



RAY ~ Link

Issue Thirty Five
February 2000

The Regular Newsletter of The Radio Amateurs' Emergency Network

RAY~Link is published for the benefit of all members of the Network. It is posted to all controllers who are requested to assist in ensuring a wide membership circulation.

(This edition has been sent to each Household)

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Report on 1999 Annual General Meeting

The 1999 AGM was held in Glasgow, in the Council Chamber which will house the Scottish Parliament when it temporarily moves to Glasgow in May this year. Thanks are due to the Lord Provost and Baillie MacMaster as the City Council hosted a civic reception for the delegates, and provided the accommodation free of charge. Our visiting speakers from the Scottish Executive, the WRVS, the Church of Scotland and Strathclyde Police were excellent, each helping to make the day's programme varied and interesting. Jim Andrews also gave an informative presentation on the IT work he is doing for the Network. An application form for RAYNET e-mail addresses appears elsewhere in this issue.

The Chairman's speech is re-produced here in full for the benefit of those who could not manage to travel to Glasgow.

"We have had an excellent set of speakers today. I hope that you enjoyed the contribution which they all made. The Rev. Neil Galbraith reminds me of my own minister. One Sunday morning he was getting ready for Church, and suddenly decided that he did not want to go, and decided that he would rather go and play golf. At 9:30 am he phoned the Church Officer and said that he was not feeling well, and asked if he could find one of the Elders to take the service. He then jumped into his car, and headed for Eastwood Golf Course. It was a lovely morning, and by 10:00 am he was driving off from the 1st tee. The ball went straight down the middle, was on the green in 2 and a short putt gave the minister a birdie three for the first hole.

St. Peter who was looking down from above, shook his head and said to God, "This man must be punished!" God agreed, and said he would think of something suitable. Meanwhile the minister lined up at the second tee, drove off, and got a hole in one. St. Peter looked at God, and said, "I thought you were going to punish him. You better think of something fast." God said, "I already have!" "What do you mean, asked St. Peter?" "Well", said God, "He can't tell anyone about his hole in one, can he?"

We, however, can tell people about the successes that the Radio Amateurs' Emergency Network has had this year. Our numbers are finally steady, and by next year, I think that we will be able to report a modest increase in the membership. Over two thirds of

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our members are now in the Personal Accident insurance scheme, and again, this figure is increasing. At just over a pound per member per year, the scheme is really good value.

Jim, G1HUL, has told you about our e-mail address scheme this afternoon, and I am sure that there will be a large uptake within the first few weeks. It really makes sense for the membership, and will make the committee's job easier too.

Last year I said that I was much happier with our relationship with the RSGB. I hope that I did not speak too soon. We have a good friend in Tom Reilly, the RSGB Emergency Liaison Officer but unfortunately the matters which we agree to pursue are not often followed up quickly enough, or acted upon at all, by the Radio Society of Great Britain.

I made a presentation to RSGB Council in January of this year, and am afraid that, although things looked bright at the time, nothing constructive appears to have developed following the meeting.

We worked with Ian Kyle, Tom Reilly and Simon Lloyd Hughes to put forward joint proposals for the update of BR68. A recent e-mail to Cathy Clark implies that we were wasting our time, and that the RSGB does not intend to pursue the matter in the near, or middle future.

An agreement to share stand space at rallies this year has all but fallen through, and it now looks as if the RSGB have been stringing us along to keep us sweet. The Committee of Management desperately wants to work with the RSGB, and has demonstrated this on many occasions. It takes, two, however, to make it work, and we do not appear to be getting the support which we seek. This lack of support is not across the board, and in fairness, I must point out that we have had considerable help from some RSGB office bearers. Although we are disappointed at the lack of progress this year, we will continue to try to strengthen the bond between our two organisations.

The COM responsibilities have generally remained unchanged this year, with Cathy Clark leading the Emergency Planning Team, David Hicks looking after our PR image, Martin Green looking at Finance and a business plan, Tom Hanratty maintaining responsibility for the Training Team, and Chris Hampson, leading the technical team. Jim Andrews has taken over responsibility for our IT portfolio.

