



*This edition of RAY~Link has been sent to all registered members who have provided an e-mail address, and by post to Group Controllers who do not have e-mail facilities. Controllers are asked to ensure that all members of their group have sight of a copy of this edition*

**Membership Fee 45p. per month.  
PAI £1.50 per year or part year  
(1st May - 30 April).**

## In This Issue

**Zone News - Page 3-5**

**See Hear - From Geoff - Page 8&9**

**Reducing paperwork - Use the Web Site -Page 12**

**SOTA?- read all about it on Page 10**

## The Annual General Meeting Saturday 6th November 2004

### Accommodation

The Annual General Meeting will be held in the Holiday Inn Bristol (Filton) hotel on Saturday 6th. November. You can book over the internet - prices are around £52 per room, but not including breakfast and will vary according to availability, and you have to pay in full when booking!

You can also ring the hotel direct (0117 910 4253) and pay £35 per person per night including breakfast (special RAYNET deal!) Mention that you will be attending the RAYNET event. Make sure, however, that you ring during normal working hours and speak with the hotel itself, not the central booking line, as they will not know about the special deal. They will take your credit card number, but you will not be charged until departure. There is a single supplement of £15.00

### AGM Dinner

The Dinner will be served at 19:30 hrs in the Holiday Inn Bristol-Filton and the menu is:-

Starter - Fan of melon with a fruit coulis

Main Course - Roast Chicken Dinner  
(Vegetarian option is Tagliatelle with roasted vegetables)

Dessert - Raspberry and Redcurrant Cheesecake

The cost is £15.95 per person and reservations with payment should be with Chris, G8RXA, by 23rd. October.

*All correspondence and membership registrations should be sent to:-*  
"Hunters Moon", Station Road,  
Newton-le-Willows, BEDALE, North  
Yorks, DL8 1SX

**Emergency 24 hour contact  
line:- (0141) 621 2121**

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## Directions to the AGM

Directions to the AGM at The Holiday Inn Bristol - Filton Filton Road BRISTOL BS16 1QX

Tel. 0117 910 4253

Saturday 6th. November 2004 Doors open at 09:45

By Car Leave the M4 at Junction 19 Follow M32, leaving at junction 1 Take A4174 towards Filton, Bristol Parkway Station. The hotel is 800 yards on the left.

By Public Transport From Parkway Station take a taxi to the hotel. (10 Minutes)

Talk-in will be provided by the Bristol Group using the callsign G4JPS on 144.775Mhz.



## **ZONE 1 REPORT**

### **Tom G0JRT**

After a busy year Groups are winding down for 2004 and are now preparing their diaries for 2005. The Tyneside RAYNET Group has disbanded and all of the members have transferred to the Northumberland Group. There have been a few enquiries for information about joining RAYNET and these have been passed on to the relevant Group Controllers.

North West Durham. At the Group's AGM in April 2004, Alan Wallis G4YMU stood down as Group Controller after twenty years of excellent leadership. He will still carry on as County Controller of Durham. On behalf of the members, the new GC thanked Alan for a job well done.

The group provided communications for the LDWA Durham Dales Challenge on Saturday 11th September 2004, about 300 walkers took part in a change from the usual programme of 28 miles to three separate walks of 16, 28 and 50 miles in and around the Durham Dales although the weather was bad a successful day was had by all. Assistance was given by East Durham and South West Durham Groups.

East Durham provided communications for the Great North Bike Ride, a 50 miles ride starting at Seahouses to Tynemouth on the North East Coast, 600+ riders took part in this event. Assistance was given by Northumberland, Sunderland, NW Durham and SW Durham (RSGB group) Groups. The group have been asked to cover this event in 2005.

Sunderland successfully covered the annual two day Scout Challenge Hike in the Lake District.

Northumberland and Cleveland have been quite busy with various events. There will be a Zone Meeting (Controllers) on Saturday 25th September 2004.

## **Zone 3 Report**

### **Roger Beever, G6CKR**

Some Zone 3 groups have been reestablishing half forgotten links with adjacent groups and working together on a few events including the use of APRS to track officials. The ZC was privileged to assist at that event. Groups continue with their established regular events which are usually of a size to allow them to be covered by the single group, but it may still be worth involving an adjacent group to gain the extra staffing to allow testing of new equipment and ideas in parallel with the trusted way of doing it. This may turn a chore into an "Event". Leicestershire groups will be assisting at the Donnington Show on 1st. & 2nd. October and the ZC hopes to be there on the Saturday.

## **Zone 4 callout John G6EUO**

Having covered a 160k horse ride on Saturday 4th September between 04:00 and 21:30hrs on behalf of St John Ambulance, Forest Heath Group was home for less than an hour when Suffolk Constabulary asked for the group to provide Communications support to Suffolk Lowland Search and Rescue at Brandon, and at 22:50hrs RAYNET operators went to Brandon Police Station and Brandon Country Park Nursing Home in the Thetford Forest where a forward control was established.

A missing person search took place throughout the night and the following day until 21:15hrs Sunday with a break between 05:30hrs and 10:00hrs

Special thanks go to the following who responded to this incident despite having already put in many hours on the Saturday. 2E1BRC, G1TIJ, G6AKC, G6SUR, G6XYX, G7IZS, G7SCO, G8HVV, and M1BIB

# ZONE 7 REPORT

## Chris, G8RXA

**Zone 7 General** - The Zone meeting to discuss proposals for Exercise ICE in December was held at the beginning of August in Exeter and hosted by GOSW. All Counties in the South West were invited and RAYNET members from all Counties except Dorset were present. It was the first time that Network, RSGB and Independent Groups had met together and most found the discussions of value. There were a number of Emergency Planning Officers also present and the meeting approved the Radio Communications Notes for Guidance for printing and issue. The West Devon Controller and I attended the launch of the Preparing for Emergencies booklet in Exeter. I have received a number of enquiries for joining RAYNET and have passed these on to the relevant controllers. I am very pleased to welcome the re-formation of the South Wiltshire Group. They are busy recruiting members at present.

**Avon Area** - The RAYNET facilities at Lansdown are still not yet available, although it is hoped they will be ready in the next 2 months. A number of exercises have taken place as usual during this time of year. The Action 100 Bike Ride last weekend went well with no major accidents or injuries.

