Now its the Feb

We are already into the second month of the year and before going to far forward, the new year almost got off to a flying start, due to a Microsoft Flight Simulator I had for xmas. 1am on new years morning there I was following page after page of instructions and eventually I got a plane on the runway. Nothing would operate, the programme had crashed! I found out later that this was due to insufficient memory, perhaps I should of carried on with my SSTV project? How the time has passed the new year celebrations seem such along way away, history will never be forgotten. At least the nights are now getting shorter and spring is on its way.

I am not aware of any radio rallies this month, speedway enthusiasts can visit Telford Ice Rink on 13th for "ice skating" The next rally is Wythall on 12th March.
Wonder if anybody saw the special 1000th edition of This is your Life, with a couple of radio amateurs making an appearance, The late King Hussian of Jordon and G2DQU Brian Rix. It is currently the middle of Jan while I am writing this report and not had the time to go on the air. When I was made redundant two years ago I thought I would have plenty of time to apply for jobs, do jobs and around the house and go on the air. I don't know where the time goes!

What a start to the year 2000, Oils by Dr Derricott, G4VPE. I was involved with oils at contract switchgear when it was used as a delay, to the piston operation in magnetic overloads. The oil used was Duckhams HY2 operating at 70°C. Our section was one of the few in the factory that was allowed an electric fire, came in very useful in the winter to test the high operating conditions. When an electric motor is powered on the load it draws is considerable higher than the normal running load, the piston travelling through the oil was the delay. Some times anti viscostatic oil was used, unaffected by room temperature, but only used if specified by the customer as very expensive! It all only seems like yesterday. So many thanks Bob for an excellent talk.

Finally I will miss not having Gordon *(good job I typed it the write way round –ed!)* as Hon Sec. We have got on well together, I hope it will continue with who ever takes over the job as Sec, all the best Gordon, a break has to come sometime!

73 Malcolm

ver lasting power

Methanol-powered battery could power a mobile phone for over a month without recharging.
Motorola has developed a miniature fuel cell for powering consumer electronic devices that is ten times more powerful than traditional batteries.
The fuel cells measure just one inch square and less than an inch in thickness and are powered by liquid methanol. Scientists at Motorola Labs claimed that the cells could power a mobile phone for over a month without recharging.
"New features for portable electronic equipment requires more power and longer operating life," stated Bill Ooms, director of Motorola's material, device and energy research. "These cells have an amazing ability to produce energy for longer periods of time and weighing less than conventional batteries."
The reservoir of methanol in the fuel cells combines with oxygen in the air to produce electricity. To avoid the problems of the low voltage output of fuel cells, Motorola has come up with circuitry that converts it to a higher voltage capable of powering portable electronic devices.
Motorola believes that the methanol needed to run consumer devices would be packaged in small cartridges to replace traditional batteries. It has formed a research team to develop the new technology and push it into the market.

Whats happened to CW

Tom 2E1HLT has agreed, provisionally, to stand for election as Hon. Sec. of the Society at the forthcoming AGM. Tom is studying for his "A" level examinations at King Edwards High School, Stourbridge and is an Old Swinford Hospital Old Boy. Should he be elected then I have agreed to continue to help with the production and distribution of the newsletter and liaise with the School and the City and Guilds with regards to the NRAE courses and examinations, if members agree.

I will not be standing for election to any post or on to the committee but am willing to carry on with some of the tasks in an ex officio capacity as mentioned above.

NOTICE OF AGM

It has been decided to publish the notice of the AGM in this issue to ensure that all members receive a copy in good time. Please read the minutes and remember to bring them with you to the AGM. **(March 20th @ 8pm prompt)**

THE MAIN MEETING OF THE MONTH was a talk on the lubrication of car engines by Dr. Bob G4VPE.

