

# only a week or two to go!

Here at last December, but looking back over the past 12 months from my point of view it has not been too bad although there as been sadness, which affected myself on Nov 17th when my Mother passed away after three years in Stretton Nursing Home near Hereford. There was also member John Pearson G3SNY & Malcolm Sparrow G3KQJ (although not a member of Stars, has visited the club from time to time over the years, until untill his passing in Sept) I also read in Sat 23thd Nov Express & Star that Jim Challenor G4EIB became a silent key on 16th Nov. I have known Jim over the years when he was employed with Wolverhampton Corporation Transport at the bus depot in the town (as it was then) and when he was involved with the Dudley Amateur Radio Club. His funeral was on Tues 26th Nov at Gornal Crem. I was unable to attend because I was in Leominster for My Mothers Burial.

On a more lighter side the highlight of the year was the visit to Bletchley Park, I hope a another visit to another venue can be arranged for 2002, like Madley near Hereford satellite station or Jodrell Bank telescope in Cheshire, just ideas. While on the subject of events I would like to give a mention of two in Dec. The Xmas Organ Concert at Shrewsburys Buttermarket which this year features the flamboyant 82 year old ex Blackpool Tower organist Dr Arnold Loxam and on Sun.16th Dec. at 3pm. Also on Tues 18th the 10th Anniversary of the Stourbridge Branch of the George Formby Society finally not forgetting the Santa Specials on the Severn Valley Railway as well as the winter time table, thats the end of My commercials! Its a fact no one knows who they are going to come into contact with, such was the case a short while ago while Glenys & myself were at the Severn Valley a fellow came into the workshop who I had seen at radio rallies. I found from him he is a member of the South

Birmingham Radio Society & he as been coming down to work at Bewdley carriage works as a volunteer for over 10 years. such was the same at a recent trade exhibition were Ray Withers G3KZH had a stand and at another exhibition Bill G3TQM who as given a talk at the club about Raynet. If asked he could give a talk on repeaters which he is also involved with.

On sat 3thd Nov. I attended the first ever Computer Fair to be held in Dudley which was at the college on the Broadway & again I came into contact with Barry G4XMT & our editor James & Malcolm G8JTL. there will be another fair on Sat 1st Dec. and I came back on the bus with 82 year old Joe from Gornal who's callsign I cant remember, but he is active on 20 15 & 10 & satellites, Its a small world!

Since I have completed the re wire I have re connected the FRdx 400 receiver and I have been doing some listening on the 15m band & getting good results Indonesia and around that area, from off an inverted V in the loft space. The last time I used was when the now late Bill G4DFE was in Australia 13 years ago so it made a break to brush the cobwebs off the RX & know it works after all the years. Sat 24th Nov. just as a anticlimax of the week events there was a pre arranged visit to Blackpool for the day to the weekend meeting of the George Formby Society. I had the 2m hand held tx/rx hoping to have a few contacts there & back I didn't have any, but at the meeting I came into contact with fellow G F S member Derek G6WMU who visited the Stourbridge branch early in the year. He operates mostly via the Leicester repeater. I have finally started to use the Compaq desktop pro 4000 computer that I purchased at the Leicester Rally and even though slow by present day standards with its 266 cpu & 64 dimm ram, I its quicker than the Pentium 75 and I still have the one I made up with the asus vx97 board with 233 cpu & 32mb edo ram.

Well thats all for 2001 to You All have a good Xmas & a Happy & Peaceful New Year.

Roving Reporter Malcolm G8BOP

# Radiocommunications Agency Roadshows

How many readers have been to one of these roadshows? I have now been to two, last years at the NEC and this year at the Belfry. The roadshow is called "Joining In" and is free to attend and open to all interested in the Radio Spectrum, from broadcast, mobile phone, PMR, amateur for example. These events are advertised on [www.joiningin.org.uk](http://www.joiningin.org.uk) and also on the RA Website ([www.radio.gov.uk](http://www.radio.gov.uk)) and once registered you get automatic notice of future events. They held 9 this year up and down the country and are a half day event starting about 10am for registration and coffee with the presentation starting at 10.30 going on to 1pm with another break for coffee during that time. There is time for questions and answers and then it concludes with a buffet lunch. The RA staff can be approached during these times if anyone wishes to raise matters with them.

One item that was mentioned was the economic benefit study that valued amateur radio at £81 a year per licence, the good news is that there are no plans to increase the current fee from £15.