West Devon - The usual events have been undertaken (Ten Tors, Carriage Drive, Lions Walk, etc). The Lord Mayors Show saw the award of the Community Shield to West Devon RAYNET for the second year running. An SSTV training day was held using VC-1H equipment with observation by WestCountry Ambulance/EPO. Approval by the EPO has been given for an HF installation at the Civic Centre. Three Operators assisted Dorset with their Ironman triathlon. Four operators were on standby to assist Cornwall for the Boscastle floods on 17 August. The Navy Days last weekend saw assistance from the local Radio Club for manning a Special Event Station whilst RAYNET operators (including 2 from Dorset) assisted the WestCountry Ambulance and MOD Police. Good publicity for RAYNET with the star attraction being the RAYNET

Hovercraft.

**Wiltshire**- The events attended have been as normal for this period. The Cirencester Horse Trials saw members from Dorset, Hampshire and the Zone assisting. Testing of Local Authority equipment has been scheduled and an invitation from the Wiltshire Radio Club to present RAYNET to their members in November has been confirmed.

**Dorset** - The normal events for (BHF Ride, MacMillan Ride, Horse & Carriage) plus some new additions of the Portland 10K and the Portland Steam & Vintage Fair have been undertaken. Ironman, the largest event requiring 48 Operators from 5 Counties, took place over the weekend 21/22 August. Two talkthrough units were used on the main net to cover the course from Sherborne to **Dorchester**. Four sub nets on PMR VHF were used to contact the marshals who were from the local Rotary club. A UHF PMR net was used for local working and APRS also on UHF was installed to track the lead cyclist and two RAYNET motorcycles. RAYNET Control was located with both Police and SJA Control. The organisers and Police were pleased with the operation and RAYNET has been invited to provide communications next year when the event will be a full triathlon.

## ZC nominations

**Nominations have been requested for zonal co-ordinators for Zones 2, 3, 5, 7, 9 and 22.**

**The current ZCs in Zones 3, 5, 9 and 22 are retiring by rotation and Zone 7 was a temporary one-year appointment. All are eligible for re-election. Zone 2 currently has no appointed zonal co-ordinator.**

**All ZCs serve a three-year term of office.**

## Zone 12 Report - Tom GM0BKX

The next West of Scotland Area Controllers Meeting will take place early next year, with all Groups in the Area attending. Since the last meeting there has been a lot more cooperation and mutual assistance given between Network and Non-network Groups.

The North Argyll Group's membership had lapsed, due to the illness of the Group Controller, but all members have now rejoined the Network and although there is no Controller at present, Stewart MM1AVR is willing to act as a contact for the Group. The group will be assisting South Argyll with the Mid Argyll Triathlon and the Philips Tour of Mull Rally.

It has been a desperate year for the South Argyll Group exercise wise with all exercises to date cancelled due to either lack of funds or lack of something! The triathlon will be held in Mid Argyll on 26th September and thereafter it's the Philips Tour of Mull Rally.

Although the Clyde Coast Group has only three registered members at present it continues to help other groups within the Zone. The Lothians Group has been so busy with South East Riding Club that we are trying via GM4GVJ to get the Borders amateurs to re-establish a RAYNET Group. About 250 hours cover including travel time was devoted to a 2 day SERC event in Kelso recently. The group

took part in covering a triathlon last Saturday including a swim in the Firth of Forth with welcome help from Fife RAYNET and two of our members will be reciprocating at the Leuchars event shortly.

The Ayrshire Group provided communications at 8 of our own events so far this year plus assisted at two events out with our own area. We have an endurance event on Sunday 5th September and a Husky Racing event in November plus we will be assisting the Dumfries and Galloway Group (Non Network) at a major event early December.

The Group attended a Voluntary Organisation Evening on 23rd June, with presentations given by RAYNET, WRVS, British Red Cross, St Andrew's Ambulance Association, The Faiths, and Emergency Planning Officers. It turned out to be a very informative and enjoyable evening. Like all Groups throughout the Zone it has been a very difficult year trying to cover events due to lack of operators, as members, including Ayrshire, are very reluctant to travel large distances to assist at events.

The Greater Glasgow Group ran the Council control at the World Pipe Band Championships on Glasgow Green, covered the BHF Cycle Ride on the Island of Bute, and provided safety cover for the Great Scottish Run in Glasgow.

## Zone 5 Report - Phil Williams, G6AQP

It's been another busy season for the four active groups that make up both Zone 5 and London County. Most events that take place in London are supported by members from all the London groups, added to which the larger events are regularly supported by members from all over the south east.

The largest event was, as usual, the London Marathon when almost 40 members provided radio cover for the organisers of the wheelchair event on behalf of the St John Ambulance. If you can't be there next year look out for RAYNET tabards on the television coverage.

In the last few weeks we have provided radio cover at the Great River Race, an event where over 260 boats are rowed from Richmond to Greenwich. This event was a first for the London Groups many of whose members were located on the rescue craft. Another first was our contact with the London Coastguard as our User Service. Both these events would have been almost impossible to deal with without the use of G3NAT our station located to the top of Guys Hospital Tower in Central London, which is over 30 stories high.

## West Devon's Thunderbirds are go!

Ian Harley, G6BJJ, Controller West Devon Raynet



**G6BJJ – Ian at the controls of TB4 on Plymouth Hoe**

Well it must be a first for RAYNET... a RAYNET vehicle which can cover fields, water, and mud flats? Yes it's the latest addition to West Devon RAYNET's growing fleet...a hovercraft!

What started as a simple winter project for the controller, Ian G6BJJ, has now become an integral part of the group's line-up, and has been raising a few eyebrows, not to mention a few pennies for the group, at local displays here in the City of Plymouth.

The craft, which is based on a design offered by the Hovercraft Club of Great Britain, is a two-seat machine using a single engine and fan, with a split air-duct to give the lift and forward propulsion.... But the biggest attraction is the engine...a trusty 4-cylinder 850cc aluminium one, which is comparatively light from...A Reliant Robin!

It even carries an Icom 207 Dual Band rig, this is normally plugged into the helmet and uses the same system as my motorcycle (a Honda Silverwing), so that I can use the radio and chat whilst on the move. You really need the helmet, as not only is the engine a bit on the loud side but just see the acceleration of the beast!

