



Improved logo! - by ZR6FD

WATTS

09 - 2003

Year 69

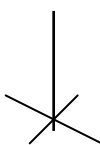
Monthly newsletter of the Pretoria Amateur Radio Club
Maandelikse nuusbrieff van die Pretoria Amateur Radio Klub.



PARC, PO Box 73696 Lynnwood Ridge 0040, RSA



<http://www.qsl.net/zs6pta> (courtesy ZS6DX)



Bulletins : 145,725MHz 08:45 Sundays / Sondag
Relays : 1840, 3700, 7066, 10135, 14,200 MHz
depending on season

Swapshop: After bulletin 2m and 40m (also on-line)

(drukwerk / hardcopy courtesy ZS6BAQ, ZR6STB)

Management team/ Bestuurspan 2003-2004:

-Chairman, SARL liason, WATTS newsletter	Hans Kappetijn	ZS6KR	hans@grv.co.za	012-333-2612
-Vice Chairman, P.R., Fleamarket, RAE, Projects,	Almero Dupisani	ZR6RY	dupisani@postino.up.ac.za	012-567-3722
-Sekretaris Tydrenne, Toekennings	Johan de Bruyn	ZR6JHB	johandbr@absa.co.za	012-803-7385
-Treasurer Clubhouse, Database, DF hunts,	Richard Peer	ZR6CK	peerrk@safrica.com	012-333-2612
-Klubfasiliteite, Sosiaal, Vlooiemark	Willie Greyling	ZR6WGR	willie@up.ac.za	082-940-2490

Co-opted / Geko-opteer:

-Auditeur	Egbert Begeman	ZS6AZG	begeme@unisa.ac.za	012-347-1905
-Tydrenne	Johann de Beer	ZR6YV		011-918-1060
-Webmaster	Rudi Venter	ZS6DX	zs6dx@ananzi.co.za	012-993-4848
-RAE	Brian Scott	ZR6BJS	ano@mighty.co.za	084-312-7407
-DF Hunts / Morse testing	Bill Ingleson	ZS6KO		012-331-2327
-Tegnies	Johan Lehmann	ZR6ANF	jlehmann@csir.co.za	083-300-8677
-Repeaters	Hans Gurtel	ZR6HVG	adele123@absamail.co.za	082-940-0623
-Repeater Maintenance	Willie du Plessis	ZS6AEA	hesterdup@webmail.co.za	012-565-5555 083-653-2101

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- Technical
- Your contributions?

in hierdie uitgawe

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- Voorsittersverslag
- Ledenuus
- Dagboek
- Algemeen
- Tegnies
- U bydraes?

Next meeting

Date: 11-09-2003
Time: 19:30 for 20:00
PARC Clubhouse,
South Campus,
University of Pretoria.
SE cnr University and
Lynnwood roads.

AGM 2003 AJV

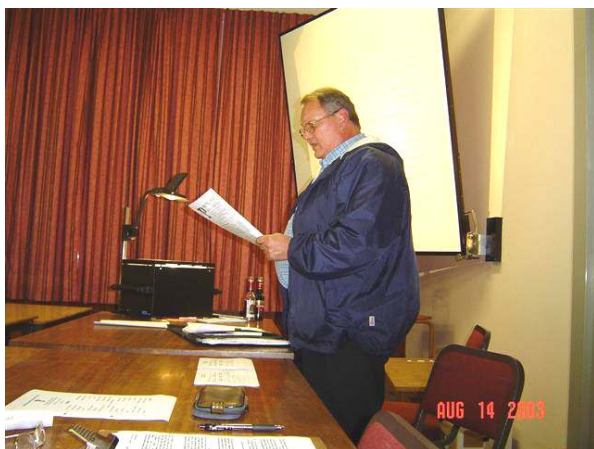
This year's AGM was again smooth as butter and we again have yours truly as Chairman with virtually the same strong team as before and, although a few less, we welcome young Willie ZR6WGR as a newcomer into the team. We will soon acclimatize him hi. It was informative to hear Graham Hartlett, the new SARL President, convey the SARL status-quo, some interesting viewpoints and intentions for the way ahead.



