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WATTS

12-2013

Year 83 + 12m

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

✉ PARC, PO Box 73696, Lynnwood Ridge 0040, RSA

web <http://www.parc.org.za> mail: zs6pta@zs6pta.org.za

Bulletins: 145,725 MHz 08:45 Sundays/Sondae
Relays: 1.840, 3.700, 7.066, 10.135, 14.235, 51.400, 438.825, 1297 MHz
Activated frequencies are announced prior to bulletins

Swapshop: 2m and 7.066 MHz Live on-air after bulletins
Bulletin repeats Mondays | herhalings : Maandae 2m 19:45

3DA0ET Dx-pedition 18-27 Nov. Roger ZS6RJ was the creator of this banner and more: p4



In this issue

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In hierdie uitgawe

Next club events

Fleamarkets at PMC
Sat 7 Dec

Club social at U.P.
19:00 5 December
Presentation on Linux commands
Club committee meeting
To be announced

PARC Management team / Bestuurspan Aug. 2013 – Aug. 2014

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From the Editor and Management

Vanaf die Redaksie en Bestuur

A Blessed Christmas

'n Geseënde Kersfees



It is difficult at the time of writing to realize that the Festive Season is soon upon us. The January issue of WATTS will probably appear after Christmas. **The Management Team of PARC will now take the opportunity to wish you and your loved ones a Blessed Christmas and Happy New Year.** May there be new inspiration for the future through the Message and real meaning of Christmas for all. We also wish our Jewish members a happy **Chanukah**.

Dit is moeilik om nou ten tye van hierdie skrywe te besef te dat die Feesgety alreeds baie naby is. Die Januarie uitgawe van WATTS sal waarskynlik eers na Kersfees verskyn. **Die Bestuurspan van PARK wil nou van hierdie geleentheid gebruik maak om u en u geliefdes 'n geseënde Kersfees en Gelukkige Nuwe Jaar toe te wens.** Mag daar nuwe inspirasie vir die toekoms deur die Boodskap en ware betekenis van Kersfees vir u almal wees.

Christmas Is Coming!



"Santa Claus" is an American phonetic alteration of the German Sankt Niklaus and Dutch Sinterklaas. Over the years, many legends and stories have been told of St. Nicholas' kind deeds for those in need.

St. Nicholas, who was born in the village of Patara (present day southern Turkey) way back in the third century. He was born to wealthy parents who were devout Christians. When they passed away in an epidemic, he gave away all his worldly possessions to the poor.

While he was still young, Nicholas dedicated his life in the service of the Lord and was made Bishop of Myra. Throughout the land and across seas he gradually came to be known as a compassionate saint, a protector of children, and a savior of sailors.

Birthdays Verjaarsdae

Dec.



- 01 Pieter ZS6CN
- 02 Antoinette, sw of Danny ZS6AW
- 05 Angelique, kleindogter van Erna en Whitey ZS6JJJ
- 06 Sylvia, lv van Tjerk ZS6P
- 07 Hansie ZS6AIK
- 08 Hans ZS6KR
- 12 Charl, seun van Karin en Sarel ZS6EK
- 15 Don ZS6AQS
- 15 Almero ZS6LDP
- 17 Dominic, seun van Hans ZS6HVG
- 21 Retha, sw of roy ZS6XN
- 23 Niel ZR6AUK, son of Marieta and Roy ZS6MI

Des. Anniversaries Herdenkings

- 01 Elize ZS6LHT en Pieter ZS6PA (29)
- 17 Leanne and Allan ZS6AVC (19)
- 22 Rita and Victor ZS6VG (34)
- 29 Molly ZR6MOL and Richard ZS6UK (37)

- 27 Pierre ZS6ADZ
- 29 Ricky, son of Rita and Victor ZS6VG
- 30 Rika, sw of Errol ZR6VDR
- 30 Juan, seun van Marilize en Pierre ZS6PJH
- 30 Jaun ZS6VDJ

Lief en Leed | Joys and Sorrows

None reported

Diary | Dagboek (UTC times)

Dec.

- 06-08 ARRL 160m Contest 22:00-16:00
- 14-15 ARRL 10m Contest 00:00-24:00
- 21 OK DX RTTY Contest 00:00-24:00
- 21-22 Croatian CW Contest 14:00-14:00

Snippets | Brokkies

Members are requested to check their details on the members page on our website. Please correct or add information as in future this will be our only database.