Absolutely nothing to do with Radio but fascinating never the less. With the aid of an OHP and some excellent sketches, Bob started with the basic causes of friction between sliding surfaces and described how even mirror finished surfaces had "high spots". Any pressure applied to these surfaces would be concentrated on the high spots and would be sufficient to cause them to weld together. Eventually the weld would break off leaving a greater contact area between the surfaces. When the contact area became so great that the welded bits could no longer be dissipated then a "seizure" would occur.

Bob described the different types of lubricants including mineral and synthetic oils, graphite and molybdenum sulphide and their applications under varying working temperatures. He explained the use of cast iron liners and piston rings, all alloy cylinders, valves and valve seats (and the use of lead replacement petrol), big end bearings and the need for "running in" to bring the graphite to the surface in the older type "White Metal" shells.

He then went on to turbo chargers and the causes of "lag" which had been overcome to a certain extent by the changeover from metal to ceramic components. He also pointed out the problems of lubrication due to the very high working temperatures of the exhaust gasses used to drive the turbo, adding that, in his opinion, turbos were on the way out in favour of larger capacity fuel efficient engines running at lower RPM and that the only research on turbo chargers now being carried out is in Japan.

A really interesting and informative talk, as confirmed by the many questions afterwards. Bob's next talk will be "Vynil versus CDs" or maybe "The 13 amp Plug"

Many thanks Bob.

MORSE TESTS IN THE USA

From the ARRL comes news that the American licensing authority, the FCC, has published its plans for restructuring US amateur radio licensing, ***The three Morse tests at 5, 13 and 20 words per minute have been reduced to just one, at 5 words per minute.***

Justifying this, the FCC's report says: "***We believe that an individual's ability to***

demonstrate increased Morse code proficiency is not necessarily indicative of that individual's ability to contribute to the advancement of the radio art".

The FCC said its actions would "***eliminate unnecessary requirements that may discourage or limit individuals from becoming trained operators, technicians and electronics experts".*** *(I agree)*

Heard that **Don G0ESR** had a nasty fall recently whilst visiting a neighbour. Tripped and banged his head. Needed a hospital check up? Hope you are well on the road to recovery Don.

TDOTA 19th. /20th/February. Callsign GB0SGA
SES for the Guides. Organised by Richard M1DBC.
Working party on the Friday afternoon at the Alderman Tye centre, South road. Your help would be appreciated.

Hon Pres. Eric JWJ turned up at the club with a trunk full of obsolete PMRs. Dunno if they can be converted but least the guys managed to salvage three PSUs for the shack

73 de Gordon

ZULU TIME

UK wants Greenwich as Internet timekeeper

Greenwich Electronic Time (GeT) to be launched on New Year's Day.

Britain will bid to make the Royal Observatory at Greenwich the Internet's official timekeeper with the launch of Greenwich Electronic Time, or GeT, on New Year's Day, the Times newspaper reported on Tuesday.

The project, to be launched by Prime Minister Tony Blair, would provide companies with special software to ensure their computer clocks were accurate with GeT, the newspaper said.

A spokeswoman for Blair's office told Reuters: "I have not been briefed on the report and cannot confirm it but the Prime Minister wants Britain to be the world leader in the electronic revolution, just as it was in the industrial revolution."

Greenwich Mean Time, also known as Zulu time, has been the standard measure of world time since 1884.

The Times said GeT was designed to act as an international standard for all electronic mail and business transactions.

It quoted Nick Raynsford, a member of parliament for Blair's ruling Labour Party who represents the Greenwich area, as saying:

"The world tells time from Greenwich and it is entirely logical that as technology evolves that the measurement of time should be from the same place."

Blair has often preached the virtues of the Internet to Britons. He has pledged that by 2002 a quarter of all transactions between citizens and the government would be electronic.

Anyone seen this Man? please call 08993 676544

REWARD for safe return of dog!

The tale of a dinosaur ...

PART I by David G3PLE

I remember my introduction to the construction of radio very well indeed. In about 1949 my father G3HGI (known as Dai on air and who later served as both Chairman and President of StARS) took me to a shop in Penn Road, Wolverhampton, an emporium that, to me, seemed like Aladdin's Cave.