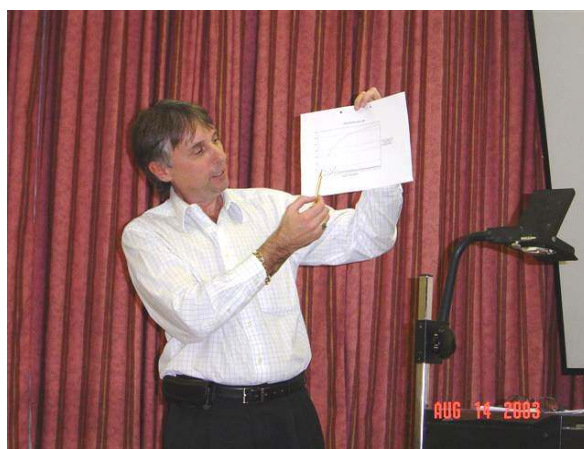
Some 25% of membership attended which was disappointing, but it was good to see some rare faces. Various trophies seen in the foreground were awarded to deserving members – including presents for the ladies whose contributions to refreshments and cleaning-up chores after meetings are not always fully acknowledged. A special Honorary Membership was awarded to Viv Prince, ZS6BZS for his many years of dedication to Rallies, RAE classes and general helpfulness on our repeater to all and sundry in and around Pretoria. The full list is as follows:

ZS6BLY Trophy – Best technical lecture / talk – ZS6OB
Sonny Don Trophy – For assisting others – ZR6RY
Ham Spirit trophy – As the description says – ZS6BRC
Roy Alexander Trophy – Top support on Rallies – ZS6KO

Hansie Meyer trophy – For participation – ZS6QA
Piet Roos trophy – Best contributions to WATTS – ZS6KR
ZSL Trophy – Most progressed ZSListener – ZR6OLM
Merits : Certificate ZS6AZG / Honorary membership ZS6BZS



Johan lees die notules van die vorige AJV



Graham in action with some facts and figures

Die verrigtinge is beëindig met 'n kort toespraak deur die "nuwe" Voorsitter waarna almal genooi is om 'n verskeidenheid drankies en eetgoed te kom geniet wat ons dames gereël het. Daar was 'n kort heildronk op die voorspoed van die Klub en toe was dit die geleentheid om die QSO's voort te sit wat voor die vergadering kortgeknip was; en om te bespreek oor wat alles gesê is. Die skrywer hoop daar is groot planne gemaak vir die uitbou van Amateur Radio en beter kommunikasie tussen die Liga en die manne op die grond. Die laaste persoon is seker eers na 11 uur uit die gebou uit - in die koue in - en vermoedelik tevrede huistoe.

Die afgelope jaar is weer gekenmerk deur aansienlike aktiwiteit vanaf lede en die Komitee. Die Pretoria Amateur Radio Klub se aansien en sigbaarheid was weereens van sodanige aard dat ons 15 nuwe en 3 hernude lidmaatskappe kon trek. Dit bring ook 'n aanwinst in kundighede en hulpbronne mee waarvoor ons baie dankbaar is. Ons is ook dankbaar aan lede en nie-lede wat skenkings gee en in die besonder Spider ZS6SO van wie ons twee Kenwood TKR720 herhalers gekry het, Egbert ZS6AZG wat 'n mooi groot militêre tent beskikbaar gemaak het, asook Richard ZR6CK vir twee groot batterye. Dan ook dankie aan almal wat wat 'n ekstrasjapie by die ledegeld gevoeg het.

The past year has again been marked by considerable activity from members and the Committee. The Pretoria Amateur Radio Club's reputation and visibility was again such that we attracted 15 new and 3 revived memberships. This also implies that we gained valuable skills and resources for which we are grateful. Our membership in June consisted of 102 full members, 7 spouses, 6 dependants and 2 honorary members. Within the current financial year we hope that an equal number will renew their membership and some ex-members will return.