RAE Candidates passed

Name	Class	Call Sign	
Bresler, A	A	ZS6AVB	Avida, XYL of Theo ZS6TVB
Daling, RJ	A	ZS6BOK	Roelf
Kelly, I	A	ZS6KEL	Irvin
Marais, GJ	A	ZS6GJM	Gideon
Mostert, M	A	ZS6GT	Marius, only attended HF Assessment
Schmidt, MJ	A	ZS6MES	Johnny
Van den Berg, JH	A	ZS6ETA	Johan

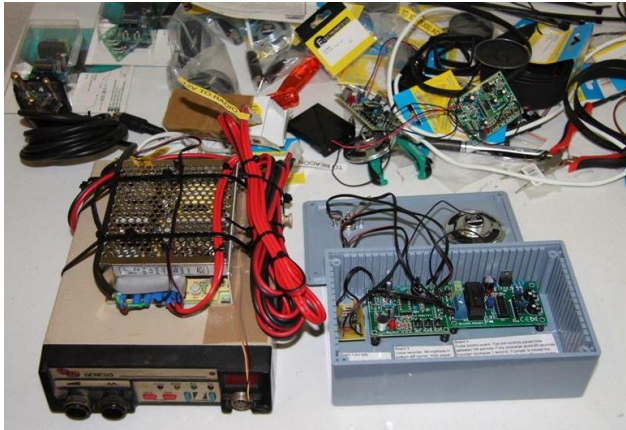
ZS6WB 6M Beacon Project now close to operational

Instigated by Hal ZS6WB with technical assistance from Roger ZS6RJ and a donation of radios from Bernie ZS4TX, will have the purpose to establish a beacon network in Southern Africa and surrounding islands.

An affordable hardware voice keyer solution was found by Roger with two Velleman kits and a small voltage regulator all driven from mains via a Meanwell 12V supply. The box of tricks has instructions inside for the hams that will host the beacons.

GP antennas and Bernie's radios complete the system.

Operation is on 50,450 MHz and 5W. Voice transmissions are made every 65 seconds. Placement is initially experimental but currently there is one with Andre V51B (JG81FK), Hal's QTH (KG44EE) announcing "Z S Six Whiskey Bravo Beacon K G 44 Echo Echo" as well as A25RJ (KG47AC) in the Tuli Block, Botswana and Z21LV (KH52NG) in Harare. ZS5JT (JG61BF) near Richards Bay is also transmitting from his own beacon on a regular basis. Eventual other locations are Madagascar, Mauritius, and more to come. An interesting aspect has been observed in early tests that aircraft reflections have locally effected 59+ signals from Hal to Roger.

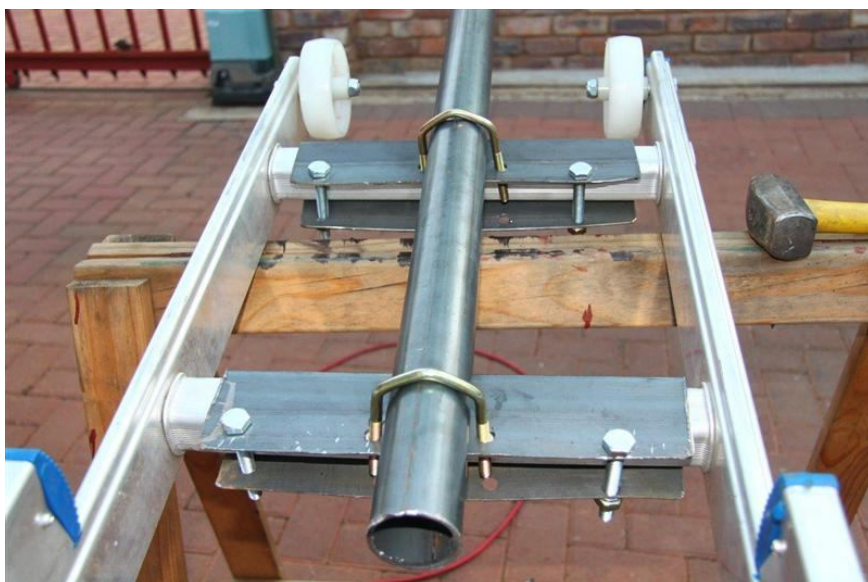


Swaziland DX-pedition – some innovations applied for ease of transport and fast deployment



Quoting Roger:

Attached the makings of my 40 foot "ladder tower" base design. Works great - whole thing is extremely strong and self-supporting, so the guys when added at the top will just be to keep it vertical and not needed midway up or anything for strength. This contraption would hold my Tennadyne T8 even. Four of these "towers" with hexbeams up on top is going to be great. And the beauty is only two blokes are needed to put it up safely in the bush (if guyed 4 ways for the "hinge" effect).