Ray Webb has continued as our treasurer, but has now asked that he be excused from attending Beaconsfield owing to the enormous travelling commitment. This issue is not a problem and the Committee looks forward to working with Ray by phone and e-mail, or even by pigeon if that is how he wants to do it. He is an excellent treasurer, and one we certainly do not want to lose.

Brian Tindill continues to be our postman, and keeps the Committee of Management on the straight and narrow throughout the year. Nothing gets past Brian, and it is comforting to know that he is always checking our words and actions, ensuring that we keep on the right side of Company law, etc.

The 80m news team, led by Eric Walton, continues to work to provide the membership with the latest news items. Getting up early on a Sunday morning might be classed as a chore in some circles, but not by this team.

Brian Shearer has been running RAYNET Supplies for over a year now, and has managed to bring many prices down, despite the fact that UK prices are generally rising.

Geoff Griffiths still looks after the Diary dates, and, after I have prepared the weekly news script, distributes it to the duty and stand-by news readers.

One person who works away in the background, often I think colluding with Cathy Clark, is my wife, Katie. Without her support and understanding I would not be able to undertake the various duties of chairman so readily. Sometimes I bounce an idea off Katie, and get an almost nil response. This means "Think again" At other times, when I come up with what might be classed as an idea of doubtful merit, I get an enthusiastic "Go for it!". I don't always take her advice, but am almost always influenced by it.

One member who has helped me enormously is Mike McCreery, GM0ETC. Mike is the Secretary and Treasurer of the Renfrewshire RAYNET Group, and is the Desktop Publisher of RAY~Link. He is a corresponding member of the Technical Team, and was a leading player in the publication of the CAIRO interface drawings. Mike is almost always available for exercises, completing more callouts than the group's average. He looks after the Group's Caravan, and ends up towing it round the area, because nobody else wants to. Mike's skills in computers has been of enormous help to RAYNET, and he has volunteered to make logos etc. available to all who want them. He was also the leading light behind transceiver training videos which were made available to the membership. It is for all these reasons that the Committee of Management decided at its September meeting to award the RAYNET Trophy to Mike this year. Mike, will you please come forward:-"

Mike then came forward and received the RAYNET trophy from the chairman.

Many members stayed on for a dinner in the evening, and this was followed by a ceilidh, featuring Angus Milne from Tobermory, Isle of Mull, who came down to Glasgow specially for the evening. By all accounts, those who can remember tell us that they enjoyed themselves!



Baillie McMaster addresses the Reception



Brian Shearer with RAYNET Supplies



Durham Members have a chat



Members enjoying lunch



Speakers on the Rostrum - 1



Speakers on the Rostrum - 2



G1HUL demonstrates a computer application



GM0ETC with the RAYNET Trophy

Zone 4

**Martin Green
G4PMG**

Zone 4 has had an eventful year with much progress seen on a number of fronts.

There have been two Zonal co-ordination meetings which have seen an improvement in inter-county liaison. A number of County meetings have taken place and the Zone Co-ordinator attended a number of group AGMs. Several groups have adopted new constitutions during the year.

A number of exercises and planned events supporting CEPO's and Red Cross were cancelled because of the Military involvement Overseas after many hours of planning RAYNET involvement. However a large number of events took place from supporting Husky Dog Trials, to Mountain Walking Events, to Marathons, to Bike rides and much, much more!

The planning for the Millennium has exercised most groups' minds during the year and although the expectation is that RAYNET involvement will be low, if any, there has been the opportunity to install fixed aerials at a number of User Service sites within the Zone.

A number of callouts have been undertaken and have reinforced the usefulness of the RAYNET capability in supporting the Community. The professional approach given by RAYNET people is often commented on.

The Next Edition of RAY~Link

This edition of RAY~Link has been delayed owing to the lack of copy. There is, we know, a lot happening, but unfortunately, unless you tell us, we don't know what you are doing!

We can, of course, lift items from the weekly news, and items of interest for the Sunday Net should be sent to Ron Cowan, GM4SRL (roncowan@zetnet.co.uk) by 19:00 hrs. on Wednesdays. Diary dates should reach Geoff Griffiths (g_griffiths@compuserve.com) by the same time.

