viv (ZS2VM)

4. MATTERS ARISING FROM THE PREVIOUS MINUTES

A vote of thanks went to Garth ZS2HB (our Editor) for the continued excellence of QSX and to Ashley ZS2AG for the printing thereof. There is no truth in the rumour that it was this that left Garth temporarily speechless.

5. FINANCE

Our Treasurer Clive, reported that the club was financially sound and that 118 members had renewed their subscriptions with another 36 still outstanding.

6. CORRESPONDENCE

(IN): Several Repeater licences, Subs from ZS2VU and ZR2A, Letter of appreciation from Raphey (ZS2SP) regarding the Ou Toppie Certificate awarded him at the AGM. He has not as yet recovered sufficiently from a motor accident and is unable to venture out at night for security reasons. He enclosed a cheque of

R50 as a donation.

To enable the Club to make the award it was decided that the committee and any other members who may wish to do so, visit him at his home and hand over the certificate.

7. GENERAL

1. Chris (ZS2AAW) advised those present that the VW Rally will be held on the 19/20th of July and gave details of the proposed route and times. He called for volunteers to man the various points and a number of those present added their names to the list. Chris will no doubt be contacting those involved in due course... a Recci of the course will probably be undertaken on the 6th or thereabouts.

2. Al (ZS2U), called on those who had indicated their interest in building QRP rigs to collect the crystals ordered by Clive and those who are licensed to do so to come on the air on 7 030 MHz for test purposes.

3. The Chairman made another appeal to those who had not joined or re-joined the SARL to please do so at the earliest opportunity. There was a very real possibility of the League folding if the financial support was not forthcoming. This would leave the Amateur Radio fraternity open to loss of band frequencies and major increases on licence fees which in turn will hasten the demise of Ham Radio in RSA altogether.

With regards the rumour that a

CONTINUED ON PAGE 7

TWO SILVER PLATING MODES

BY BILL BROWNE ZS2BY

I thought that you might like something for QSX so here are two formulae for silver plating, taken from QST of May, 1966.

Silver Plating Paste

Silver Chloride AgCl 1 oz.
Cream of Tartar $\text{KHC}_4\text{H}_4\text{O}_6$ 2 ozs.
Table Salt (not iodised) NaCl 2 ozs.

Mix dry and, when needed, a small amount is made into a paste with water.


Metal must be very clean

With a soft damp cloth lightly rub

the paste onto the metal. After plating, wipe clean and spray with clear lacquer.

Silver Plating Mixture

Silver Nitrate 30 parts
Caustic Potash 30 parts
Distilled water 100 parts


Put silver nitrate in water for quarter of an hour, then add caustic potash. Filter when mixed. Pickle article to be plated and dip for 1 - 2 minutes. 

FROM PAGE 6

number of locals had travelled to Division 4 to obtain their 12 wpm Morse certificates by means other than the published regulations. Beavan made it clear that any underhanded or unlawful occurrences would not be tolerated by the club which would have no dealings with persons involved.

4. The Chairman presented Julie (ZR2EY) and Trevor (ZS2AE) with Certificates of appreciation for Collation and Distribution of QSX and maintenance of the Database for distribution. ZS2ACP (André) was presented with a Certificate of

Achievement in VHF Satellite communications.

There being nothing further to discuss, the meeting was closed at 20.15 and after tea and coffee, Hugh van Niekerk of the SA Weather Services gave us an extremely interesting talk on weather prediction and followed up with colour slides of his 18 month stay on Marion Island and the SA base in Antarctica. Those who missed this one really missed a very entertaining evening. So interesting was the slide show that very few of those attending left early, in spite of the talk ending at 22.15. 

FOR SALE ★ WANTED ★ SWOP

FOR SALE OR SWOP

* A homebrew linear amplifier for 20, 15 and 17 metres: An antique inker similar to those used in the Post Office for monitoring the output of telegraph circuits -- Phil Kauffmann-Sorensen ZS2NP, tel. 082 577 5249.

WANTED

* Meck 60 crystal CW transmitter (1948 ~): Outboard Millen VFO for same -- D. Forsyth, ZS2AW, tel. 046 622 3985.