Die gemiddelde bywoning van gewone vergaderings het egter begin afneem van 30 na 25. Die Komitee probeer hulle bes om interessante aanbiedings te reël, maar dit is 'n moeilike taak om lede te trek vanweë uiteenlopende belangstellings en besware teen aand-vergaderings. Saterdagmiddag opofferings is egter ook nie gewild nie en die status-quo sal dus behou word.

We can proudly recap on our activities and awards over the past year:

1. Rallies / Motor Sport communications support for 3 national and 5 regional events. Unfortunately Kyalami racing communication support on a secondary basis has seen a decline due to a decline in races held. This can probably pick up again in future.
Die primêre taak by tydens is om 'n goeie kommunikasiesisteme daar te stel sodat Tydens Beheer die verlangde tye van deelnemers, kontak met mobiele- en veldstasies kan handhaaf. 'n 2m mobiele herhaler en HF word hier gebruik. Die Pretoria Amateur Radio Klub is altyd bo aan die lys as hierdie dienste benodig word. Dit is te danke aan betroubare toerusting en die feit dat ons lede keer op keer hulle goed van hul taak kwyt.
Our members involved in motor sport are too numerous to mention but we extend our profuse thanks for their dedication to practical amateur radio and keeping our Club's reputation high.
2. Vlooiemarkte – Ons vlooiemarkte het wye erkenning en Amateurs van heinde-en-ver kom kuier. Baie dankie aan Alméro ZR6RY vir sy organisasie, Willie ZR6WGR en ook Richard ZR6CK, Molly ZR6MOL, Johan ZR6JHB, Doreen ZR6DDB, Katti ZS6KVR, na die omsien van verversings en ander take.
3. Awards and certificates were from outside the Club were again plentiful and well deserved:
ZS6PTA : PARC first in all three SARL 2002 HF Contest categories: CW,SSB and Club Participation Trophy.
The latter is for the best aggregate in both contests for the 6th time in succession.
ZS6WB : 1st in Africa to receive a 6m DXCC award
PEARS VHF/UHF Januari contest – 1st in digital modes
ZS6KR : 2nd place certificates in each of SARL HF CW and SSB contests
Best aggregate in SARL HF contest
ZS6DX : SARL HF contest 40m single op SSB
1st place Hamnet Simulated Emergency Contest together with Katti ZS6KVR
4. Baie toewyding word aan ons maandblad WATTS bestee. Tot Januarie 2003 moet Rudi ZS6DX en Katti ZS6KVR moet bedank word vir die opstelling en verspreiding van 'n puik publikasie. Dan Doreen ZR6DDB wat die tuig oorgeneem het tot Junie. Vanaf Junie het ek self WATTS elektronies begin opstel om stygende posgeld die hoof te bied. Ons bereik tans 60 lede op die manier. Die drukwerk wat nog benodig is, word gratis deur Doppies ZS6BAQ behartig en Doreen sorg vir die verspreiding daarvan. Ook 'n groot dankie aan lede wat papier geskenk het. Laaste maar nie die minste nie het Peter ZR6FD weer tyd bestee om ons logo beter detail te gee.
5. Our website was maintained by Rudi ZS6DX and attracted many visitors. The on-line swap-shop was also well utilized and also the valve and crystals stock lists from which we managed to make considerable sales. Our website makes a very good impression and serves as an excellent public relations tool for amateur radio.
6. Image building and exposure is also an important function of your Committee and a Combined Club Braai and Combined Clubs Mega-Fleamarket were part of this effort. Club shirts, caps and magnetic callsign stickers initiated by Katti ZS6KVR have also proved to be powerful advertising.
7. RAE klasse by ons klubhuis het tot dusver hierdie jaar nie plaasgevind nie. Ons fasiliteite word egter wel gebruik vir eksamens waar Richard en Alméro dien as toesighouers. Werwing in Amateur Radio het ernstige aandag nodig en dit is almal se plig om geïnteresseerde persone aan te moedig om kandidate te word.