The next edition of RAY~Link will be posted out to all households on 17th. of April. This means that copy must be received by 30th. March at the latest. But please don't wait till then, send it in as soon as it is available! The 17th. of April is a definite date, and RAY~Link will be posted out on that date even if it is only one side of A4! The more you send in, the more pages will be included! The best way to get copy to RAY~Link is to send it by e-mail to roncowan@zetnet.co.uk. Please use ASCII text, or attach an MS Word document, preferably without a password!! Please don't use a Desktop Publishing package as this can sometimes be difficult to handle, and cause delays.

If you prefer, you can send your items in via your ZC, but please allow an extra week to allow the information gathered locally to be collated and sent in to the editor.

Eastbourne Call-out

**Dick Jefferies
G4KAR**

Eastbourne RAYNET Group was called out to man two rest centres, one in Pevensey Bay and one in Eastbourne, and the Wealden Emergency HQ in Hailsham on Christmas Eve. We were put on stand by at 12:00 hrs. and called out at 17:00 hrs. Approximately 12 operators were deployed, three fixed stations were established at the rest centres and at Emergency HQ. Two 4WD mobiles and two pedestrian mobiles were used to communicate with the Police and Parish emergency teams in the effected areas.

Large scale evacuations of elderly people took place in the Beachlands area of Pevensey Bay. Although, a fairly large area was flooded it was not as bad as it could have been. During the flooding gale force winds caused problems in bussing evacuees from the area. Double Decker buses had to be withdrawn as there was fear they would be blown over.

The RAYNET operation went very well and good radio coverage was achieved, South Sussex put their operators on standby for reliefs if the operation became protracted.

High Tide passed at midnight without any major breach of the sea defences although the sea was breaking over the top of the shingle defences the Environmental Agency Bulldozers managed to keep repairing the eroded areas.

Standby was given shortly after 02:00 hours on Christmas day.

Air Fete 2000 May 27-28

**John Slater
G6EUO**

Since 1984 FOREST HEATH RAYNET has supported the Emergency services at the Air Fete at RAF Mildenhall with communication assets. The Air Fete is the largest Military Air Show in the World organised by the USAF which on its best year was attended by over 400,000 people, producing several hundred casualties of every kind from sunstroke to a pregnant lady starting labour. RAYNET has also assisted at two aircraft crash sites and several helicopter casualty evacuations.

With the greater co-operation between the Military Medical Services, the statutory Ambulance Authorities and the Voluntary Aid Agencies, the requirement for RAYNET Communications has expanded annually. This year we will be looking for over 70 willing operators prepared to arrive before 07:00 hrs and leave after the crowds have gone. We have a local campsite for those with caravans or tents, and if you feel you would like to volunteer to help on this event please contact John Slater, G6EUO, on 01842 860475.

For those that are not aware Zone 10 encompasses the Counties of Cumbria (the Lake District), Cheshire (the home of Rolls Royce Cars), Lancashire (Hot Pot country), Greater Manchester (Eccles Cakes & Black Pudding), Merseyside (Two Cathedrals in Liverpool), & The Isle Of Man (Manx Cats). Zone 10 is also the only International Zone because the Isle of Man is Independent with its own Government, and therefore a separate Country.

Isle of Man RAYNET is also independent of affiliation being financed by the IoM Government. Their main events have been until recently the TT Races and the Manx Grand Prix. They now have too few members to cover due to natural wastage, and not enough able bodied operators. In recent years RAYNET members from the mainland have helped, very often travelling at their own expense. They have tried to recruit new members but new young operators are few and very far between, a familiar story but worsened by the remoteness of a very small Island.

Lancashire RAYNET is affiliated to the RSGB, but work very actively with all other RAYNET groups in the Zone. They have an extremely close relationship to their CEPO, and are written into many emergency plans. Major emergency plans in Lancashire also recognise the wider picture of RAYNET in the Zone and adjacent Zones. They have over the years worked on call-outs requiring close co-operation with North Yorkshire RAYNET.

All the Counties & the Island in the Zone form the North West RAYNET Association, which promotes that all work for the RAYNET ideal to provide emergency communications in times of disaster and emergency. In order to work together efficiently, and executive committee meets 3/4 times per year with 2 open meetings in spring & autumn. The executive committee has selected officers, voted in at the AGM, and representatives from each County are usually County Controllers and their Deputies.