DIGITAL MODES ON VHF/UHF

BY BARRY MURRELL ZR6DXB / ZR2DX

Over the last twelve months there has been an incredible upsurge in activity on a variety of digital modes on VHF worldwide. As was illustrated by the articles in QSX by Pieter ZR1AEE in April 2002 as well as my visit to PE in January South Africa has also been touched by this phenomenon.

I had planned to post regular articles earlier than now, but saltmine activities and some personal problems have hindered this. My thanks to Pieter for his excellent articles!

The WSJT program which I demonstrated and used to great effect over Christmas has undergone dramatic revamping over the past six months, and now includes two modes: the Meteorscatter mode FSK441 (generally called the WSJT mode) as well as a new mode, JT44, which is aimed at tropospheric and EME work.

It is this new mode that has caused a sensation worldwide: several transatlantic contacts have been made on both 6m and 2m EME already by stations running single Yagis and effectively "QRP" for EME – around 200–400W!

Several long-distance contacts have also been made with this mode where the other station is not even audible – as weak as 20dB below the noise level!

In addition to the WSJT modes, experimentation has also been undertaken with PSK31, MT63 and SSTV. Several SSTV and RTTY contacts have been heard on the 6m band between South Africa and Europe too.

Below I will outline these modes as they relate to South African operation.

WSJT (FSK441)

The by now familiar meteorscatter mode enjoys considerable exposure

amongst 6m VHF enthusiasts in South Africa. From a quiet start in August 2001 which saw a handful of experimenters in Divisions 1 and 6 trying this mode, we have progressed to some 24 stations having made contacts via meteorscatter, with more coming up every week now.

Initial experimenters ZS6WB, ZR1AEE, ZR1ADI, ZS6AVP and the writer are still very active on this mode, and several other stations are heard almost every weekend.

Activity has been recorded regularly from Division 4 where ZS4NS is very active indeed from Welkom (and on a recent trip to V5 where he activated three rare gridsquares) and ZS4TX from Bloemfontein.

Bernie ZS4TX has also operated from Lesotho as 7P8Z on a few occasions, providing several of us with a new country!

Division 5 is represented by ZS5DJ, ZS5LEE and ZS5SAM, whilst Division 1 has seen ZR1AEE, ZR1ADI, ZR1TRD, ZR1L and ZS1EK active at one time or another.

To date the only operation from Division 2 has been my Christmas expedition, which yielded 100% results from five different grids, ZS6WB, ZS6OB, ZS6AVP, ZR1AEE

and ZR1ADI all enjoyed a bonanza of gridsquares over that time.

JT44

This is a mode to get really excited about. For the guys who want that something extra from a digital mode this is it.

Direct contact via JT44 is a regular occurrence between Divisions 1 and 6 via this mode on 6m, whilst Division 4 and 6 can make contact at will on both 6m and 2m using JT44. Signals can be copied way below the noise level, making this mode far more effective than CW.

Where this mode has proved to be incredibly effective is via EME. Up until now ZS stations have been virtually nonexistent on 6m EME due to the extreme requirements. Only one station (ZS6NK in Pietersburg) has anywhere close to the antenna requirements, and our power limitations make matters even worse.

The average US station runs at least 4 x 7 element Yagis with elevation fed by around 1KW of power! However with JT44 we have found it possible to complete QSOs via EME on 6m using a single Yagi without elevation at our moonset (the station on the other side does however need to be well equipped!).

ZS6WB completed his first contact with W7GJ using a 9 element M2 Yagi at 15m off the ground with 400W of power, without any preamps or other aids. Hal has subsequently added another three W stations to his log via this mode. I have also copied signals from both W7GJ and KJ9I on my 5 element Yagi!

So far none of us have tried 2m

due to a lack of power (100-180W will definitely not cut it!) but we are currently looking at the feasibility and availability of valve amplifiers for 2m and 70cm.

PSK31

This is essentially a ragchew mode, yet has proved quite effective on VHF. During the PEARS VHF contest PSK31 QSOs were achieved between Pretoria and Cape Town, and Division 6 stations regularly work Division 4 on 6m on this mode.

PSK31 is the most popular digital mode on HF, and is well worth looking at. Its narrow bandwidth also allows for considerable activity in a narrow frequency range.