8. Then I would like to thank some perpetual stalwarts who for many years have performed specialized functions. Firstly Richard ZR6CK for the creation and maintenance of our database software, printing WATTS labels and managing the clubhouse, Katti ZS6KVR, Molly ZR6MOL, Doreen ZR6DDB and recently also Mary, sw of Bill ZS6KO for providing refreshments and cleaning up afterwards. Secondly Richard and Bill for organizing DF hunting activities in summer. Bill was also our Vice-Chairman for the past year. Bill is also registered as our official Morse Examiner together with Frank ZS6GE.
9. Aan die sosiale kant was Bill en Doreen ZR6DDB verantwoordelik vir die Kersfees Sjinese-braai, samekoms by Dros, die Roodeplaat Amateurgees en Velddag Naweek, en twee inter-klub braai geleenthede by die LC de Villiers gronde wat weereens deur Alméro beskikbaar gestel was. Dan nie te vergeet nie het Tjerk ZS6P en sy LV Sylvia tradisioneel seker 'n dosyn van ons lede verwelkom om by hulle QTH te kom braai. Also to Bill and Mary a special thanks for their hospitality after fox-hunts.
10. Every Sunday our repeater hosts the SARL HQ bulletins which we also relay to 40m. These HF relays are again picked up by several far away stations for re-transmission. Club bulletins are also relayed on 30, and 80m.
11. ZS6PTA was again registered as an educational station. This means we can host non-amateurs to operate under supervision to promote the hobby amongst youngsters and the general public at any event. Andre ZS6GCA put this into practice during Kid's Day last May and I would like to see much more of this in future.
12. Ons 2m herhaler is deurentyd deur Willie ZS6AEA onderhou en ook het Hans ZS6HVG baie tyd opgeoffer vir die partykeer ondankbare werk. Hulle verdien 'n spesiale woord van dank vir al die heen en weer ry. Willie stel nog steeds 'n 70cm herhaler kosteloos aan ons beskikbaar op sy eie fasiliteit. Dan ook 'n spesiale woord van dank aan die lede wat aandag gee aan die 2m toring se onderhoud. Andre ZS6BRC, Hans ZR6HVG, Pine ZS6OB, Almero ZR6RY en Dawid ZS6DSG het almal bygedra of deel geneem aan die aktiwiteite.

For the future I can see issues such as the rapidly changing technology scene and the application of these technologies by members to be the major survival mechanism of Amateur Radio in general. In future it may be the only glue to bind people to a Club or at least an interest group.

Some of our Club members are already venturing into new modern modes and I hope this is the beginning of a new era where the application of equipment with digital capabilities to process sound and RF can boost the hobby to new technological levels so as to be more compatible with the expectations of the current generation and thus attract newcomers as well as being able to offer a more efficient infrastructure for public service.

I am not shooting down analogue QSO's as obviously personal contact between amateurs is extremely important but everyone should seriously consider that just chatting over radio does not impress the young generation at this day and age, especially when an exam has to be done, licenses to be paid and equipment to be bought. The recent ICASA fees increases do not help either and will put a damper on efforts to interest anyone, especially those from our PDC's where disposable income cannot be spent on gadget purchases.

The pending relaxation of requirements to obtain entry to the HF bands can be a factor to stimulate interest but I am convinced that it will not swell the amateur ranks. In my mind more souls can be drawn from established economically active groups who are looking for something to do in their spare time and who can imagine and appreciate the actual scope of Amateur Radio as a hobby and community service tool.

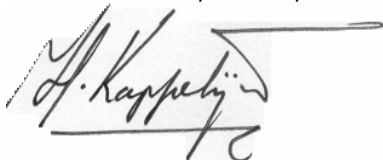
It is just the service aspect that too few of us are involved in and although Hamnet receives a lot of scorn, it is not deserved. It is absolutely amazing how the Amateur Service is appreciated in disaster-prone communities. To date South Africa is just lucky to have escaped major disasters. I wish to continue with the 725 repeater preferential-use agreement with Hamnet no matter what. Everyone within reach of this repeater should also exhibit and expect common courtesy and adherence to Regulation G(5) at all times.