The ZC is of course a Network appointment which comes up every 3 years, and only the registered members of the Network are allowed to vote. In all other respects the Zone is the NWRA, and all operational decisions are made by the executive committee. This state of co-operation has worked without problem for some 6 years, and our close work with each other often reminds us of the need for RAYNET to work effectively to discharge our intent properly.

The 4 counties, Cumbria, Cheshire, Greater Manchester and Merseyside, are all registered with the Network. All these Counties operate Training based on the national scheme and in some respects this has streamlined operating procedures in the Zone, with cross border co-operation on events & exercises. All RAYNET members in the North West can be justifiably proud of their recent record of working together, and in particular the planning for the potential Millennium problems has highlighted this. The relationships with the user services, in particular the Blue Light services, have been strengthened, and the sharing of information is extremely useful.

1999 has generally seen an increased work load for RAYNET members in the North West. The cross border co-operation means that many events are covered where in would be difficult for Groups to man them independently. Only one Call-out, for Cheshire, has been received, this was relatively short in duration, and provided potential radio links following 999 telephone line failure in the Winsford area. This was interesting as the call-out was received from the Police direct & from CEPO via the National Emergency Number (0141-621 2121). Cheshire RAYNET were particularly pleased with the call-out direct from Cheshire Police as this was the first time this had happened in an emergency situation.

I could give you a long list of events from Zone 10, but I am sure that you see enough of these via the National Diary on the 80M news, but suffice to say that the members in North West RAYNET will have covered over 100 events in 1999, some 15 exercises, & 1 Call-out.

***RAYNET
Manual***

**Cathy Clark
G1GQJ**

After a long period of editing and pre-production work, the National RAYNET manual is at last available to the membership. The first edition of the revamped manual is available in both CD and printed form. A group may copy the manual as needed for its own members. Sections are included to insert local information such as frequencies, callout information and constitutions. The CD version is in Adobe Acrobat format, for which the reader is also included on the disk. Also supplied on the disk is a set of Network logos in various formats for use by groups on their own paperwork. The cost for the CD is £5+p&p and the printed version £10+p&p. Purchase should be made through National Supplies. Please note that the manual is only available to Network Members.

***Voluntary Seminar at
Easingwold***

Following the notification which appeared on a recent Sunday morning 80m net, the following members will represent us at a two day seminar for the voluntary agencies which is to be held at Easingwold on the 6th. and 7th. of April.

Ron Cowan, GM4SRL, Chairman; Brian Davies, G3OYU, CC Surrey; David Hicks, G6IFA, ZC10; Alan Hopkinson, G8OJQ, Deputy Group Controller, Cheshire; Tom Stewart, GM0BKX, ZC 12.

NVIS- Part Two

Paul Gaskell
G4MWO

What goes up must come down - but only if you choose the right frequency!

Naturally, you don't get something for nothing and in general NVIS is of course limited to those frequencies which the ionosphere will reflect at any one time - go too high in freq. and it will just pass through into space. In practical terms, we are talking about 1.8 to 10 MHz (i.e. 1.8, 3.5, 7 and possibly 10 MHz), the lower frequencies being used at night. Summer and Winter also cause propagation changes as of course does the sunspot cycle. In general the lower frequencies are favoured during the Winter and during the trough of the Sunspot cycle as the ionosphere is not as active. A good 'working' frequency for NVIS will often be between 10-20% of the Critical Frequency - this is the frequency up to which a return can be obtained from a signal directed vertically at the ionosphere, usually from a commercial or scientific ionosounder. You can easily obtain this from the various propagation forecasts. If you have internet facilities, the following two sites are very useful for getting an estimate of the critical frequency:

<http://www.rcru.rl.ac.uk/iono/maps.htm>

http://www.ips.gov.au/asfc/euro_hf/euomap.html

These give REAL TIME European Region IONOSPHERIC MAPS; the first one gives Predictions of the FoF2 Critical frequency, the second is a record of the previous hours. The Optimum Working Frequency for NVIS is 80% of this frequency.