Fully deployed the ladder is 10m.

Then there will be a 1.5m mast at

the top attached via cross braces to the top 3 rungs. Plus the centre post of the hex itself.

A 4-way guying system will be used.

This puts the 20m band up at a full 41 feet and the 10 meter band at 38 feet with the other bands in between. At that height the hex will perform superbly.

The whole thing including hex and a rotator only weighs 43kg.

In the bush one simply hammers 16mm diameter stakes in through the mounting holes to pin the base, and 4 angle iron stakes spaced out 5 meters for guy ropes. (in the picture the base is not complete. It still needs the vertical plate triangular bracing and a cross brace which will spread the load of the ladder evenly under the bottom rung)



Mr. I. J. Richards, chairman of the Pretoria branch of the South African Radio League, in the new clubhouse in Von Wielligh Street. In the background are other "hams."

Radio 'Stars' Are All Hams

By Staff Reporter "Old Man John"

MR. ZS6AQ AND MRS. ZS6AIL were engaged in a bantering sort of man and wife argument about who should be called "senior operator." An evil little green band arched and winked with glee. "Just QRX, will you?" said a harsh metallic voice from the depths of "the rig" in "the shack."

I was spending an evening in the company of two keen radio hams, Mr. and Mrs. A. Leeb-du Toit of Hazelwood.

It was an odd experience — and one that earned me a nickname that I fear might stick.

It happened quite suddenly. A voice crackled out of the set and said: "Hello Old Man John and a good evening to you. If Old Man John is a tall reporter with yellow hair tell him I know him.

"Thanks," I said. "Say hello from Old Man John." I am not in fact an old man, but when you get in tow with radio hams strange things can happen.

STRANGE THINGS

Strange things do happen, con-

the Pretoria Show which opens on September 26. A "ham shack" is being established and the public will be able to see something of this odd little hobbyists' world of codewords, rigs, antennae and transmitters.

It will be one of the few places in South Africa where the word "receiver" has nothing whatever to do with those buff forms that should have been filled in last month.

Club History

This newspaper cutting dated August 20, 1960, was kindly provided by Esme Brasler, the daughter of Ritchie ZS6ET SK. Also his SARL certificate dated 30 June 1951. Ritchie's original "Netset" rig was also donated to the club and has found a good home for resurrection with Vincent ZS6BTY.

tinually, among the world-wide fraternity of radio hobbyists.

Sometimes—when static is not too bad and they manage to hit the right frequency—the old story of "boy meets girl" presages wedding bells.

Most eagerly followed conversation, recently were those of a girl called ZESJP a Salisbury ham, and a man called ZS9P of Bechuanaland.

OWN CODE

To the delight of hams everywhere they are happily married now after a long-distance courtship that drove them from speech to morse code and finally to a code all their own.

There are also in Pretoria and other cities of the Union, many hundreds of people to whom ham radio is something more than a hobby—people crippled in accidents and by illness, to them amateur radio work is a life-interest.

"The ham radio movement is helping hundreds of people to maintain an interest in merely being alive." Mrs. Marlene Leeb-du Toit told me. "It's the friendliest club in the world."

MOTOR RALLIES

Hams have also done notable work in "covering" motor rallies. But it is an offence to pass a message by ham radio when a telephone call would do.

There are about 90 members of the Pretoria branch of the South African Radio League. Recently this group became the first in South Africa to establish its own club house.

This is a ramshackle old house in Von Weilligh Street — once the Native Pass Office.

Under the chairmanship of Mr. I. J. Richards (ZS6ET) the hams have moved in and repainted it. Broken window panes have been replaced. Even the curtains have a "ham" touch with patterns of circuit diagrams and call-signs.

For the first time in many years ham radio is to be featured at

HOW MANY HAMS?