**So why did I call this section 'Thunderbirds are Go!'...?**

The simple answer is that the West Devon Raynet's Mobile Control Vehicle, was long ago nicknamed Thunderbird-5 as it had so many radio systems in it that we were always using and monitoring, ...Mind you, you should have heard what it was called the other day when the front, vehicle, battery went flat when we found that some kind person had left the rear heater fan and fog lights on for the past 3 days at the Navy Days show!!!!

Since then, we have added TB1 (The Honda bike), TB2 a Sherpa van for lifting and shifting just about anything, TB3, John G1SQI's Fire-blade, a real rocket!! And now of course, TB4, the hover-beastie.

## Topband to twenty-three has the 'Edge'

RAYNET in the North of England had been requested by Network Rail to participate in the Standedge Tunnel Complex Simulated Disaster Exercise ('Exercise Southbore') on Sunday 25th April 2004. The tunnel complex, consisting of main-line rail and canal tunnels, together with a couple of disused tunnels (all of which are inter-linked), connects the west and east sides of the Pennines, from Diggle on the Greater Manchester side to Marsden at the West Yorkshire end. The rail tunnel in question is a straight, level one of approximately 5 Km in length, bored through the two outcrops of Pole and Round Hills. The exercise scenario was based on the (fictitious) derailment of a Diesel Multiple Unit in the operational tunnel. The purpose of the exercise was to test the mobilisation and deployment of Police, Fire, Ambulance, Network Rail, Mountain Rescue personnel and other assets in a Search and Rescue situation. One non-communications problem for RAYNET was that on the day, West Yorkshire RAYNET assets, including Leeds and Keighley Groups who would normally be involved were already committed on the Yorkshire Three Peaks Race and unable to run the Marsden end of the tunnel exercise. However, teams from the North Yorkshire and Sheffield & Rotherham Groups under the overall coordination of N. Yorks County Controller, Brian Dooks, G0RHI covered the Yorkshire end at Marsden. The western side of the Pennines was handled by Greater Manchester RAYNET under the overall coordination of Bolton Group Controller Eric Walton, G4FSN

RAYNET's brief was to provide communications over the top of the moorland terrain, from portal-to-portal, plus additional on-site comms if required and if time and circumstances permitted in the later stages of the exercise, to examine communication within and through the tunnel. The first of these tasks - that of external portal-to-portal communications was achieved by two separate systems. The first was a VHF- UHF-VHF system using two back-to-back crossband 2m/70cm Talkthrough Units. The second utilised a 160m Topband MF SSB Groundwave link on 1905 KHz LSB.

The Fire Service made use of the VHF/UHF/VHF talkthrough link between the two exercise sites and from about 11.00am until the end of the exercise at 12.15pm the link was used for direct officer-to-officer traffic. After 'endex', the senior Fire Officer in charge came personally to thank RAYNET for all that had been done for them and requested that RAYNET make a presentation to his personnel in Greater Manchester on RAYNET's capabilities and limitations.

The 160m Topband MF groundwave SSB link also worked as planned and that was used by the Network Rail RIO (Rail Incident Officers) for officer-to-officer traffic between Diggle and Marsden, relating to the wider management of the exercise. At the conclusion, Richard Davies, the Network Rail Risk Manager North-

East (and overall Exercise Coordinator) came over to Diggle, having spent most of the exercise at Marsden, similarly again to personally offer his thanks for a good job well done.

In addition to the HF and Talkthrough links, RAYNET and CREG (Cave Radio & Electronics Group) member John Rabson, G3PAI provided 23cm mobile and handportable radios and drove through the tunnel with Richard Davies in Richard's 4x4 vehicle. G4FSN stayed at the Diggle portal with the handportable whilst they drove off into the tunnel, stopping every 200m or so to exchange reports. Communications were maintained at full strength all the way through the tunnel - all 5km of it - and out at the other end on 1297.50MHz FM, thus proving that 23cm will travel all that way with very little attenuation. The 'Gritstone Challenge' had been finally conquered! Readers may recall the article in the March 2004 edition of RadCom (p83) detailing the internal communication challenges of the Standedge Tunnel. Overall, RAYNET communication links performed successfully and the User Services declared themselves very well satisfied with what had been done for them. RAYNET officially attended the debrief at Fire Service HQ, Bradford, during which this sentiment was re-iterated. Many useful contacts have been made and RAYNET will be very busy following these up over the next few months. Whilst there have been notable successes, there are always things that could be improved upon and finding out these is one purpose of all exercises. In addition, more RAYNET engineering tests are planned to further enhance siting of Talkthrough Units and other communication aspects, such as manpower per shift per portal - one estimate is a minimum

of 12 operators to deal effectively with all user service requirements which grew as the exercise went on - plus greater familiarisation with the topography of the area

Compiled by G4MWO from information supplied by G4FSN, G7JJK and G0RHI



Gtr Manchester Fire Brigade and Ambulance Personnel in discussion with Gtr Manchester RAYNET County Controller, Jon Mossman, G7JJK on the road bridge adjacent to the Diggle (Gtr Mcr) tunnel portal

## See Hear September 04 - Geoff, G3STG

All too often, Amateurs who write for the Amateur press forget how difficult it is to tackle some tasks in the shack when you are first licensed. I remember only too well struggling with connecting Westflex 101 to a standard N-type connector for the first time. Many routine problems in the shack - and out on RAYNET operations - turn out to be down to cable connections, or do yours always work 100%? There is nothing more embarrassing than having problems with cables when you are out on a RAYNET duty.