Further Information and Activities:

Short Wave Magazine article: 'NVIS Propagation' by Jacques D'Avignon, VE3VIA in the May 1998 edition, p.39

Also recommended is the book 'Near - Vertical Incidence Skywave Communications' by Ltc. David Fiedler & Maj. Ed. Farmer, AA6ZM (recently reviewed in QST). 144 pages long in A4 format, it contains lots of information and tests. It is available in UK and Eire from myself, Paul Gaskell, G4MWO, Northwest RAYNET Assoc. Secretary, 131 Greenfield Rd, ST. HELENS, Merseyside WA10 6SH for £10ukp, which includes post and packing. I can also be contacted on e-mail: paulgaskell@cwcom.net

These websites should give you some grounding in general NVIS techniques both practical and theoretical :-

<http://web.utk.edu/~cebik/radio.html>.....Some Notes on NVIS 'Cloud Burners' (Antennas!)

http://members.aol.com/ka8zvz/packet/packet_nviss.html.....NVIS and Packet

<http://www.scn.org/IP/nwqrp/archives/apr98/nwqapr04.htm>.....The 'L' Mobile/Fixed Antenna

<http://www.scn.org/IP/nwqrp/archives/aug97/nwqaug06.htm>.....A QRP NVIS experience in the US

<http://www.ci.san-jose.ca.us/oes/races/hfradio.htm>.....California OES (i.e. Emergency Planning Unit) NVIS Pages

<http://www.gordon.army.mil/acd/tcs/hf/2418xtr2.htm>.....Part of Military Manual concerning NVIS

<http://www.gordon.army.mil/ocos/BMDIV/AC/SUMMERAC/NVISPAT.HTM>.....Another military NVIS site

<http://www.codan.com.au>.....Codan Communications (Australia) Commercial HF SSB - these two companies have HF

<http://www.iinet.net.au/~barrett>.....Barratt Communications (Aus.) down to a fine art, datacomms included!

<http://www.shakespeare-ef.com/index.html>.....Shakespeare Antennas. Fibreglass antennas. By the way, bet you thought that Shakespeare only made fishing tackle!!

<http://www.raynet.demon.co.uk/raynet/hfteam.html>.....Northwest RAYNET HF Team website and NVIS activities

Acknowledgements: Barrett and Codan Communications Pty. advertising literature
Worldradio Books Inc.

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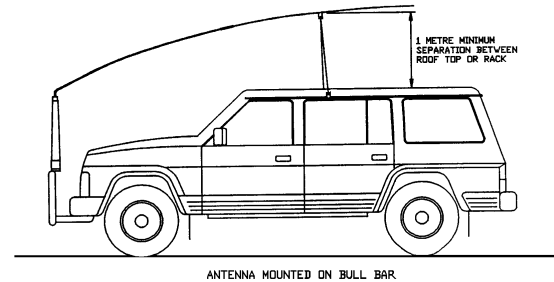
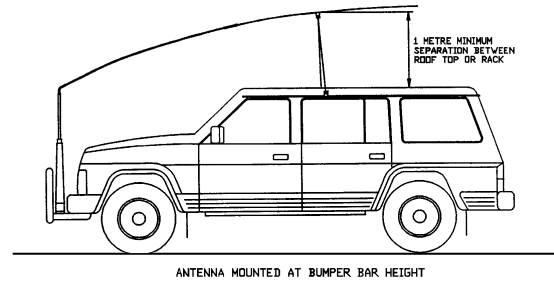


Fig 5

Codan's method of setting up their mobile antenna for NVIS operation, using their NVIS kit. If the antenna is mounted on the bumper, a 'riser' portion is required to provide the eventual clearance above the roof. An additional length is also added to the whip and it is held to a near-horizontal position by non-metallic cord ties attached to the vehicle's gutter. Note that there must be a metre minimum separation between the roof top or rack

Millennium Duties

Emergency Planning Team

The Emergency Planning team kept a watchful eye over preparations for the Millennium. Zonal Co-ordinators were asked to report back on any involvement of their area's groups, and these were discussed at the EPT meeting at the end of November.

Although there appears to be no common approach to the type of requests received by RAYNET groups throughout the country, many groups appeared to have made their own arrangements for RAYNET cover over the period, should their presence be needed. Nearly all groups reported that their Emergency Planning Units were co-ordinating any requests for assistance.

