



March 2007 Issue #15

This newsletter is sent out to all who have called in on the AWA net and who have email facility, and those who have paid for mail envelopes, with the hopes that it will encourage you to call in again and help to keep the AWA net alive and well.

Should you not want to receive any further publications of this newsletter, drop me a note and I will take you off the mailing list. Should you prefer to receive a hard copy via snail mail, please send an SASE for the period you would like to receive these and I will process for you.

Happenings:

Don't forget the date for the AWA open day at Rand Airport, Saturday 21 April. We will be there from 08:30 and running the AWA station from the venue (hopefully).

Make a note in your diaries to come and join us at the Rand Airport should you want to. Any one looking for a lift, contact us and we will see if we can organize with someone who may be coming from your area. It's always cheaper if you can get someone to share petrol costs. Hopefully this year we will manage to get the flea market on the go too with lots of antique goodies to whet your interest. Should you want a table to display your wares, please let me know well ahead of time and we can certainly see about making the flea market a success. I will keep reminding you via the newsletter.

AN OLD TIMER

An OLD TIMER is an amateur who was proud to be called a "Ham" and they didn't mean bacon. When an 807 was a valve, not an address. He is a person who was around before the invention of the "Pill" and the population explosion. Before TV, ANTIBIOTICS or even FRISBEES.

Before SUPERMARKETS and FROZEN FOODS, NYLONS, XEROX COPIERS, RADAR, CREDIT CARDS and BALL POINT PENS. For them a CHIP was a piece of wood, HARDWARE meant hard wear and SOFTWARE wasn't even a word. They were here before PANTYHOSE and DRIP DRY CLOTHES, before DISHWASHERS, FREEZERS or ELECTRIC BLANKETS. Before men wore LONG HAIR and EARRINGS and before women wore TUXEDO'S. Before the 40HOUR WEEK and the MINIMUM WAGE. They got married, then lived together, how quaint ! CLOSETS were for clothes, not for coming out of, BUNNIES were rabbits and BEETLES were not Volkswagens. Before GRNDMA MOSES and FRANK SINATRA and cup sizing for BRAS.

Girls wore PETER PAN collars and thought CLEAVAGE was something that Butchers did. Here before BATMAN, RUDOLPH THE RED NOSED REINDEER and even SNOOPY. What about VITAMIN PILLS, DISPOSABLE NAPPIES, and the JEEP. Before PIZZA'S and INSTANT COFFEE and COLONEL SAUNDERS KENTUCKY FRIED CHICKEN. Perhaps even before MAC DONALDS. They thought FAST FOOD was something you ate during Lent. Before BOY GEORGE and MADONNA. What about FM RADIO, TAPE RECORDERS, ELECTRIC TYPEWRITERS and WORD PROCESSORS. Even DISO dancing.

In their days GRASS was for mowing, COKE was a refreshing drink and POT was something which you cooked in. They are the OLD TIMERS, the RAG CHEWERS. A hardy bunch when you think of what they have been through and the changes they have had to cope with. Don't tell them they are set in their ways, inflexible, irritable or impossible, they have had to change more than any other generation in history.

ZS0AWA/CW.



The CW net continues along with very little activity over the past month probably due to band conditions. Heard on frequency this last month has been Barrie ZS6AJY and Ian ZS5IAN while John ZS6JBJ is away on leave. Join us on Saturday afternoons at 14:00 SAST. The net is run at 12 wpm and so should meet the needs of all interested in CW. 7020 is the frequency.

I often hear of hams out there that are trying their hand at CW again, so if you know of anyone wanting to work CW, then tell them about the net and let them come up and join us.

AM Net:

Please come up and join us if you have the time and the inclination. 19:30 Wednesday evenings on 3615. Where only the brave hang out after dark. Conditions seem to be improving with good 5/9 plus signals overpowering the QRN these days.

The 05:30 net on a Saturday morning has been fairly well attended and we did not think that we would get the response that we have so far. Conditions are a lot better early in the morning, but one really has to drag your body out of bed to make it. It's only the "Old Timers" that have no problem at that time of day.

Should you happen to know of another AM net running, or come across one, let us know the times and frequencies that these happen so we can publicize them. I am sure there will be a few ardent listeners out there.

The Man Behind the Symbol

NO7 Georg Simon Ohm

by Morgan Bradshaw

THIS month we move to Germany to hear about the man who gave his name to the unit of resistance, Georg Simon Ohm, and his now famous law (Table 1).