From IARU.org via QSL.net

According to the most recent statistics of the International Amateur Radio Union, there are 2.6 million licensed radio amateurs in the world. The list of countries, where about 90% of the world hams reside, may hold some surprises.

Japan has half of the world Amateur Radio population: 1.3 million. The Japan Amateur Radio League (JARL) has a membership of 194,000.

The **United States** has one-fourth of the world radio amateurs. Less than 30 years ago, the US was home to more than half of the world amateur population. However, at that time the total world ham population was barely more than 400,000! Amateur Radio has grown in the US but has been growing even faster in a number of other countries. ARRL membership is about 172,000.

Canada, is in a growth spurt, thanks to recent changes in its licensing structure.

Thanks to reunification, **Germany** has the largest number of amateurs of any European country. The Deutscher Amateur Radio Club (DARC) has a remarkable 77% of the licensed amateurs in Germany as members; nearly 50,000 of its 57,000 members are licensed.

The **UK** has nearly as many amateurs as Germany. The Radio Society of Great Britain (RSGB) has a somewhat smaller, but still impressive 44% of licensees as members. The total membership of the RSGB is about 30,000.

Indonesia's position on the top 10 list may surprise you, since Amateur Radio barely existed there as little as 25 years ago, but it would not surprise anyone who attended the 1991 IARU Region 3 Conference in Bandung. Organisasi Amatir Radio Indonesia (ORARI) is a well organised and effective national association in a country where radio communication is very important, and membership in ORARI is compulsory to hold an amateur license. According to ORARI, its membership figures are trending downward for reasons that sound similar to those that affected Amateur Radio in the US following the CB boom of the late 70s.

Spain is another country where Amateur Radio has experienced rapid growth in recent years.

Accurate statistics for Russia are difficult to come by at present, but the estimate of 38,000 is probably close enough to establish its relative position. A new national organisation, Soyuz Radiolyubitelej Rossii (SRR), was voted into membership in the IARU in 1994.

Italy has about 30,000 amateurs, making it either the fourth or fifth largest country in Europe in terms of amateur population, depending on whether you count Russia (many of whose amateurs are in Asia) as a European country.

Finally, **Brazil** is the lone South American country on the top 10 list, although in fairness to **Argentina** it must be said that our LU friends are close behind, in position number 11, with 24,000 licensees.

If you look at the statistics in The Radio Amateur Callbook you will note that some of their figures, particularly for Japan and Indonesia, are dramatically lower than those given here. The reason is that the Callbook figures only include those amateurs for whom they have address listings.

By ITU Region, the IARU statistics show there are **417,000 amateurs in Region 1** (Europe, Africa, the Middle East, and the former Soviet Union), **780,000 in Region 2** (the Americas), and **1.4 million in Region 3** (the rest of Asia and Oceania).

Who does the IARU count as a radio amateur? In general, only those individuals who hold both an operators license and a station license are counted. In Japan, for instance, operators licenses are issued for life and the total number of operators licenses ever issued is well over two million! Station licenses, on the other hand, have five-year terms and are a more accurate indicator of potential activity.

A country that should soon join the Top 10 is **Thailand**, where 92,000 operators licenses have been issued and 38,400 have requested a station license!

IARU: WORLD'S AMATEUR RADIO

1	Japan	1.300.000 om
2	USA	632.000 om
3	Germany	64.000 om
4	England	62.000 om
5	Indonesia	60.000 om
6	Spain	47.000 om
7	Canada	44.000 om
8	Italy	30.000 om
9	Brasil	27.000 om
10	Hungary	8.500 om

ASSOCIATIONS situation:

Membership DARC (Germany)	77% of total
RSGB (England)	44% of total
ARI (Italy)	75% of total
ARRL (USA)	28% of total
JARL (Japan)	15% of total

The difference between DVD-R, DVD+R, DVD+RW and DVD-RW

There's DVD+R, DVD+RW, DVD-R, DVD-RW, and even DVD-ROM! So what's the difference between all of these different names, aren't all DVDs the same? Well, it's not quite that simple.

Let's first start with the most obvious difference: some have R and some have RW. The "R" stands for readable, while the "W" stands for writeable.

The main difference between DVD-R and DVD-RW, or DVD+R and DVD+RW is that the R disc formats can only be written to once, and then it is only readable for the rest of its digital life. While RW discs can be written to and erased many times, they are both readable and writeable.