MT63

They also enjoyed the opportunity of working GOKZG/MM in a number of wet grids as he sailed from Durban around the coast to Angola!

The question is: who will be the first Division 2 call sign to be worked on this mode? Will it be Nico ZS2N in Aliwal North, who has now got himself a Kenwood TS570 and is getting an interface ready? Will it be Ken ZS2BWB who is almost ready to go at time of writing? Possibly Andre ZS2ACP who is also busy readying his setup?

Come on guys – it is really easy to work MS! To date the bulk of the operation has been on 6m, but 2m contacts have also been made between Divisions 1 and 6. Pieter ZR1AEE has made successful QSOs with ZS6WB (Pretoria), ZS6NK (Pietersburg) and ZS6Y as well as the writer (Johannesburg).

These contacts have been with reasonably high power, but results from Australia indicate that a contact over this distance should be possible with as little as 50W and a 7 element Yagi. Anyone keen to try?

This has until now been viewed as essentially an HF mode, but tests between ZS6Y in Johannesburg and ZS6AVP in Witbank would suggest that it may be effective on 6m, if not even on 2m. Further tests with this mode are currently under way.

SSTV

The advent of soundcard interfacing has breathed new life into good old SSTV.

During our last TEP season ZS6Y made several SSTV contacts into Europe on 6m, proving its viability on this band.

In the Pretoria area every Friday evening the Magalies Radio Club hold SSTV transmission sessions on their local repeater. These are very well supported, and carry on until quite late.

The software available nowadays is easy to use and SSTV can provide considerable entertainment even on FM. No additional equipment is needed: just your PC, soundcard interface and radio!

HOW TO GET ON TO DIGITAL MODES?

Now that you have read about these modes, what do you require to get going on them?

Quite simply you require a multimode VHF radio (or just FM will do for SSTV), a PC (at least Pentium 133) equipped with a soundcard and

an interface between soundcard and radio.

There are several interface schematics available on the internet, or for those "chequebook hams" who balk at the thought of building anything. There are commercial models such as the Rigblaster, Rascal or MFJ models.

These interfaces however require minimal electronic knowledge to build, and component cost is under R100.

In an effort to simplify matters for the ZS hams who are keen on trying digital modes I am currently setting up a website which will contain all the relevant information, software and instructions to use these mode, as well as general SA VHF operation info. This page can be viewed at <http://www.qsl.net/zr6dxo/>.

All interface components (including the audio transformers) are available locally in Johannesburg, and can be sent to anyone who cannot source them in their own town.

Andre ZS2ACP has designed a PCB for the interface which is described on my website. Please have a look at this website and give me your comments – it is there for the benefit of South African VHF operators as well as international hams looking to work South Africa.

Your comments and contributions are greatly appreciated. Any material for inclusion in this site can be sent to zr6dxo@qsl.net.

In future articles: more on JT44 EME, hopefully reports on Division 2 MS activity, planned portable operations on both 6m and 2m! 📍

BY ALLAN WHITEHEAD ZS2R

In this part we will consider an example of op amps used to make up an audio frequency oscillator. In this case the function of most components will be considered and hopefully many questions will arise to elicit further discussion on Monday evenings on the two metre link system.

It is strongly suggested that those wishing to learn more about op amps make an effort to construct this project even if only on bread board. This kind of oscillator will be found to be very useful as a test instrument.

The heart of this oscillator is a LM358 readily available from component stockists at about R14. This op amp is designed for use on a single supply not exceeding 32 volts. The unit contains two op amps, each labelled as 1/2 IC in the circuit diagram.