Some RAYNET groups were asked to provide nominated contacts over the Christmas/New Year period, whereas others had teams of operators ready to move at short notice to cover until other operators can be alerted. Some groups had nominated specific operators to designated locations should the need arise, but most reported that they have checked the availability of their members and were "standing by" should a callout occur.

A listening watch was also maintained on 3.663MHz from 20:00hrs on 31st. December and the National Emergency 24-hour telephone number was, as usual operational.

The Emergency Planning Team wishes to record all Millennium standby and active callouts, and group controllers are asked to pass the information to Hunters Moon by 26th. February. There will be a £20.00 RAYNET Supplies voucher for the first reply drawn out of the hat after that date.

80m Duty Roster

80m news. (3.663 MHz. On Sundays at 08:30 hrs. local.

News Net controllers for February 2000

6th February -	Duty G0MRH, Standby G0EWO
13th February -	Duty G3STG, Standby G4FSN
20th February -	Duty G0NZU, Standby G3STG
27th February -	Duty G0BDA, Standby G0MRH

Plaudits

Nice to see a letter in the March edition of Practical Wireless praising the services of Dorset RAYNET, who have regularly assisted the Dorset Red Cross. Nice to be remembered! Thanks to Peter Hill, Emergency Planning Officer for Dorset County Red Cross for sending the letter to Practical Wireless. Well done, Dorset RAYNET!

Hampshire Emergency Callout

**Bob Bloodworth
G4VWP**

On Sunday 12th December 1999 there was a major fire in Basingstoke involving a domestic garage and several timber frame houses.

A fractured gas main, a gas cylinder and some ammunition were also involved in the fire, which turned the situation into a major incident.

Basingstoke & Dean Borough Council activated their Emergency Call-Out procedures which involved opening up the Emergency Control Centre at the Council Offices and the establishment of a Rest Centre at a school near to the incident.

Over 40 people were evacuated and attended the school.

RAYNET were called out 13.50 by the Divisional EPO for Hampshire County Council who was in attendance at the Emergency Centre in Basingstoke. and he requested RAYNET to provide a point to point radio link between the Emergency Centre and the Rest Centre. At this time there was a real risk that the incident could have escalated.

Unfortunately the initial call came at a time when neither the local Controller or Deputy Controller were available. The call went on to Bob Bloodworth G4VWP (County Controller) who managed to locate and mobilise George G4EDH and Andy G1JHM (both N.W Hampshire Group) and Peter G1TQY (Hampshire County Group).

Eddie Ogden (N.W Hampshire Group Controller) responded to a telephone answering service message and also quickly attended. Clive G4ODM was also able to provide some limited support.

Bob G4VWP (County Controller) and Jan G4VWO (S.E Hampshire) joined the team at Basingstoke but luckily were not required as the incident was brought under control and RAYNET were stood down after about 2 hours.

The Incident was under the control of the Deputy Chief Executive for Basingstoke & Dean Borough Council who wished to pass on his thanks to all RAYNET members who were involved. This thanks was also echoed by the Divisional EPO for Hampshire County Council.

Letter to the Editor

New E-mail forwarding address.

Following the AGM, I was trying to understand my lack of enthusiasm for the '@raynet-uk.net'. While it is a great idea to have a consistent e-mail address, I would have preferred that it was a name that DID NOT identify with any particular organisation or company. I follow many interests where 'raynet' would not be appropriate. That is one of the reasons I chose 'quista', as it is not obviously The Royal Bank of Scotland. Perhaps other members may wish to comment on this topic.

Mike McCreery gm0etc@quista.net.

**Millennium
Preparations
in Zone 6**

**Cathy Clark
ZC6**

Many of the groups in the Zone were involved in extensive planning for the Millennium. This included attending planning meetings, volunteer seminars and exercises.

Hampshire undertook an extensive county-wide exercise in mid-November, testing communications between 18 different sites including Police Gold Control, Fire, Ambulance and Coastguard HQs. Some 36 operators took part, and there was also involvement from County Main on the Isle of Wight. Equipment was taken to locations which did not have permanent installations, and some temporary aerials were erected.