Our purchases included an old army compass box, sheets of clear Perspex, capacitors and coils, crystal with cats whisker and a coil of wire! Not to forget the pair of headphones with the khaki head band.

Over a few afternoons all these components were assembled and the end product was a battery-operated crystal set, all neatly assembled in the box with knobs on the top and one was able to see all the bits. The wire went from the set to my bedroom window and thence to the garden fence.

I spent so many hours listening to Radio Luxembourg that the set was taken away for a while. The beauty of headphones was that no sound could be heard by others, but the problem was that the lights had to go on in order to adjust the cat's whisker. Later the crystal was replaced with diodes and tuned circuits

I continued my interest in radio at school when I joined the Signals Section of the Cadet Force (what is worse - carrying a rifle or an 18 set?). This is where I first learned the Morse code. I recall going on camp to Sennybridge in the Brecon Beacons; we were in the observation area of the firing range but the wireless failed to operate. I noticed that two valves were not lit and changed one of them - the set worked and I was given a Lance Corporal stripe!

StARS had a great influence on my decision to take up radio as a profession. In the late 1950's the Scouts World Jamboree took place in Sutton Park, Birmingham. StARS were invited to participate in the first Jamboree on the Air. I remember attending and spending a day in a smoke filled tent - it seems that all radio hams smoked in those days. Into the 1960's StARS was one of the leading contest radio clubs in the country, winning NFD in 1962 & 3. I recall a field in a farm between Kinver and the Sheepwalks, with Alex Higgins G8GF, Tom Cashmore G3BMY and others operating for the 24 hours. I did a bit of logging when I was on leave in 1963, and I was very much in awe of Tom's ability on the key. Others recalled include John Hogg GW2OG, Ivan Eamus G3KLT and Jake G3AAQ.

On leaving school I had insufficient exam passes to take me to university. Why a lad who had spent his life in Malvern and Kingswinford and who had never been on a ship larger than a ferry should want to go to sea is beyond me. I wanted to be involved with radio and go to sea and so enrolled at the Wireless College, Colwyn Bay.

The first lessons were to be the Morse code. A large room with wooden tables with two wires running down the sides, and wooden benches. Five students in a row, the one at the end sending for ten minutes then each in rotation. This for two and a half-hours a day. On Fridays there was a test and progress was carefully monitored. Within months one is moderately proficient at 20 wpm plain language and 15 wpm code.

It is worth pausing here to mention that the morse instructor was "Tubby" Nelson a

partner on the College board. He could read morse by watching your wrist move! If a student sent three four two dots and a dash (flows quite nicely) and Tubby was watching, he would get a ruler across the back of his hand. Today I am a member of POLDHU ARC and the president is George Banner G3AHX, who sailed with spark transmitters in the 1930's, Tubby Nelson also taught George morse, thirty years before me. It is said we have very similar "fists".

The beauty of this method of teaching morse is that everyone has to send to a standard and your colleagues will soon tell you if your sending is no good. Secondly we sent articles selected from the newspaper and this was good practice in case you ended up on passenger ships where you would need to receive news, football and stock exchange reports for the benefit of the passengers. While there were some bad operators at sea, I must say that I never heard bad morse from anyone who attended at Colwyn Bay.

The aim was 20wpm plain language and 15 wpm code for a Second Class Postmaster General's Certificate and 25/20 for a First Class Certificate. In fact by the end of the course, we had contests to see who could send fast accurate morse on a straight key. 35 wpm was not unknown.

The remainder of the day would comprise lectures and practical work. These were to prepare us for the required examinations. The theory side had two exams: -
Technical Electricity.
Example question: Explain how the anode current of a triode valve is controlled by the potential of the grid with respect to the cathode. Define the terms Amplification Factor, Mutual Conductance and A.C. Resistance.
Radiocommunications.
Example question: Upon what factors does the efficiency of an aerial depend? Describe a ships main aerial and explain the maintenance necessary to ensure its efficiency as a radiator. (more on ships aerials later in this article).