Ian White G3SEK in his regular "In Practice" column tackles the right tools and techniques for making up DIN and D connectors in RADCOM for April and May, covering not only how to do it, but also some advice on the best tools to use. There's even some good advice on knowing when not to try, and how to get around the problem. All good practical stuff. (Radcom April pp65-66, May pp48-9)

Chris Lorek gives a useful review of the RIGBlaster Pro PC to sound card interface for many software modes, but in the same issue, Peter Homer gives good practical advice on designing and building your own interfaces. (RadCom April pp38/43) and the same issue tackles the development of computer networking in and around the shack. (pp45-46)

If your Group runs APRS or UIView on your duties, I wonder how you cope with Lap-Top Batteries. No matter how much care I take of them, they seem to need continual mains power before too long! This always makes getting the best out of the technology not really a mobile prospect. However maybe Every Day Practical Electronics for May offers a ray of hope. The Mag contains a construction project for providing a simple laptop power supply of 14 - 23V from 12V for about £15.00. You might even find that you can run the system from dry-fit 12v batteries if your car battery is not man enough? (EPE May pp317-320)

EPE also contains details of a project to supply a mains low energy light-bulb from a 12v supply, which might have applications for RAYNET duties. Find them in the March issue (EPE March pp176-181)

Tunnel operations have featured in the press recently, and the article that seemed to remind us that the original work done in Limestone doesn't necessarily work in other rock types is worth a read. Have you got a Railway Tunnel in your Group's area? (RadCom March pp83-85)

Trawling though the April issues of the mags is always good fun, trying to spot the April spoofs. How many did you spot? Which is your favourite? I quite liked the two-step transmitter by Audio Stimulation in PW, although the ADENoiD technique reference rather gave it away. Well done PW!

But sadly, where are all the news reports of Amateur Communications volunteer operations? Not in the British Mags for sure! for those you need to look at the US mags. Try CQ March pp62-65, CQ April pp56-61 QST April pp90-91, and QST May pp81-83 for details of National exercises, local emergencies and national emergency training.

Using your old dead PS2 mouse for a source of data-connectors and couplers seems to be doing the rounds in several places. - try QST May pp67-68!

The August issue of Datacom, the of BARTG members' magazine, carries a feature on the use of MT63, which discusses the settings and frequencies being used for this promising mode. This coincides with News Items on the trial being carried out using "raynet" format for test transmissions of the RSGB News items. Unfortunately the article makes no reference to the importance of linearity in transmission which has been reported as the major stumbling block experienced by some in the use of this



## See Hear September 04 continued

mode. Nevertheless, it seems that the mode may offer real possibilities for low power long distance transfer of Raynet traffic. (Datacom Aug04 p12)

Elektor for September contains an interesting article on bogus electronic parts! Apparently more and more fake electronic components are appearing on the market, and this seems to be a problem for some manufacturers, particularly in the area of semiconductors. So just be thoughtful when you see those bargains at Donington! The article contains some web addresses reporting some of the details (Elector Electronics Sept04 p66-68)

On a rather more cheerful note, Robert Penfold in September EPE writes about obtaining components for projects, with lots of suggestions on what to stock and how to store (Practical Everyday Electronics September p638)

If identifying the source of noise in the shack (RF noise that is, not the darned cat) troubles you, then SWM suggests a link to a valuable web site, which provides help. (<http://ve3hls.tripod.com/noise/rfhome.html>) The same article provides an introduction to ALE (Automatic Link Establishment) which may offer some thoughts for RAYNET members. (SWM August 2004 p56- 57)

RADCOM reports the death of past president of Ian Kyle GI8AYZ. Ian was for many years an active force in RAYNET in Northern Ireland, and will be missed. The same issue also contains an intriguing reference to a meeting with the CAA. A further report on the saga of RAYNET comms in railway tunnels and a report of North Norfolk's operation along the Norfolk coast in July also make good reading. And in his regular "In Practice" column, Ian White answers the question 'which is the best sound card for my radio pc?'

Also have a look at the second in a series of articles on the use of tuned loops in real

environments, which examines HF operation from small loops in an attic! Quite a bumper crop of RAYNET relevant items in this issue for a change. (RADCOM September p5-6, 11, 53, 59, 61-69)

QST for September carries details of the SET in the USA on October 2-3. I wonder what would happen if the UK government attempted a similar national exercise to test our radio-readiness for an emergency situation. Would you be ready? Mind you, it does seem difficult to imagine that COBRA would ever go that far, let alone our local EP departments. (QST Sept p105)

CQ, as always, carries a number of fascinating insights into the American comms volunteer scene. A headline of "Ham cited as domestic terrorist" reveals the prosecution of an amateur for jamming an emergency radio system. Sentence? 8 years imprisonment! Ouch!!! Also a hint of a new antenna design being patented which promises efficient 21MHz operation on an antenna just 15 inches high?

But as usual, CQ provides interesting reports of RACES and ARES operations with medical evacuations, a bicycle mobile operation in support of a fund-raising run. (CQ Amateur Radio Sept p4, 52-57, 66-69)

CQ also has some practical advice on setting up a shack home computer network, and reports of electric vehicles, and of trends in mobile antennas (CQ Amateur Radio Sept pp 74-79, 80-82)

And that concludes the round up for this issue. If you have difficulty in accessing any of the above original items, please drop me a line QTHR.

# The SOTA 2m Beam and SOTA Award

## Dave Howard - M0BGR

Many of you will have seen the SOTA 2m beam review in the July edition of RadCom but as I own one I thought I would tell you about it from the RAYNET point of view. For those that did not see the July RadCom, the SOTA beam, as its name suggests, it is designed for use on the hills for those participating in the "Summits on the Air Award". It is a three-element beam which breaks down into components that will fit inside a 15mm x 1m plastic tube which also forms the antenna boom. It comes with a five-metre length of RG-58 coax, with a BNC plug on one end and ... don't cringe ... a pair of croc clips on the other. Remember this twig is designed for fast assembly in difficult conditions ! It can be bought with a 6m telescopic fibreglass fishing pole and guy kit to form its mast. (For those of you worried about a 6m pole and 5m of coax, please be patient!)

I have used my SOTA beam on SOTA expeditions, Backpacker contests and for RAYNET control station and it really does work very well indeed. The whole lot, beam, cable and pole weighs a little over one kilo. The pole can either be strapped to a rucksack or could also double as a walking stick. I strap the beam (inside its tube) to the pole with tape, which make the whole lot very convenient to carry.

One on site, it is simple for one person to assemble and raise into position, even in windy conditions found on hill tops on the nicest of days. First, I dig a shallow depression in the ground with my heel and place the end of the pole in this. I then raise the pole to about 1.5m and fix the guy lines at this point. Next, I unpack the beam, slide the boom over the end of the pole (there are fixed brackets on the boom for vertical or horizontal use), assemble the elements, attach the crocodile clips to the driven elements then raise the pole and antenna to full height. Three minutes on a bad day. As the fishing pole top is too thin to support the beam, the antenna clamps about 4m above ground, so the 5m of coax is plenty to reach the radio. The thin top sections of the pole, above the beam, can either be omitted or used for a

wire HF antenna.