This oscillator uses the well known Wien Bridge circuit. One advantage of this circuit over others is that a frequency range of ten to one can be achieved. The frequency is determined

by the values of C, R1 and R2. If $R1 = R2$ the frequency is given by

$$f = 1/(2\pi.R_1.C)$$

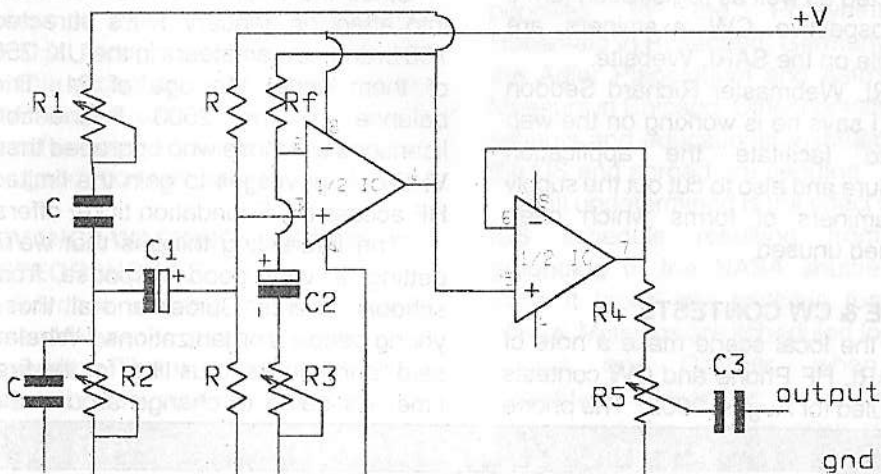
To keep $R1 = R2$ we use a dual ganged pot. Values of 10k to 25k would be suitable.

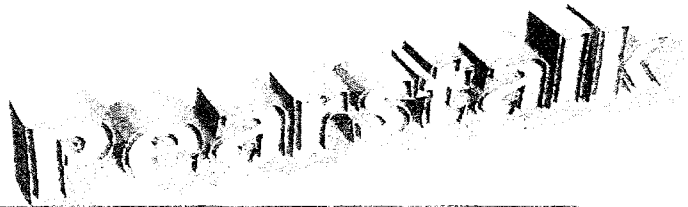
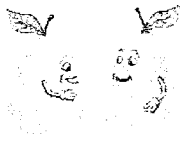
Note that the two resistors marked R set output dc level at 1/2 of V. Two 100k resistors would be suitable. C2 and C3 are 10µf, added to prevent any offset problems. Rf and R3 must be equal to ensure a gain of 2 that is required by this circuit. If Rf = 6.8k then R3 could be a 10k pot or trimpot.

R3 is decreased until oscillation just begins. If R3 is too small the output will be a near square wave. Automatic adjustment of R3 will be considered in part 5.

The second half of the LM358 is used as a buffer and has a gain of 1.

R5 is used to adjust the output level and R4 is included to ensure that the op amp is never overloaded. R5 = 10k and R4 = 1k is suggested.





CW EXAMINERS TO REREGISTER

The term of office for existing CW examiners expired at the end of June. Those who wish to officiate as examiners should register with the SARL as soon as possible.

Only duly registered examiners are permitted to conduct morse tests. Two examiners must be present during the course of a test.

To qualify for appointment, a prospective examiner must:

- be a member of the SARL;
- be a member of an SARL-affiliated club;
- have held a Class A licence for more than 2 years and have passed a 12 wpm morse test;
- be competent in CW and
- be approved as an examiner by the Council of the SARL.

Instructions on how the CW test is conducted as well as registration forms for prospective CW examiners are available on the SARL Website.

SARL Webmaster Richard Seddon ZS2CLI says he is working on the web site to facilitate the application procedure and also to cut out the supply to examiners of forms which often remained unused.

PHONE & CW CONTESTS

On the local scene make a note of the SARL HF Phone and CW contests scheduled for August 2002. The phone

contest on Sunday afternoon 04 August and the CW on Sunday afternoon 25 August 2002 with activity on 80, 40 and 20 meters. Full details can be found on the SARL web site at www.sarl.org.za

INTERNATIONAL LIGHTHOUSE & LIGHT SHIP ACTIVITY

The International Lighthouse and Light Ship activity will be on the air during August. At this stage I know that the Durban ARC are busy planning their activity from the Cooper Lighthouse. What about other lighthouses along our coast?

UK FOUNDATION TICKET A HIT

Radio Society of Great Britain President Bob Whelan, G3PJT, says the new Foundation class entry-level amateur ticket in the UK is proving a huge success, especially among youth.

Since the Foundation licence went into effect on January 1, it's attracted 700 brand new amateurs in the UK, 250 of them under the age of 21. The balance of the 2500 Foundation licensees are those who upgraded their VHF-only privileges to gain the limited HF access the Foundation ticket offers.