The Ohm family lived in Erlangen, South Germany, with their two sons Georg, born March 16, 1789, and Martin. Ohm senior was in business in a modest way as a locksmith, his wife complimenting the family income by taking lodgers. It was one of these, a student from the protestant university, who was to influence the two boys in their early years.

It was expected that Georg being the eldest would take over the family business, but having been inspired by the student lodger to study he entered the local university. He was a competent pupil and a natural born teacher and, on completing his course, accepted in 1819, at the age of 30, the post of professor of mathematics at the Jesuits college in Cologne, whilst his brother took up a similar post in Berlin.

During this time Georg set his mind to many problems contained in mathematics, physics, and the new power, electricity. It was at Cologne he learnt how the "Flux of Heat" in a metal bar is directly proportional to the difference of temperature between its ends, and then influenced by the journals of Schweigger and Poggendorf the German physicists which had appeared in 1825, Ohm sought to discover what laws regulated the flow of electricity in a conductor.

His results were published in Berlin in 1827 in a pamphlet with the title *Die Galvanische Kette Mathematisch Bearbeitet* which roughly translated means *The Mathematical Works of the Galvanic Chain*. The theory Ohm proposed set out that the electric current in a conductor is directly proportional to the difference of potentials between its ends.

Photo: Radio Times Hulton Picture Library



Everyday Electronics, February 1986

Table 1: THE OHM (Ω)

The oldest and one of the most important electrical "laws" was formulated by Georg Ohm, and the practical unit of resistance, the Ohm, is named after him. This is used to measure the value of the resistor, the most commonly used of all electronic components.

Ohm's law illustrates that the resistance of a conductor is equal to the voltage across it divided by the current flowing through it. When the resistance is in Ohms

the voltage is in watts and the current in amps.

The Omega sign (Ω) used for the Ohm was suggested by Sir William Henry Preece, the British Electrical Engineer and Wireless Telegraphy pioneer, whilst lecturing to Indian telegraph service cadets at the Hartley College, Southampton in 1867.

In 1884, the Congress of Electricians which met in Paris made it internationally official.

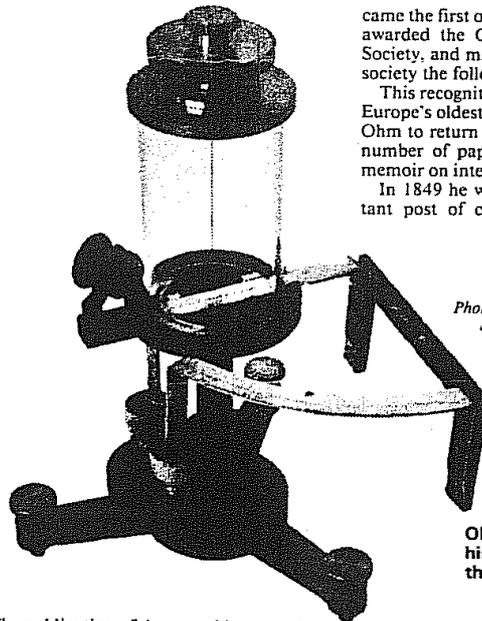


Photo: Courtesy Science Museum

came the first official recognition, Ohm was awarded the Copley medal of the Royal Society, and made a foreign member of the society the following year.

This recognition from Britain, and one of Europe's oldest scientific societies, inspired Ohm to return to his work. He published a number of papers on mathematics and a memoir on interference in uniaxial crystals.

In 1849 he was appointed to the important post of conservator at the physical

Ohm's apparatus used in his work with his law on the Galvanic circuit.

The publication of the pamphlet caused a major upset in German scientific circles, people said Ohm was mad, and his law absurd, he was even forced to resign his post at Cologne.

For six years he was an outcast doing very little scientific work, then in 1833 he obtained a post at Nuremberg polytechnic.

RECOGNITION

Gradually, however, the pamphlet began to get a wider circulation and his law was being quoted. Then, quite suddenly in 1841,

collection at Munich, and in 1852 professor of experimental physics in the high school at Munich, carrying out some important work on interference phenomena in uniaxial crystals. Ohm also started work on a text book of Physics which was published in 1854 just before he died of apoplexy brought on by overwork, on July 7.

Thus at 67 died the man who in the face of great opposition took the first steps towards the formulation of the laws of the electric current.

SSB Net:

40m has not been behaving too badly these last few weeks and there certainly seems to be a slight change in propagation. Div 6 stations are actually quite readable these days.