The antenna has an impressive specification and also works very well in practice. It has a useful bit of gain, a reasonably wide main lobe but can null out unwanted stations. I was Control at a recent RAYNET event and I was getting interference from another group 200 km way (typical; a lift just when you don't want it). I could adjust the beam to completely null the other group but still work my own net. Despite the croc clips, the VSWR is very reasonable right across the band.

For those of you who have not tried the SOTA award, I strongly recommend it as excellent practice for RAYNET members who want experience of operating in difficult situations. It could be used to either improve you own capability or as a group training activity. Full details are on the web site below, but briefly, award seekers climb the hills designated in the scheme, make four (or more) QSOs from the hill top and claim the points for that hill. Some hills are very easy to ascend, these get just one point each, but others (Ben Nevis for example) are more challenging and get up to ten points.

Just a few of notes of caution, unless you are an experienced hill walker then try 'easy' summits first or team up with someone else who is knowledgeable . Under no circumstances attempt anything beyond your capability. The tops of hills can be very cold places, even on the finest of days, so do take along warm clothes. Don't get so absorbed in radio that you forget to keep a sharp eye on the weather - it can change fast and do not be tempted to stay too long but, above all have fun!

The SOTA 2m beam is not intended for long-term operation, but is great for getting the 'first on scene' on the air quickly. It is light and easy to carry into places where vehicle access is impossible and can be assembled single-handed. It is reasonably robust, but obviously not as rugged as a metal mast. In short, a useful accessory for a RAYNET group to have at its disposal. The pole and beam cost under fifty pounds.

## **Ian Kyle, Silent Key.**



Ian Kyle, G18AYZ and M10AYZ, the RSGB President in 1997 and 1998, died peacefully at home on Friday the 23rd of July after a long illness. Ian was a long-serving RSGB volunteer. Joining the Society in 1967, he served as a regional representative, Zonal Council member, Chairman of the Membership Liaison Committee and long-standing GB2RS newsreader and manager. In total Ian served for a period of 10 years on the Council.

A quiet, but persuasive, man, Ian will be remembered as the President who during his term in office presided over the RSGB change of policy not to support compulsory Morse testing and for starting the negotiations with the RA - now Ofcom - which led to the introduction of the Foundation licence. Ian was a great supporter and friend of amateur radio in his native Northern Ireland and across the UK, and was well respected around the world.

He was a great friend of RAYNET and will be remembered by all who worked with him to further our hobby. He will be sadly missed by all those who worked with him and operated with him on the bands.

## **Charitable Donation**

The Annual Donor Report from the Charities Aid Foundation shows that we received £230.40 under the Give as You Earn scheme for the year ended 30th April 2004. This total attracted a further 10% from the Government. That bonus will not apply in the future.

The donor or donors being anonymous cannot be thanked directly, but the Committee of Management wishes to record its thanks to the person or persons responsible through the medium of RAY~Link.

## **RAYNET Supplies Katie, GM0UIG**

RAYNET Supplies will be at the AGM in Bristol on 6th. November. Whilst we will endeavour to have a good selection of RAYNET items with us, it is impossible to transport our entire stock, and members wishing to buy particular items are asked to order and pay for them in advance but without including a postage amount, and sending the order form to

RAYNET Supplies,  
85 Eastwoodmains Road, Clarkston,  
Glasgow,  
G76 7HG

to arrive by Friday 22nd. October, marking the order "AGM Collection".

Your order will be delivered to the AGM without postage or carriage costs. (This arrangement is ideal for large or heavy items such as roof signs, magnetic signs, jackets, etc!)

## Whatever Happened to the Last Treasurer?

Jack, G4PIJ

Objective within RAYNET now being just 'Chelsea Pensioner' Wimborne Group, at Zone 7 meeting call from Brian G1HFY North Wiltshire Controller for help at Cirencester 3 day horse event on the Friday as most Wiltshire members will be at their respective 'salt mines'. He apologised for the day being rather long for such aged folk, Jean R1941 and self) starting around 6am finish (hopefully) by 5pm.

Morning incident, mini-stampede by heifers ahead of riders making for narrow exit gate onto road. Quick thinking Jean closed gate but riders at gallop caught up cattle, diverting them into hedgerow causing horses to panic! No animal damage but riders disturbed.

During the morning road traffic had increased and several 'horse crew' members servicing nags with cooling bottles of water on their necks mentioned a quite serious accident at that place last year. They felt all horse crews should be on the far side of the road to service horses and riders. However one route was on the road for a short while before a blind bend and car drivers were ignoring caution signs 'horses on road'. About 4pm near miss by a car - nobody able to read numberplate, and panic stricken horse and rider finished in hedge, 2nd. Incident, is there to be a third?

In base by 5.30pm demolish hamburger and a pint of tea. At van door G1HFY said 'Hae having to ask you but could you do about an hour at post 7? The zone 7 Co-ordinator Chris G8RXA has to get Geoff G6WQU home PDQ for a family commitment. OK but major RTA closed only road exit from site, access to be via woodland tracks, should make it in 10 minutes. Chris led way, lumber behind in campervan. 100 metres from site track barred by immovable fallen tree, alternative leads to gate onto public road. New gate, firmly padlocked and anti-theft devise prevents lift-off. Radio for key, arrive by motorbike half hour later. Stayed at post an hour returned to campsite 9pm having checked through one rider, and seen the final two competitors checked through by our relief. Total time on duty nearly 15 hours, not bad for two 75 years+

a bit! Moral of story (1) make sure one has bolt cutters in grab bag although landowner might not approve if used and (2) it would have been handy to have a spare bulldozer!

In all, 4 outside groups assisted. We wonder what Ian G6BJJ, controller West Devon can produce for Navy Days in Plymouth at the end of August, however we look forward to that event.

### Reducing registration paperwork Jim G1HUL

For those who are connected to the Internet, you can significantly reduce the amount of paperwork that needs to be submitted and increase the accuracy of your members details by updating information via the website.