"R" discs are perfect if they are only needed to be written to once, such as giving some files to a friend or transferring them between PCs. "RW" discs have their strength in the ability to be used many times over, which is great for routine system backups, etc. And naturally, the RW discs are slightly more expensive than the R discs, but you'll have to decide if the trade offs are worth the money.

Now, onto the difference between DVD-R and DVD+R. As I just described above, DVD-R & DVD-RW are sister discs, the difference being one is writeable once, while the other is writeable multiple times. The same thing is true for DVD+R & DVD+RW. So the question is, what's the difference between the plus and minus?

In order to explain this we must take a trip back in time. When DVDs were first being developed, there was no industry standard. Multiple companies were competing to develop what they hoped would be the dominant form of the future.

The DVD-R DVD+R difference can easily be summarized by the following:

* The DVD-R/RW standard was developed by Pioneer, and is used primarily by Apple and Pioneer. These "minus" discs can only be written to in one layer on the disc surface.

In addition, this format is supported by the DVD forum, but is in no way an industry standard. DVD-R/RW discs are cheaper than the "plus" format.


* The DVD+R/RW format is supported by Philips, Dell, Sony, HP, and Mcft. These discs can be written to in multiple layers, giving them slightly better and more disc storage than the "minus" format. Because of this additional capacity, they are slightly more expensive than "minus" discs.

A couple final things to clear up is the difference between DVD-ROM and DVD+RW, or the other DVD formats I mentioned above. The DVD-ROM drive can only read DVDs, while the other DVD drives can read and write data to DVDs.

Currently there are three competing technologies for rewritable DVDs: DVD-RAM, DVD+RW and DVD-RW. DVD-RAM is considered a highly reliable format, as the discs have built-in error control and a defect management system. Therefore, DVD-RAM is perceived to be better than the other DVD technologies for traditional computer usage tasks such as general data storage, backup and archival, though the Mt. Rainier standard for DVD+RW somewhat lessens the DVD-RAM format's perceived advantage. Curiously, DVD-RAM has a larger presence in camcorders and set-top boxes than in computers, although the DVD-RAM's popularity in these devices can be explained by the fact that it is very easily written to and erased, which for example allows extensive in-camera editing.

The on-disc structure of DVD-RAMs is closely related to hard disk and floppy disk technology, as it stores data in concentric tracks. DVD-RAMs can be accessed just like a hard or floppy disk and usually without any special software. DVD-RWs and DVD+RWs, on the other hand, store data in one long spiral track and require special packet reading/writing software to read and write data discs. It is a common misconception that DVD-RAM uses magneto-optical (MO) technologies: DVD-RAM is a pure phase change medium, similar to CD-RW or DVD-RW.

Source(s): <http://en.wikipedia.org/wiki/DVD-RAM>

<p>C/O NELSPORT & 801 MALMESBURY STR, WINGATE PARK, PRETORIA [S25.49.36 & E28.16.07]</p> <p>ICOM HAMSHACK [PTA] Pine ZS6OB 082 4477 823 AUTHORIZED ICOM DISTRIBUTOR</p>  <p>FOR ALL YOUR ICOM PRODUCTS & ACCESSORIES SPECIALLY MANUFACTURED VHF/UHF EX60B ANTENNA SYSTEMS FOR: EME, TROPO, MS, REPEATER & SATELLITE SYSTEMS</p>	<p>QRV Services offers the following expertise:</p> <ul style="list-style-type: none">• General equipment and Television repairs• Small-scale design and manufacturing• Precise frequency and power calibration• Technical writing• 3rd Party scrutiny of projects and documents• MFJ 259/69 Analyzer repairs and calibration• Ham radio and solid state amplifier repairs• Valuation of ham estates and their disposal. <p>and products:</p> <ul style="list-style-type: none">• Legal limit 30m and 40m dipole traps• Linear power supply O.V. protection kits• 30A DC switching supplies• 30A DC Anderson Power Poles• Connectors RF and Audio• Plug-in triple sequential industrial timers <p>Contact Hans at 012-333-2612 or 072-204-3991</p>
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Long Term HF Propagation Prediction for Dec. 2013