As Club Chairman, I must thank my Committee for assisting me over sometimes difficult terrain. Johan ZR6JHB my secretary has been very patient with me and his extensive experience has smoothed many paths. Also Egbert ZS6AZG our auditor who, despite bouts of ill-health has fine-tuned our financial recording and reporting system again deserves special thanks. He will soon have his own word in these proceedings.

Furthermore one of the last tasks of the outgoing committee was to allocate awards and certificates to deserving members. These will soon be handed out.

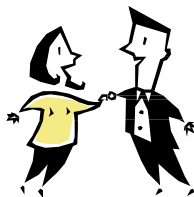
Our Club has had a busy and productive year and I wish the incoming Committee and Chairman another successful year ahead.

Hans Kappetijn ZS6KR
Chairman PARC 8/2002-14/2003



Birthdays Verjaarsdae

September



September Anniversaries Herdenkings

02 Charell ZR6GN
05 Bernie ZS6ANU
09 Hester lv van Willie ZS6AEA
15 Pamela sw of Harry ZS6HRD
16 Fanie ZR6FBI
18 Desire lv van Dawid ZS6DSG
21 Johan ZR6JHB
24 Estie ZR6STB
25 Claire daughter of Robert ZS6ARC
26 Lucilla sw of Carlos ZS6AJW
29 Roy ZS6HH
29 Charlize dogter van Dawid ZS6DSG

02 Lily and Harry ZS6AMP
09 Adele and Hans ZR6HVG
27 Miemie en Hennie ZR6HEN
28 Retha and Roy ZS6XN

New Members Danny ZS6AW and sw Antoinette ZS6D
Spider ZS6SO
Johan ZR6ANF

Sick parade



Krukkelys

Egbert ZS6AZG moes 'n stukkie van sy middel-vinger afstaan
Sarina, lv van Willie ZR6WGR, is op 26 Aug onder die mes.

Ham diary

Aug

31 SARL President's Net
31 SARL HF Contest 2nd leg: CW [Please diarize! Let's go for #7 best Club aggregate SSB/CW in a row.](#)

Sept

06-07 All-Asian DX SSB Contest
IARU Region 1 SSB Field Day
07 DARC 10m Digital Contest
12 Closing date October RAE
13-14 WAE DX SSB Contest
20-21 SARL VHF/UHF Contest
28 SARL President's Net

Oct

02 SARL 80m QSO Party (2nd leg)
04-05 Oceana DX Phone contest
05 RSGB 21/28MHz Phone contest
16 RAE

Last reminder

Ledegeld R50,00 Membership
Bank: FNB
Branch/Tak: 25 20 45
Account/Rek: 546 000 426 73

Enter your callsign in the info space!

SNIPPETS / BROKKIES

- The youngest PARC member is **Malcolm ZR6OLM** son of Roy ZS6XN who is now 14.
Kort op sy hakke is **Arnaldo ZS6-2505**. Hy is ook 14 en ongeveer 'n maand ouer.
- Coming up: **ADEC 2003 electronics and components trade show** running concurrently with the **PMRA professional mobile radio exhibition** at the Kyalami Exhibition Centre 16-18 September 09:30-17:30.
Registration on-line at www.progroupshows.co.za by completing your details and following instructions.
ADEC exhibits : Passive and active components
Test and measurement equipment
Production equipment
PMRA exhibits : 2-way radios and control centres
Video telemetry, mapping, sat etc.
Accessories and services
- Coming up: Invite to **open day** at 1 Signals Regiment Wonderboom courtesy John ZS6AN – details awaited.