Up until now, you were required to submit a REG-02 (application to register / re-register a member) for every member being registered or re-registered.

However, you can now dispense with all the REG-02's for existing members and, instead, update the details on-line. All Group officers have access to edit all details for the members of their Group via the RAYNET website.

So, what do we need to do, to reregister under this alternative procedure?

It's very simple:

- \* Update details on-line for all members re-registering (under "Member management" in the RAYNET members area [www.raynet-uk.net/members](http://www.raynet-uk.net/members))

- \* Compile a one-page summary of call signs and names

- \* Complete a REG-01 (registration summary)

- \* Submit the following to registrations:

- o REG-01

- o Photos

- o Summary list

- o Payment

If you have any new members, you still need to complete a REG-02 and REG-06/06J (member's agreement) as the system will not yet know about them.

The benefits are:

- \* Reduced paperwork from the Group

- \* Reduced keying required by the registrations team

- \* Increased accuracy of information

- \* Reduced postage costs all round

You may also be interested to know that you can update member details at any time, thus keeping their on-line record as accurate as possible.

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**Clarkston**  
**GLASGOW G76 7HG**  
**supplies@raynet-uk.net**

| Ref No. | Description   | Retail Price | P & P Ref | Banding |
|---------|---|--------------|-----------|---------|
| 1101    | Yellow High Visibility Jacket with clear badge pockets but no badges - S              | £53.00       | £6.00     | K       |
| 1102    | Yellow High Visibility Jacket with clear badge pockets but no badges- M               | £53.00       | £6.00     | K       |
| 1103    | Yellow High Visibility Jacket with clear badge pockets but no badges - L              | £53.00       | £6.00     | K       |
| 1104    | Yellow High Visibility Jacket with clear badge pockets but no badges - XL             | £53.00       | £6.00     | K       |
| 1105    | Yellow High Visibility Jacket with clear badge pockets but no badges - XXL            | £53.00       | £6.00     | K       |
| 1106    | Yellow High Visibility Jacket with clear badge pockets but no badges - XXXL           | £61.00       | £6.00     | K       |
| 1107    | Yellow High Visibility Jacket with clear badge pockets but no badges - XXXXL          | £61.00       | £6.00     | K       |
|         |   |              |           |         |
| 1111    | Yellow High Visibility Sleeveless Waistcoat with RAYNET badges front & back - S       | £17.50       | £1.75     | E       |
| 1112    | Yellow High Visibility Sleeveless Waistcoat with RAYNET badges front & back - M       | £17.50       | £1.75     | E       |
| 1113    | Yellow High Visibility Sleeveless Waistcoat with RAYNET badges front & back - L       | £17.50       | £1.75     | E       |
| 1114    | Yellow High Visibility Sleeveless Waistcoat with RAYNET badges front & back - XL      | £17.50       | £1.75     | E       |
| 1115    | Yellow High Visibility Sleeveless Waistcoat with RAYNET badges front & back - XXL     | £17.50       | £1.75     | E       |
| 1116    | Yellow High Visibility Sleeveless Waistcoat with RAYNET badges front & back - XXXL    | £17.50       | £1.75     | E       |
| 1117    | Yellow High Visibility Sleeveless Waistcoat with RAYNET badges front & back - XXXXL   | £17.50       | £1.75     | E       |
|         |   |              |           |         |
| 1121    | Yellow High Visibility Long Sleeved Waistcoat with RAYNET badges front & back - S     | £22.85       | £2.00     | F       |
| 1122    | Yellow High Visibility Long Sleeved Waistcoat with RAYNET badges front & back - M     | £22.85       | £2.00     | F       |
| 1123    | Yellow High Visibility Long Sleeved Waistcoat with RAYNET badges front & back - L     | £22.85       | £2.00     | F       |
| 1124    | Yellow High Visibility Long Sleeved Waistcoat with RAYNET badges front & back - XL    | £22.85       | £2.00     | F       |
| 1125    | Yellow High Visibility Long Sleeved Waistcoat with RAYNET badges front & back - XXL   | £22.85       | £2.00     | F       |
| 1126    | Yellow High Visibility Long Sleeved Waistcoat with RAYNET badges front & back - XXXL  | £22.85       | £2.00     | F       |
| 1127    | Yellow High Visibility Long Sleeved Waistcoat with RAYNET badges front & back - XXXXL | £22.85       | £2.00     | F       |
|         |   |              |           |         |
| 1301    | Reflective 'RAYNET' badge - S   | £2.25        | £0.75     | A       |
| 1302    | Reflective 'RAYNET' badge - L   | £3.90        | £0.75     | A       |
| 1303    | Reflective "RAYNET Controller" badge - S  | £3.00        | £0.75     | A       |
| 1304    | Reflective 'RAYNET' Controller' badge - L   | £5.35        | £0.75     | A       |
| 1311    | Embroidered round 'Network' logo sew on badge   | £2.50        | £0.75     | A       |
| 1312    | Lapel Badge, stud fixing, with round 'Network' logo                                   | £1.10        | £0.75     | A       |
| 1321    | Epaulettes - 'RAYNET' - Pair  | £7.25        | £0.75     | A       |
| 1322    | Epaulettes - 'Controller' - Pair  | £11.15       | £0.75     | A       |
|         |   |              |           |         |
| 1331    | Window Sticker - 100mm round 'Network' logo, black on yellow                          | £0.90        | £0.75     | A       |
| 1332    | Window Sticker, small, - Text 'RAYNET', black on yellow, 200mm x 60mm                 | £1.00        | £0.75     | A       |
| 1333    | Window Sticker, large, - Text 'RAYNET', black on yellow, 500mm x 125mm                | £1.35        | £0.75     | A       |
| 1336    | Car Window Panel with suckers   | £9.75        | £1.75     | D       |
| 1338    | Sign for mounting on vehicle roof rack, double sided, white on blue/red               | £20.25       | £4.50     | J       |
| 1341    | Magnetic Sign - Text 'RAYNET' white on blue, 310mm x 100mm, each                      | £6.00        | £2.00     | E       |
| 1342    | Magnetic Sign - Text 'Comms by RAYNET' black on yellow, 310mm x 100mm, each           | £6.00        | £2.00     | E       |
| 1351    | Flag 3'x2' dye printed, black Network logo on yellow polyester roped & toggled        | £42.00       | £1.75     | D       |
| 1352    | Network Logo Sticker, large - 280mm black on yellow, strong adhesive                  | £4.45        | £1.25     | B       |