The RA team on the "top table" giving the presentation were Barry Maxwell - Director of Customer Services as Chairman (with some good jokes!), David Hendon - Chief Executive, Julian Mackenney - Head of Spectrum Strategy Unit and Hazel Canter - Director of Spectrum Services. There were also some displays around for information and one very useful demonstration was that of the Mobile Sitefinder facility on the RA Website, which also contains the Stewart report. This enables anyone to look at all the mobile phone sites by entering either a Post Code, Street name or Town/City.

The information shown for each site gives the mobile phone company, antenna height, fre-

quency band, radiated power and licensed power. For example, whose antenna are those on the blocks of flats off Bath Road of the Ring Road. Answers on the site, there are 3 operators, one with two systems giving a total of four mobile systems. One interesting point is that from various sites I have checked in this locality and some down south, is that the maximum power shown is 32 dBW (1,585W) with most running power levels in the 20's dBW (around 200W or more).

Next year I look forward to seeing some Stars members in attendance as the only other local amateur that I met this year was Robert Fisher, G3PWJ who is also in the PMR business.

Richard, G0EWH



Remember the Annual Constructors competition is only months away in February.

# committee meeting

## Report of committee meeting held on 29<sup>th</sup> October 2001.

The meeting opened on the somber note from President Wayne that he had been forced to cancel the Presidents Dinner due to lack of support from members. For a successful evening approximately 25 / 30 persons would need to attend, but only 15 had put their names down or contacted Wayne with a booking. His comments will no doubt be found elsewhere in these pages.

Moving to more progressive matters the meeting discussed the progress of AO-40 satellite project which is intended to encourage new members from the School while providing additional interest for existing members. Equipment in connection with the aerial construction has been purchased by Alan G6UYJ on behalf of the club on his recent visit to America. Following earlier discussions on the purchase of a new HF transceiver the FT748 is now under consideration as this would fulfill the HF requirement and also Satellite function. Technical details have yet to be confirmed together with total cost. However the sale of the R107 military transceiver and the club 707 rig would help to offset some of the costs. Anyone wishing to help with the project or knows of a military enthusiast who wishes to make an offer for the R107 (prior to our advertising) based on a minimum offer of 200.00. please contact either the Editor or Hon. Sec.

After the recent upheaval in the licensing regulations the full meaning of some of the proposals is still not fully clear. In particular the contents of courses to be run for aspiring members and in consequence the club has delayed starting courses until the new year. Unfortunately James G7HEZ who has been a stalwart of the teaching of the earlier Novice courses has indicated that due to pressure of work he may not be available for teaching

this year. Anyone with the necessary qualifications and willing to help would be most welcome.

As suggested in the previous report the internet gateway has now been reinstated on 145.337.5 MHz and anyone wishing the "gain without the pain" may wish to use this route. There being no further committee meetings scheduled until the New Year (and consequently no further reports in Starlight until then) the committee would like to take this opportunity to wish all members the compliments of the season and a peaceful new year.

**Having now obtained the use of the room adjacent to the "shack" on a permanent basis, tea / coffee making facilities together with biscuits are now available at no charge to members (and guests) at Monday evening On Air club meetings.**

# The highly unofficial

11 years ago, April 1st 1990, rfc 1149 was written. This rfc specifies a protocol for IP over avian carriers, CPIP (carrier pigeon internet protocol). In 11 years, noone has bothered to implement this important protocol stack. But happily, we don't need to wait any longer! BLUG in cooperation with Vesta Brevdueforening has given you rfc 1149 support for Linux.

## The informal report from the RFC 1149 event.

Finally, rfc 1149 is implemented! On saturday 28th of april 2001, the worlds very first rfc 1149 network was tested. The weather was quite nice, despite being in one of the most rainy places in Norway.

The ping was started approximately at 12:15. We decided to do a 7 1/2 minute interval between the ping packets, that would leave a couple of packets unanswered, given ideal situations. Things didn't happen quite that way, though. It happened that the neighbour had a flock of pigeons flying. Our pigeons didn't want to go home at once, they wanted to fly with the other pigeons instead. And who can blame them, when the sun was finally shining after a couple of days?

But the instincts won at last, and after about an hour of fun, we could see a couple of pigeons breaking out of the flock and heading in the right direction. There was much cheering. Apparantly, it WAS our pigeons, because not long after, we got a report from the other site that the first pigeon was sitting on the roof.