A reminder which was raised by Rod ZS5RK again, you don't have to be operating an antique to call in, but you need to have an interest in the old rigs. That is what we are all about.

We appeal to all of you, when calling in on 40m, should you not be able to hear the control station, try letting someone know who you can hear and you know can hear the control station. It's better than doubling over everybody.

Promotions:

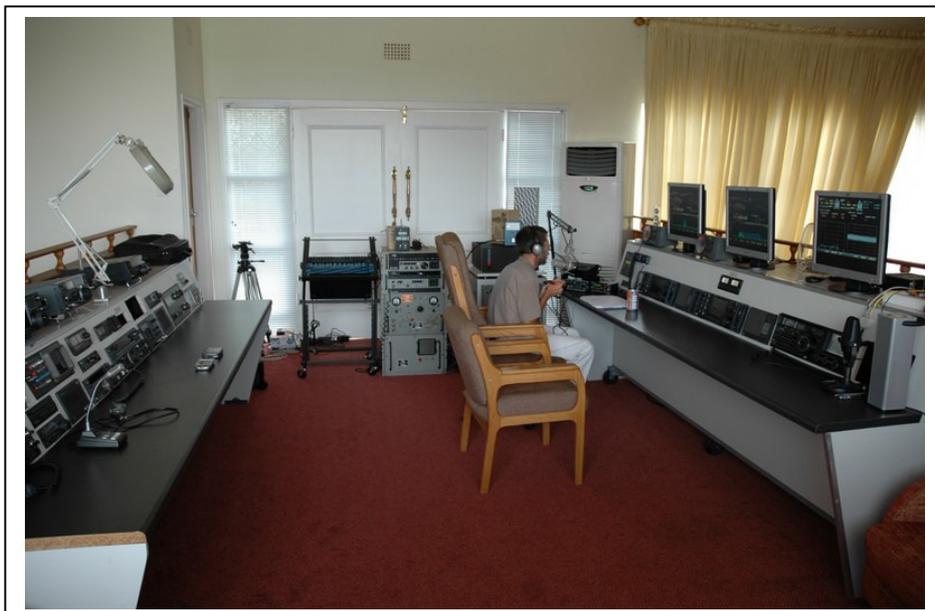
Restoration News:

We want to remind you again of the valves which have been collected. They are there for your use as a member of the AWA. We are not asking exorbitant prices for the valves, but want to encourage the restoration of the old rigs by making these valves available to anyone who needs them. There have been a few requests for valves and we have been able to help most of those requesting them.

All we ask is that you make a donation to the coffers of the AWA, which help for the costs of our annual license and any small sundry items that may creep in, and pay for the postage.

I have received from Om Pine ZS6GST, an article on restoring old valve rigs by Chris Parry G8JFJ. It is just over 600Kb in size and can be emailed with ease. Anyone interested in a copy of this article can drop me a note or let me know on the Saturday morning net, and I will get copies off to you. Rad ZS6RAD and myself have reviewed it and both think it will be of interest to the serious restorer. The stipulation from the author is that it can be copied and distributed as much as we want, but no one should be charged for it.

Shack News:



Gary ZS6YI sent us this picture of his shack layout. Looks like you could control the launch of space craft from there. Very nice Gary.

Swap Column:

Any swaps or items for sale in the antique line ? Let me have the details and we will advertise it here.

There is an online swap shop on the website of the Highway Amateur Radio Club for ALL amateurs and interested parties to use - it is not restricted to members only. We have been invited to make use of this facility too. Should you want to, use the link to the HARC at the end of the page to take you to their website.

If you would like to forward this newsletter to any other interested parties, please feel free to do so. Print it out and put in on your club notice board, or give it to someone interested in valve radios. If you know of any who report in on the net but don't have email, print it out and give them a copy.

Net days and times:

Saturday 05:30 AM Net – frequency 3615Mhz
Saturday 08:30 SSB net - frequency – 7070Mhz
Saturday 14:00 CW net – frequency 7020Mhz
Wednesday 19:30 AM net – frequency 3615 (-5 for QRM)

This, and past copies of the AWA Newsletter can be downloaded from <http://members.harc.org.za/newsletters/AWA/>. Our thanks to the Highway Amateur Radio Club in Durban (<http://www.harc.org.za>) for providing this service to our members and other interested parties.

Thanks for the bandwidth.

DE ZS6ADY FOR ZS0AWA