Amplifier project – attention all members

This is a preliminary probe into the feasibility of starting a practical amplifier construction project under the expert guidance of Wynand ZS6ARF who has much practical experience in this field. Your Editor thought it to be a useful project if we could go for a 6-meter unit of moderate power like 200-400W which is affordable and could serve as a useful tool when tackling digital modes or just DXing. Most of us that wanted linears for HF, already have one, but the availability of 6m amplifiers is a different story. We are open to any suggestions. Use emails to ZS6KR or ZR6RY or a hard-copy by fax to 012-333-2612. Several stages are envisaged: 1. Education 2. Getting the parts 3. Construction and testing in stages. This can be done over a year if necessary. Guidance can be via WATTS on a monthly basis. [Remember that tackling this means spending time, money, mechanical work and dedication to the end.](#)

APPLICATION FEES INCREASE – AANSOEKFOOI VERHOGINGS Amateur Radio

According to the Government Gazette 22874 of November 2001 now in force:

Applications:	All classes of licence (including CEPT format)	R140,00
	Beacon	R100,00
	Change of call sign on request	R100,00
	Guest or Special Event License	R100,00
	Listener	R100,00
	Repeater station including radio link	R100,00
	Digipeater / Bulletin board	R100,00
	Experimental station for WXsat reception and re-transmission	R210,00



WANTED

We need alternative operators for the following duties:

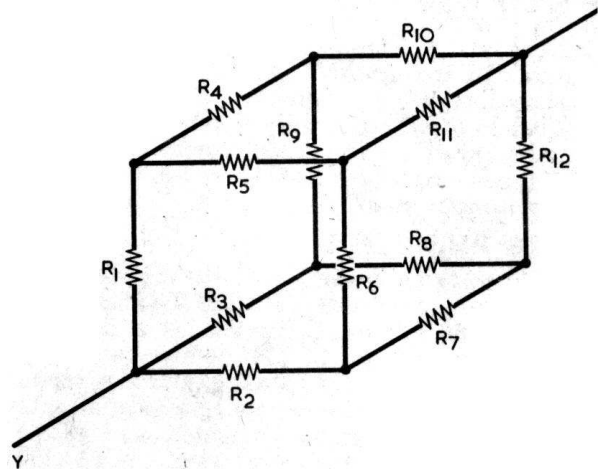
- 1. 30m PARC Bulletin relays**
- 2. 40m SARL Bulletin relays**
- 3. Webmaster**

Please contact any Committee member

PUZZLE: (not for the faint-hearted)

Can you find a method to calculate the resistance between X and Y? All resistors are 1 ohm

I will even give you the answer: 5/6 ohm



INTERNET SECURITY

For more than a year people who used Internet terminals at 14 of Kinko's Stores in NYC, were monitored by secretly installed software by a gentleman called Juju Jian, recording all individual keystrokes. 450 user names and passwords enabled him to access and open bank accounts online. Jiang was caught when he used one of the stolen passwords to access a computer with GoToMyPC software, which lets individuals access their own computers from elsewhere. The GoToMyPC subscriber was at home at the time and suddenly saw the cursor on screen move around and files open as if by themselves. He then saw an account being opened in his name at an online payment transfer service.

Several keystroke loggers are available for businesses and parents to monitor employees or children. Be careful when using public terminals or purchasing second-hand PC's – they may just be spying on you!

VHF/UHF "Bricks" for Amateur use – Mitsubishi and Toshiba >10W - relevant type numbers.

Part number	Freq. range	Max BW	Power out	Bias class	Case
M57735	50-54	48-56	17	AB	H3B
M57713	144-148		17	AB	H3B
M57715	144-148		13	C	H2
M57719N	142-163	140-165	14	C	H2
M57726	140-152		43	C	H2B
M57727	144-148	140-150	37	AB	H3B
M57737	144-148	140-152	30	C	H2
M57741	148-160	140-170	28	C	H2
M57747	144-148	140-150	13	C	H6
M67727	144-148		60	AB	H17
M67741H/L	150-175	140-180	30	C	H2
M67746	144-148		60	C	H2
M67781L	135-160	125-160	40	?	H2
SAV7	144-148	143-149	28	C	H2
SAV17	144-148	144-148	50	C	H2
SAV24	144-148	140-174	50	C	H2
M57704M	420-450	420-450	13	C	H3A
M57716	430-450		17	AB	H3C
M57729	430-450	420-450	30	C	H3A
M57745	430-450	425-450	33	AB	H3C
M57752	430-450		13	C	H3A
M57788M	430-450	410-460	45	C	H3A
M67703M	430-450		50	C	H17
M67709	430-470		13	C	H16
M67728	430-450	420-470	60	AB	H17
M68703M	430-450		60	C	?
M68762L	400-450		30	C	H3
SAU3	430-450	427-450	17	C	H2
SAU4	430-450	430-450	10	AB	H4
SAU6L	400-440		13	C	H2