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**October 2004**

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**85 Eastwoodmains Road**  
**Clarkston**  
**GLASGOW G76 7HG**  
**supplies@raynet-uk.net**

| Ref No. | Description  | Retail Price | P & P Ref | Banding |
|---------|--|--------------|-----------|---------|
| 1401    | Acrylic V Neck Nato Jumper embroidered round Network logo - S        | £15.55       | £2.75     | G       |
| 1402    | Acrylic V Neck Nato Jumper embroidered round Network logo - M        | £15.55       | £2.75     | G       |
| 1403    | Acrylic V Neck Nato Jumper embroidered round Network logo - L        | £15.55       | £2.75     | G       |
| 1404    | Acrylic V Neck Nato Jumper embroidered round Network logo - XL       | £15.55       | £2.75     | G       |
| 1404    | Acrylic V Neck Nato Jumper embroidered round Network logo - XXL      | £15.55       | £2.75     | G       |
| 1406    | Acrylic V Neck Nato Jumper embroidered round Network logo - XXXL     | £15.55       | £2.75     | G       |
|         |  |              |           |         |
| 1411    | Acrylic V Neck Nato Jumper embroidered text 'RAYNET' - S             | £15.55       | £2.75     | G       |
| 1412    | Acrylic V Neck Nato Jumper embroidered text 'RAYNET' - M             | £15.55       | £2.75     | G       |
| 1413    | Acrylic V Neck Nato Jumper embroidered text 'RAYNET' - L             | £15.55       | £2.75     | G       |
| 1414    | Acrylic V Neck Nato Jumper embroidered text 'RAYNET' - XL            | £15.55       | £2.75     | G       |
| 1415    | Acrylic V Neck Nato Jumper embroidered text 'RAYNET' - XXL           | £15.55       | £2.75     | G       |
| 1416    | Acrylic V Neck Nato Jumper embroidered text 'RAYNET' - XXXL          | £15.55       | £2.75     | G       |
|         |  |              |           |         |
| 1441    | Sweatshirt, navy, with embroidered round Network logo in gold - S    | £16.15       | £2.25     | F       |
| 1442    | Sweatshirt, navy, with embroidered round Network logo in gold - M    | £16.15       | £2.25     | F       |
| 1443    | Sweatshirt, navy, with embroidered round Network logo in gold - L    | £16.15       | £2.25     | F       |
| 1444    | Sweatshirt, navy, with embroidered round Network logo in gold - XL   | £16.15       | £2.25     | F       |
| 1445    | Sweatshirt, navy, with embroidered round Network logo in gold - XXL  | £16.15       | £2.25     | F       |
| 1446    | Sweatshirt, navy, with embroidered round Network logo in gold - XXXL | £16.15       | £2.25     | F       |
|         |  |              |           |         |
| 1451    | Sweatshirt, navy, with embroidered text 'RAYNET' in gold - S         | £16.15       | £2.25     | F       |
| 1452    | Sweatshirt, navy, with embroidered text 'RAYNET' in gold - M         | £16.15       | £2.25     | F       |
| 1453    | Sweatshirt, navy, with embroidered text 'RAYNET' in gold - L         | £16.15       | £2.25     | F       |
| 1454    | Sweatshirt, navy, with embroidered text 'RAYNET' in gold - XL        | £16.15       | £2.25     | F       |
| 1455    | Sweatshirt, navy, with embroidered text 'RAYNET' in gold - XXL       | £16.15       | £2.25     | F       |
| 1456    | Sweatshirt, navy, with embroidered text 'RAYNET' in gold - XXXL      | £16.15       | £2.25     | F       |
|         |  |              |           |         |
| 1461    | Polo Shirt, navy, with embroidered round Network logo in gold - S    | £14.95       | £2.25     | F       |
| 1462    | Polo Shirt, navy, with embroidered round Network logo in gold - M    | £14.95       | £2.25     | F       |
| 1463    | Polo Shirt, navy, with embroidered round Network logo in gold - L    | £14.95       | £2.25     | F       |
| 1464    | Polo Shirt, navy, with embroidered round Network logo in gold - XL   | £14.95       | £2.25     | F       |
| 1465    | Polo Shirt, navy, with embroidered round Network logo in gold - XXL  | £14.95       | £2.25     | F       |
| 1466    | Polo Shirt, navy, with embroidered round Network logo in gold - XXXL | £14.95       | £2.25     | F       |
|         |  |              |           |         |
| 1471    | Polo Shirt, navy, with embroidered text 'RAYNET' in gold - S         | £14.95       | £2.25     | F       |
| 1472    | Polo Shirt, navy, with embroidered text 'RAYNET' in gold - M         | £14.95       | £2.25     | F       |
| 1473    | Polo Shirt, navy, with embroidered text 'RAYNET' in gold - L         | £14.95       | £2.25     | F       |
| 1474    | Polo Shirt, navy, with embroidered text 'RAYNET' in gold - XL        | £14.95       | £2.25     | F       |
| 1475    | Polo Shirt, navy, with embroidered text 'RAYNET' in gold - XXL       | £14.95       | £2.25     | F       |
| 1476    | Polo Shirt, navy, with embroidered text 'RAYNET' in gold - XXXL      | £14.95       | £2.25     | F       |