And finally, the first return pigeon arrived. The packet was carefully removed from the leg, unrolled and scanned. After manually verifying the OCR and correcting the few mistakes (gocr is quite good, but it *did* have

problems recognizing F's in my end), the packet was accepted as a valid packet, and there was much cheering about what we saw:

```
64 bytes from 10.0.3.1: icmp_seq=0 ttl=255
time=6165731.1 ms
```

The remaining pigeons arrived simultaneously. Two of them didn't have any IP packets, though, it turned out that things had been so busy at the other end that they forgot to shut the pigeon cage, and the remaining two pigeons escaped without an IP packet. There was only six return pigeons, thus we got four ping replys, with ping times varying from 3211 to 6389 seconds. I guess this is a new record for ping times...

The implementation was declared a success. Now, we're waiting for someone to write other implementations, so that we can do interoperability tests, and maybe we finally can get the RFC into the standards track...

Network Working Group D. Waitzman  
Request for Comments: 1149 BBN STC 1 April 1990  
A Standard for the Transmission of IP Datagrams on Avian Carriers  
Status of this Memo  
This memo describes an experimental method for the encapsulation of IP datagrams in avian carriers. This specification is primarily useful in Metropolitan Area Networks. This is an experimental, not recommended standard. Distribution of this memo is unlimited.  
Overview and Rational  
Avian carriers can provide high delay, low throughput, and low altitude service. The connection topology is limited to a single point-to-point path for each carrier, used with standard carriers, but many carriers can be used without significant interference with each other, outside of early spring. This is because of the 3D ether space available to the carriers, in contrast to the 1D ether used by IEEE802.3. The carriers have an intrinsic collision avoid-

ance system, which increases availability. Unlike some network technologies, such as packet radio, communication is not limited to line-of-sight distance. Connection oriented service is available in some cities, usually based upon a central hub topology. Frame Format The IP datagram is printed, on a small scroll of paper, in hexadecimal, with each octet separated by whitestuff and blackstuff. The scroll of paper is wrapped around one leg of the avian carrier. A band of duct tape is used to secure the datagram's edges. The bandwidth is limited to the leg length. The MTU is variable, and paradoxically, generally increases with increased carrier age. A typical MTU is 256 milligrams. Some datagram padding may be needed. Upon receipt, the duct tape is removed and the paper copy of the datagram is optically scanned into an electronically transmittable form. Discussion Multiple types of service can be provided with a prioritized pecking order. An additional property is built-in worm detection and eradication. Because IP only guarantees best effort delivery, loss of a carrier can be tolerated. With time, the carriers are self-regenerating. While broadcasting is not specified, storms can cause data loss. There is persistent delivery retry, until the carrier drops. Audit trails are automatically generated, and can often be found on logs and cable trays.

Security Considerations Security is not generally a problem in normal operation, but special measures must be taken (such as data encryption) when avian carriers are used in a tactical environment. Author's Address David Waitzman BBN Systems and Technologies Corporation BBN Labs Division 10 Moulton Street Cambridge, MA 02238 Phone: (617) 873-4323 EMail: [dwaitzman@BBN.COM](mailto:dwaitzman@BBN.COM)

Further information and pictures can be found at

<http://blug.linux.no/rfc1149/>

## What is the Morse Assessment?

### Why do we need the Morse Assessment?

The Morse Assessment will satisfy the current ITU requirements in that, candidates will send and receive the Morse Code.

### What do I need to take to the Morse Assessment

Candidates will be required to bring with them, their Licence Validation Document and another form of identification that features their signature.

### What's Involved in the assessment?

Firstly, please note that this is not a test, it is a short course, which will last about 30 minutes and is lead by a Morse Tutor.

The assessment is complete when a candidate can successfully decode a short piece of Morse code into text and successfully send a short piece of text in Morse.

There is no speed requirement and the use of information sheets to help with decoding and coding will be provided.

The receiving assessment will involve the tutor sending by hand a text in Morse code; this will take the form of a contact between two amateurs and will consist of 20 to 30 characters. Candidates may copy this down as either letters or dots and dashes and if required use the decoding sheet to recover the message sent by the tutor.

The sending assessment will require candidates to send a pre-prepared text of the same format and length as for the receiving assessment. The candidate will be permitted to make preparations as required, for this assessment. A copy of the Morse alphabet will be provided.

### What happens next?

On successful completion of this assessment you will be issued with a Foundation Licence Course Completion Slip, which you will require in order to apply for your Foundation Licence.