"The interesting thing is that we're getting a very good response from schools, Scouts, Guides and all those young people's organizations," Whelan said "and it looks to us like, for the first time, it's going to change around the

Have you done your duty to the SARL?

fortunes for Amateur Radio in the UK."

The Foundation license has made the HF bands much more accessible to newcomers as well as Class B VHF-only "no code" licensees.

To comply with the current international Radio Regulations, applicants demonstrate Morse proficiency by completing what is called a "Morse assessment." Class B licensees need only complete the Morse assessment to qualify for the Foundation license. Applicants work with a Morse tutor for the assessment, and there is no Morse speed requirement.

Those taking the assessment get a copy of the Morse alphabet and "coding" and "decoding" information sheets. To complete the assessment, applicants must receive a text of up to 30 characters in QSO format. They may even write down the Morse elements and decode them later using the information sheets.

The sending assessment requires sending a prepared text in a format similar to the receiving assessment's. The RSGB says the entire Morse code assessment takes about 30 minutes.

Holders of the Foundation ticket gain access to most amateur bands from 136kHz though 440MHz – with the notable exception of 10 meters – using 10W output using only commercially manufactured equipment or "properly designed" commercial kits.

ADVANCE WARNING: LEONIDS METEORSHOWER

Advance warning of the Leonids meteorshower peaking on 19 November. This is being forecast as a major shower, and is expected to be very good indeed.

Last year we had an amazing

shower, with contacts being made between all divisions on 6m as well as Divisions 4, 5 and 6 on 2m.


Sadly only ZS2ACP and ZS2CR were worked on 6m, nobody on 2m. I am looking for hams in the PE area keen on trying WSJT tests on 2m. Prospective stations need at least 7 element Yagi, horizontally polarised, and 50W SSB output.

Anyone interested please contact me on (011) 704 1870 / 083 717 9210 or on email at zr6dxb@qsl.net

ALL-HAM CREW ON BOARD ISS

The International Space Station Expedition 5 crew of Peggy Whitson KC5ZTD, Russian cosmonaut and crew commander Valery Korzun, RZ3FK, and cosmonaut Sergei Treschev RZ3FU is settling in aboard the space outpost. The increment 5 crew is the second all-ham crew to serve a duty tour aboard the ISS. The expedition 5 team will be in space for 4½ months.

Scheduled Amateur Radio on the International Space Station (ARISS) school contacts are set to resume in early July, when QSO's have been penciled in the Progymnasium Rosenfeld in Rosenfeld, Germany, and the Adler Planetarium and Astronomy Museum in Chicago. Other contacts with schools and educational institutions in the US and abroad are pending.

Still undetermined is the effect on the ISS schedule resulting from the grounding of the NASA shuttle fleet while it looks into possible fuel line cracks. Missions are scheduled for July, August and October, when the Expedition 6 team is scheduled to arrive, and the current crew returns home. 

Congratulations...

CONGRATULATIONS

July

- 22 Beavan Gwilt ZS2RL
- 26 Daniel Burger ZS2DSB
- 29 Desmond Pettit ZS2ABU
- 31 Sandra van Wyk XYL of ZS2P

August

- 2 Anita Human XYL of ZR2XTC
- 4 Brenda Whitehead XYL of ZS2R
- 6 Julia Atteridge XYL of ZS2V
- 7 Dawn Hislop XYL of ZR2DJH
- 8 Johan van Zyl ZS2Z
- 10 Hermanus Nell ZR2NH
- 15 Annamarie Barnard XYL of ZS2Q
- 17 Jan van Ree ZS2JW

CONGRATULATIONS

July

- 28 Libby & Mike Hanslow ZS1RMS

August

- 1 Ginny ZS2GIN & Pat Pullinger ZS2PJP
- 17 Annamarie & Attie Barnard ZS2Q

CONGRATULATIONS Robert Bosch ZR2ABK and Ann Kruger, and Garth Laaks ZS2HB and Elize van der Merwe.

CONGRATULATIONS ZS1AWG. Charlie of George, formerly ZR1AWG.