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| Ref No. | Description   | Retail Price | P & P Ref | Banding |
|---------|---|--------------|-----------|---------|
| 1501    | Pilot Shirt, blue or white, with embroidered round Network logo - Short Sleeves - 15"   | £11.70       | £2.25     | F       |
| 1502    | Pilot Shirt, blue or white, with embroidered round Network logo - Short Sleeves - 15.5" | £11.70       | £2.25     | F       |
| 1503    | Pilot Shirt, blue or white, with embroidered round Network logo - Short Sleeves - 16"   | £11.70       | £2.25     | F       |
| 1504    | Pilot Shirt, blue or white, with embroidered round Network logo - Short Sleeves - 16.5" | £11.70       | £2.25     | F       |
| 1505    | Pilot Shirt, blue or white, with embroidered round Network logo - Short Sleeves - 17"   | £11.70       | £2.25     | F       |
| 1506    | Pilot Shirt, blue or white, with embroidered round Network logo - Short Sleeves - 17.5" | £11.70       | £2.25     | F       |
| 1507    | Pilot Shirt, blue or white, with embroidered round Network logo - Short Sleeves - 18"   | £11.70       | £2.25     | F       |
| 1508    | Pilot Shirt, blue or white, with embroidered round Network logo - Short Sleeves - 18.5" | £11.70       | £2.25     | F       |
| 1511    | Pilot Shirt, blue or white, with embroidered round Network logo - Long Sleeves - 15"    | £12.25       | £2.25     | F       |
| 1512    | Pilot Shirt, blue or white, with embroidered round Network logo - Long Sleeves - 15.5"  | £12.25       | £2.25     | F       |
| 1513    | Pilot Shirt, blue or white, with embroidered round Network logo - Long Sleeves - 16"    | £12.25       | £2.25     | F       |
| 1514    | Pilot Shirt, blue or white, with embroidered round Network logo - Long Sleeves - 16.5"  | £12.25       | £2.25     | F       |
| 1515    | Pilot Shirt, blue or white, with embroidered round Network logo - Long Sleeves - 17"    | £12.25       | £2.25     | F       |
| 1516    | Pilot Shirt, blue or white, with embroidered round Network logo - Long Sleeves - 17.5"  | £12.25       | £2.25     | F       |
| 1517    | Pilot Shirt, blue or white, with embroidered round Network logo - Long Sleeves - 18"    | £12.25       | £2.25     | F       |
| 1518    | Pilot Shirt, blue or white, with embroidered round Network logo - Long Sleeves - 18.5"  | £12.25       | £2.25     | F       |
| 1521    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Short Sleeves - 15"        | £11.70       | £2.25     | F       |
| 1522    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Short Sleeves - 15.5"      | £11.70       | £2.25     | F       |
| 1523    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Short Sleeves - 16"        | £11.70       | £2.25     | F       |
| 1524    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Short Sleeves - 16.5"      | £11.70       | £2.25     | F       |
| 1525    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Short Sleeves - 17"        | £11.70       | £2.25     | F       |
| 1526    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Short Sleeves - 17.5"      | £11.70       | £2.25     | F       |
| 1527    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Short Sleeves - 18"        | £11.70       | £2.25     | F       |
| 1528    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Short Sleeves - 18.5"      | £11.70       | £2.25     | F       |
| 1531    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Long Sleeves - 15"         | £12.25       | £2.25     | F       |
| 1532    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Long Sleeves - 15.5"       | £12.25       | £2.25     | F       |
| 1533    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Long Sleeves - 16"         | £12.25       | £2.25     | F       |
| 1534    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Long Sleeves - 16.5"       | £12.25       | £2.25     | F       |
| 1535    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Long Sleeves - 17"         | £12.25       | £2.25     | F       |
| 1536    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Long Sleeves - 17.5"       | £12.25       | £2.25     | F       |
| 1537    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Long Sleeves - 18"         | £12.25       | £2.25     | F       |
| 1538    | Pilot Shirt, blue or white, with embroidered text "RAYNET" - Long Sleeves - 18.5"       | £12.25       | £2.25     | F       |

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| <b>Ref No.</b> | <b>Description</b>  | <b>Retail Price</b> | <b>P &amp; P Ref</b> | <b>Banding</b> |
|----------------|---|---------------------|----------------------|----------------|
| 1601           | Fleece, grey, with embroidered round Network logo in gold - S               | £27.90              | £4.25                | H              |
| 1602           | Fleece, grey, with embroidered round Network logo in gold - M               | £27.90              | £4.25                | H              |
| 1603           | Fleece, grey, with embroidered round Network logo in gold - L               | £27.90              | £4.25                | H              |
| 1604           | Fleece, grey, with embroidered round Network logo in gold - XL              | £27.90              | £4.25                | H              |
| 1605           | Fleece, grey, with embroidered round Network logo in gold - XXL             | £27.90              | £4.25                | H              |
|                |   |                     |                      |                |
| 1611           | Fleece, grey, with embroidered text "RAYNET" in gold - S                    | £27.90              | £4.25                | H              |
| 1612           | Fleece, grey, with embroidered text "RAYNET" in gold - M                    | £27.90              | £4.25                | H              |
| 1613           | Fleece, grey, with embroidered text "RAYNET" in gold - L                    | £27.90              | £4.25                | H              |
| 1614           | Fleece, grey, with embroidered text "RAYNET" in gold - XL                   | £27.90              | £4.25                | H              |
| 1615           | Fleece, grey, with embroidered text "RAYNET" in gold - XXL                  | £27.90              | £4.25                | H              |
|                |   |                     |                      |                |
| 1701           | Tie, navy, with round 'Network' logo in white                               | £7.25               | £1.25                | B              |
| 1702           | Headscarf, navy, with round 'Network' logo in white                         | £6.00               | £0.75                | A              |
| 1703           | Baseball Cap, black, with round Network logo embroidered in gold            | £5.60               | £1.50                | C              |
| 1704           | Baseball Cap, black, with text 'RAYNET' embroidered in gold                 | £5.60               | £1.50                | C              |
| 1801           | Transparent ID badge holder with clip                                       | £1.65               | £0.75                | A              |
| 1802           | Keyring with leather fob with round 'Network' logo                          | £3.10               | £0.75                | A              |
|                |   |                     |                      |                |
| 1821           | 18 amp RAYNET standard connectors - Pack of 10 pairs                        | £8.35               | £1.50                | C              |
| 1831           | Emergency Cone Light with gravity switch, amber LEDs                        | £5.60               | £2.00                | E              |
| 1851           | Fold-over yellow clipboard with round 'Network' logo printed in black       | £7.25               | £2.75                | G              |
| 1852           | Fold-over yellow clipboard with '50 Years of Service' logo printed in black | £7.25               | £2.75                | G              |
|                |   |                     |                      |                |
| 1861           | PALight 4 function palm size torch with '50 Years of Service' logo          | £12.25              | £1.50                | C              |
| 1871           | '50 Years of Service' white mugs  | £4.50               | £2.00                | E              |

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