Note: Before installation or replacement, antenna switching PIN diodes should be tested with a normal ohm-meter for high-low resistance. Check the circuit, antenna, coax etc. to make sure that adjustment or repairs are not required. Scrape off all dried heatsink compound from both the module and mounting surfaces, clean with a cloth till both are smooth and apply fresh compound liberally. Wipe excess away after tightening the module to its final position. No compromises must be made in this process.

Technology News

(The following 7 items extracted from previous issues of DataWeek)

A robust lead-free solder alloy Sn3, 9Ag0, 6Cu has been developed that will replace the eutectic tin-lead solder in industrial processes. Projects to determine assembly and rework processes for this alloy are now under way.

A unique monitor with the code name Helios is shaped like a 510mm globe and can show high resolution colour images that appear to move in space allowing multiple users to move around the 360 degree display and view images at any angle. The display has a resolution of approximately 100 million volume pixels (voxels)

The one-billionth PC was shipped last April 2002. The two-billionth is expected around 2008. Some 140 million are expected to be shipped in 2003.

The FCC has given permission to a US manufacturer with the name *Hop-On* to produce the world's first 800MHz disposable, recyclable cellphone. It will however have a rechargeable battery and capability to add additional minutes.

The television receiver market is the next major growth opportunity for LCD panels. LCD-TV unit shipments are expected to be 3,2 million in 2003 and 28,8 million units over the next 5 years.

Engineering samples of paper-like displays with 160 pixels/inch resolution were recently demonstrated by an E-Link and Philips joint effort. The customer can ultimately design the shape of his required product.

The Korean Herald reports that Samsung is to ban camera phones from its semiconductor flat panel and electronics factories because of espionage fears. The ban applies to both workers and visitors. Ironically the company is a leading manufacturer of the technology it wants to ban.

Cognitive Radio – it lives. There is a movement under way at the FCC to increase spectrum efficiency through the use of a new technology called Cognitive Radio. What is that you ask? This is radio gear and antenna systems that could adapt to their operating environments by automatically identifying vacant spectrum, switching to that spectrum and carrying out a specific communications mission.

Cognitive Radio will also be the subject of an FCC workshop.

More information is at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-233615A1.doc

Your most unhappy customers are your greatest source of learning. (Bill Gates)

Steurings wat jy nie kan identifiseer nie? Kyk rond vir son-panele wat beheer word met omsetter-tipe battery laaiers. Die tipe laaiers is baie doeltreffend wat energiebesparing en oordrag betref, maar is in die algemeen goedkoop gebou in plastiek sonder dat stuuringsonderdrukking veel aandag gekry het.

babbel-amateur = ragchewer

Manuals/Handboeke

http://f6keh.free.fr/index_r

<http://www.manualman.com>

<http://www.w7fq.com>

<http://mods.dk>

J-pole design

http://qsl.net/ares_d24/jpole.html

<http://www.sedan.org/jpol.htm>

<http://qsl.net/wrav/2mjpole.htm>

6m frequencies

SSB call 50,200

Int. call 51,110

JT440 50,225 JT6M 50,260

PSK31 50,250 FSK441 50,270

In the film *Cliffhanger* when the mountain guys are running round with their handhelds the base guy is talking into an FT101ZD – Great place Hollywood.