CONGRATULATIONS of PEARs Barry Jackson ZS2H, and Charlie ZS1AWG who has become a member of PEARs.

CONGRATULATIONS Lynne Crothall ZS2MM who retires at the end of July after a long and happy (?) stay

CONGRATULATIONS Jim Duck ZR2JRD is recuperating well from his run-in with the doctor and is back at home.

Neville Vroom ZS2NV has been doing OK on the air since his recent set-back.

ZR2TW Tim Joubert injured his hip in a fall from his roof and is now preparing to get back up.

We hope you have a good recovery.

CONGRATULATIONS
to the following

On the last inner page of QSX, seen overleaf, all the e-mail addresses of the various PEARs sources are named. Please address your directives to the named officials so as to avoid undue delay, as the Editor usually relates the query to the relative person

From an elementary school:

Lot's wife was a pillar of salt by day, but a ball of fire by night.
The people who followed the Lord were called the 12 decibels.
St. Paul cavorted to Christianity. He preached holy acrimony, which is another name for marriage.
Christians have only one spouse. This is called monotony. ☹

Your Society's Committees

Chairman, Awards	Beavan Gwilt ZS2RL	360-6968	gwilt a telkomsa net
Vice Chair, repeaters, packet	Chris Scarr ZS2AAW	368-1344	cvscarr a intekom co za
Secretary	Cyril Hislop ZR2H	360-8482	
Treasurer, Assets Control	Clive Fife ZS2RT	367-5203	cfife a freemail absa.co.za
Social, Retirement	Bill Hodges ZS2ABZ	581-2580	
QSN Editor	Garth Laaks ZS2HB	368-1101	glaaks a iafrica.com
QSN distribution (tex comm)	Trevor Scarr ZS2AE	367-1746	
Technical Classes, RAL (tex comm)	Al Akers ZS2U	360-2983	
Special Events	Ewalt Bouwer ZS2EHB	933-3482	

PEARS' Long-Range 2-Metre Services

REPEATERS

Town VHF	# 145.050/650		
Town UHF	# 431.050/438.650		
Cockscomb	145.000/600		
Colesberg	* 431.075/438.675		
Craddock	* 145.050/650		
Grahamstown	* 145.150/750		
		Knysna	* 145.075/675
		Lady's Slipper	* 145.100/700
		Noupoort	* 431.150/438.750
		Uitenhage	* 145.075/675

* These form the PEARS long-range 2-metre repeater system, also linked to which are East London 145.775 MHz, George 145.700, Danabaai 145.600, Stülbaai 145.750, Butterworth 145.725, King Williams Town 145.625 and Umtata (438.725 duplex). It is further extendable to Cape Town via the WCRWG system. # These can also be linked as required.

OTHER SERVICES

Packet Bulletin Board (ZS0NTP)	144.625
Packet Rose Switch ZS0GHT-3,046101 (144.675 in/out) or 046102 (UHF out to BBS)	144.675
2m Beacon (ZS2VHF CW ID, FSK) (horizontally polarized, 160W ERP)	144.415
6m Beacon (ZS2SIX CW ID) (horizontally polarized, 25W ERP)	50.005
6m Simplex Link with Lady's Slipper 2m Repeater (vertically polarized)	51.400
Wefax Relay (Meteosat)	145.350

Sunday Transmissions

PEARS bulletins are transmitted on Sundays immediately after the SARI English transmission, i.e. at about 08:45, on 7098 kHz as well as the 2 metre linked network that provides coverage from East London to George as well as Craddock and environs. PEARS' 7098 or 3640 kHz transceive facilities are also remotely linked as needed. In addition, the SARI's 40m operations on 7082 or 7066 kHz or Hamnet's 7070 kHz can be remotely patched into the 2m network, in receive-only mode or with full transceive capability for interactive events.

Date	Frequency and Repeater	Event
14	ZR2H	JULY 17 (Wednesday) PEARS monthly meeting 19-20 VW Rally
21	ZS2RT	
28	ZS2FHB	
4 Aug	ZS2HB	
11	ZS2ABZ	
18	ZS2RL	AUGUST 16 Pears monthly meeting
25	ZS2AAW	

Let's All Be Your Society! *