Practical exams included the morse test, adjustment, maintenance and practical working of equipment used on board ship, a very elementary test "sending and receiving spoken messages by telephone" and an oral test on knowledge of regulations relating to the safety of life at sea.

The College had a radio room with an early Marconi Oceanspan transmitter, an Electra receiver and a Lodestone direction finder. One soon learned to use ones eyes first (is a fuse missing? Are the valve heaters alight?) then use the meter. We were taught how to use a soldering iron. There was also the all important battery room.

.Back in the 1950's conscription was still with us. If one attended Wireless College and then spent six years at sea as a Radio Officer, one could be excused call up As can be seen this was not a decision one would take unless one had the real desire to follow a career in radio. The National Service rules were changed shortly before I was due for call up, but it made no difference to me anyway.

It was often said that if I did not go to sea I would be a damn good snooker player! Joe and Fred Davis had little to worry about and, in any case, the rewards for playing snooker were trivial by today's standards. I passed my First Class PMG Certificate and applied to New Zealand Shipping Company for a job and was accepted

I joined the m.v. Northumberland as Second Radio Officer in the Royal Albert Docks in London. One had to spend at least six months under the guidance of an experienced R/O and I was most fortunate to meet Brian Cullimore who was to teach me the right way of doing things. (I understand that some first timers received no help at all from their first Chief).

I spent 20 months on the Northumberland and we were chartered to the MANZ Line run (Montreal Australia New Zealand). Crossing the Pacific three times each way. I found that the Radio Officer also has other duties. I was

the ships librarian and also the projectionist. Imagine a balmy night on the Pacific Ocean with a screen about 20ft by 20ft rigged over a hatch and film being shown on a gently moving ship. One did not dare let it break down or take too long changing the reels!

On board ship the Radio Room works to GMT in various time zones round the world to ensure that ships are keeping watch at the same time. Ship's time would be very different of course and would be adjusted, back or forward, by up to twenty minutes a day depending on speed and which direction you were travelling. One would gain or lose a day when crossing the date line. But the radio log remained on GMT. If ever you see a photograph of an R/O with two watches then you will know that one was GMT and the other ship's time.

The two of us worked 2 on, 6 off, 6 on and 10 off. This inevitably meant that I, as the junior, would have the dead of night (midnight to 6am ships time) watch. This could be very interesting from a radio point of view. When I was at sea we operated under the Commonwealth Area Scheme. This enabled British registered ships to QSP (relay) messages via stations in Canada, New Zealand, Australia, Hong Kong, Singapore, India and South Africa depending on the area you were in. This made life very easy as the Oceanspan only had 100 watts output. However it was a great achievement to contact Portishead Radio direct when crossing the date line! This on 12 or 8 Mhz. I accept that the traffic was less in those days, but I was working into GKG (Portishead) at its busiest time and from the greatest possible distance, which was quite an achievement. The other pleasure was to contact Auckland Radio ZLD on 500Kc/s from over 2000 miles away.

More next Month!

Stuart G7KKC has found a very good home page for your internet explorer

www.search.soton.ac.uk

a number of search engines on one page, with no adverts!

Dr Bob now joins us on the world of email at:-

robert@drderricott.freeserve.co.uk

WANTED
for the shack

coat hooks for the back of the shack door

Pair of computer speakers for use with the shack PC.

[now with Pentium ™ Overdrive Processor and CD ROM (courtesy of Stuart G7KKC)
VGA monitor (courtesy of Festival Computing)
plus soundcard (surplus sale!)
The machine now runs Windows 95™, and has a range of useful radio and non

Ideas for talks, on Radio and non-related (mainly technical) subjects.

plesae pass on thoughts to Wayne G7LLT

email wayne:-