Courtesy ZS6BTY

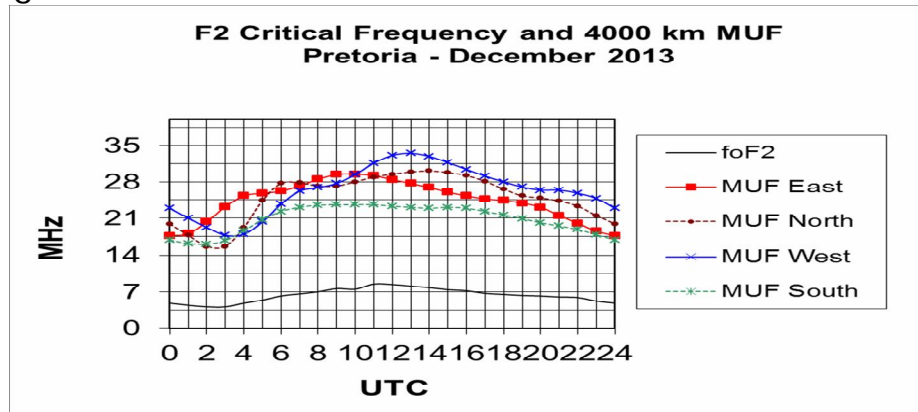
(see also our website propagation tab)

DX Operating

The graph shows the 4000 km maximum useable frequency (MUF) to the East, North, West and South from Pretoria for the first hop using the F2 layer.

Local Operating

The F2 critical frequency (foF2) is the maximum frequency that will reflect when you transmit straight up. E-layer reflection is not shown.



As incredible as it sounds, men and women took baths only twice a year (May and October) Women kept their hair covered, while men shaved their heads (because of lice and bugs) and wore wigs. Wealthy men could afford good wigs made from wool. They couldn't wash the wigs, so to clean them they would carve out a loaf of bread, put the wig in the shell, and bake it for 30 minutes. The heat would make the wig big and fluffy, hence the term 'big wig.' Today we often use the term 'here comes the Big Wig' because someone appears to be or is powerful and wealthy.

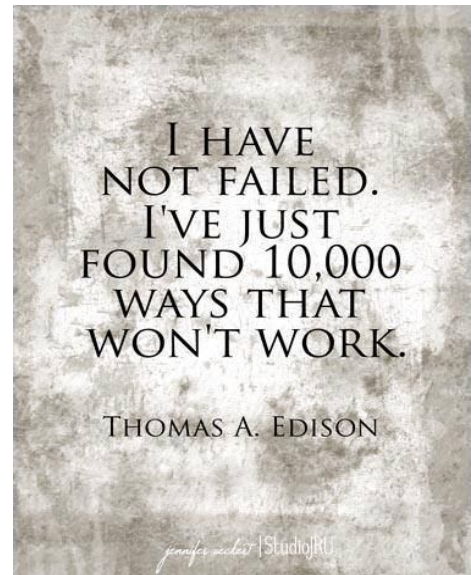
In the late 1700's, many houses consisted of a large room with only one chair. Commonly, a long wide board folded down from the wall, and was used for dining. The 'head of the household' always sat in the chair while everyone else ate sitting on the floor. Occasionally a guest, who was usually a man, would be invited to sit in this chair during a meal. To sit in the chair meant you were important and in charge. They called the one sitting in the chair the 'chair man.' Today in business, we use the expression or title 'Chairman' or 'Chairman of the Board..'

Personal hygiene left much room for improvement. As a result, many women and men had developed acne scars by adulthood. The women would spread bee's wax over their facial skin to smooth out their complexions. When they were speaking to each other, if a woman began to stare at another woman's face she was told, 'mind your own bee's wax.' Should the woman smile, the wax would crack, hence the term 'crack a smile'. In addition, when they sat too close to the fire, the wax would melt . . . Therefore, the expression 'losing face.'

For those traffic standstills...



Never give up



Tainting the Family Tree

The Smith's were proud of their family tradition. Their ancestors had come to America on the Mayflower. They had included Senators and Wall Street wizards.

They decided to compile a family history, a legacy for their children and grandchildren. They hired a fine author. Only one problem arose - how to handle that great-uncle George, who was executed in the **electric chair**.

The author said he could handle the story tactfully.

The book appeared. It said "Great-uncle George occupied a chair of applied electronics at an important government institution, was attached to his position by the strongest of ties, and his death came as a great shock."