Exercise Golden Fleece

On 8th September 1999, all RAYNET groups in Buckinghamshire, Berkshire and Oxfordshire took part in Exercise Golden Fleece for the CEPO and Thames Valley Police. The aim of the exercise was to test the co-ordination and communication facilities of key authorities, services and agencies operating in Thames Valley in preparation for Millennium emergencies. The objective for RAYNET was to test external communications between the above, and for those agencies involved to confirm contact details in their contingency plans.

Some 72 authorities, services and agencies were involved. These included city, borough, district and county councils, ambulance services, fire & rescue services, hospital trusts, MoD, BT, Transco, and electricity services, Railtrack, Anglian and Thames Water Utilities, the Environment Agency, Thames & Chiltern Trains, London Underground, British Airports Authority, the British Red Cross, St John Ambulance, and the WRVS. Although not all of those listed used the services of RAYNET on the exercise, over 50% of them listed RAYNET as being listed in their emergency plans.

Each of the three counties involved had differing views on the involvement of RAYNET "on the night". Berkshire and Oxfordshire concentrated on their emergency centres, whereas the main aim for RAYNET in Bucks was to test the untried links between fire stations, hospitals, British Red Cross and St. John Ambulance headquarters, Police Silver Controls and other key locations which would be needed to aid communications. Installations at district emergency centres were tested in July. During the exercise, the various inter-county links were tested and deemed "workable", "readable" or "unreadable". Each of the key locations reported on other stations worked or heard and a comprehensive list was built up.

In the strategic debrief, the following paragraph highlights RAYNET's involvement:

There was a full and comprehensive test of RAYNET communications across the three historic counties of Buckinghamshire, Oxfordshire and Berkshire, and by and large the radio amateurs got through successfully. Their debrief reports indicate the need for some aerial maintenance and a tightening up of some of their own procedures. The major lessons were learnt by other exercise participants who in some cases saw for the first time what an extensive and professional service RAYNET can provide in emergencies should normal communications break down. For those organisations unfamiliar with them, it is worth considering their involvement in future exercises.

**Information
Systems
Update**

**Jim Andrews
G1HUL**

Membership registrations

Since the introduction of the new registration forms in October, several groups have asked about being able to fill them in electronically (i.e. directly onto the form or through a local mail-merge) and just send in a file.

Whilst this would appear to be a good idea on the surface, particularly with the requirement for the members' signature having been removed, the reason for protecting the Acrobat version of the file is to stop local versions being introduced and maintain a standard form.

However.... Around Easter 2000 we will be introducing software to enable groups to register electronically. This will be a simple database application that will enable you to keep local records for your group and, when your registration time comes or you have made updates to your local data, generate a file that can be either sent on floppy or e-mailed. The software will be Windows 95/98/NT based and be offered free to groups.

The requirement to send payment, photos, one-time declarations (as appropriate) and a signed cover sheet with registrations will, however, still exist.

ID cards

The annual ritual extraction of photographic images from members sometimes makes groups consider the use of digital photos.

The requirements of a secure photo-ID card in terms of the photo image quality is the same as that of the passport agency, i.e. it is of a quality that will not fade, cannot be altered, will stand heat-treatment and is permanent.

Only a few digital printing systems using dye sublimation printing techniques have been accepted by the passport agency as conforming to this requirement. Therefore we cannot accept digital photos that have been printed on bubble-jet printers, whatever the final quality is, for the reasons of fading, being a water-based ink and poor paper quality.

Questions are occasionally asked why groups cannot produce local ID cards, as opposed to having them centrally issued. Quite simply it is an issue of security, i.e. only issuing cards to bona-fide members

- We would not like anyone with less-than-above-board aims to gain access to an incident under the pretence of being a RAYNET member. It also ensures there is one style and format so that our user services can be sure of the card's validity.

E-mail

The Network has recently launched its e-mail forwarding service. An e-mail forwarding service gives members the ability to have one consistent mail address (e.g. jim.andrews@raynet-uk.net) that is then forwarded to their real address. There are several benefits of this:

· You can change service provider as often as you like, without having to tell anyone.

· Your contacts don't get confused about which provider you are using.

· The address gives a 'corporate' image to the organisation and makes a statement about our involvement in RAYNET.

An application form is attached and full details about the scheme are included on the form.