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Club News and Views

Editorial

Martyn Phillips, G3RFX

Jane and the Mini-skirted Maidens are currently working overtime to analyse and evaluate the responses to our Questionnaire in the January *Digest*. From which you'll gather that they've had a fair number of responses, but ideally they could do with a few more. Which is why I've repeated those 10 questions on page 20 of this *Digest*. Do let us know what you think, if you haven't already done so.

You will see that there is no 'President's Patter' in this *Digest*. This is because Neville is currently on a trip to Antarctica. No amateur radio activity planned from down that way, as far as I'm aware – although be prepared for plenty of penguin photographs in the next *Digest* centrefold.

Staying with our regular contributors, this time Steve/9M6DXX's 'Borneo Bulletin' kicks off on page 11. He was also telling me that he will miss the deadline for the May *Digest*, seeing as he'll be away on the T32 IOTA DXpedition at around that time.

"That being the case," Steve went on, "I think this is a good opportunity for me to close the 'Borneo Bulletin' altogether. As I intimated last year, it is getting harder to find original material to write about with each issue and, sadly, my local noise problem is so bad that I am not as active as I would like to be - although I do listen a fair amount and usually keep an eye on the Cluster to see what I am missing. I will of course continue to contribute occasional items from time to time."

Thanks, Steve, for your sterling efforts over the past four years and (as I originally announced it in the May 2006 *Digest*) 'that regular look at goings-on on the bands from

a rather different, non-European perspective'. Meanwhile I do indeed look forward to the occasional contribution from you – as and when your other commitments permit.

Talking of which, the Mini-skirted Maidens have been chasing up a few DXpedition write-ups (part of the deal if you accept CDXC funding for such things...). And who can resist their charms? Which is why we have no fewer than seven DXpedition write-ups this time round, which should keep even the most ardent of travelogue readers more than happy.

In fact as *Digest* Editor, for my sins, I confess to being a trifle envious on receiving some of these contributions. Yes, Tahiti, Niue, Easter Island, Conway Reef, you name it... when the furthest I've been recently, dammit, is Weston-super-Mare.

At which point I have a brief request from Secretary Gordon, G3USR. He asks CDXC members who purchase from *Digest* advertisers to ensure that they credit the *Digest* advert as being the reason why they chose this particular supplier in the first place. That sounds like an excellent idea to me, Gordon.

Anyway, with a bit of luck this *Digest* should be hitting the doormats in good time for our Annual Dinner at Wyboston on Saturday, 20 March. Needless to say, it should be great! And this dinner is now sold out, I'm afraid. Although, to be honest, I'm not afraid at all. I'm very glad that it sold out so quickly. Meanwhile I very much look forward to seeing you there!

73 Martyn, G3RFX

Chairman's Chat

Chris Duckling, G3SVL

At last! There seems to be a small awakening on the HF bands. Comments of 'Ws on 12m – booming' are being posted on the CDXC Reflector – and not before time. It's amazing to think that the peak of cycle 23 was March/April 2000 – a full 10 years ago! Of course cycle 23 had a very long tail, but it only peaked at an SSN of 120 – a little over half of the fabled peak of cycle 19 back in 1958.

And that set me thinking: what was I doing during all these peaks? I missed cycle 19 by being too young (!) but started my SWLing just as it was in decline. I received my licence at the start of cycle 20; but cycle 20 was pretty poor, with a peak lower than cycle 23 in fact. Cycles 21 and 22 were not that bad, but what was I doing during then – building my career and starting a family! So the message must be to enjoy every sunspot – you never know what the next cycle will hold.

Despite the low sunspots there has been some quite remarkable propagation – or is it that technology and understanding has moved on so much since the 1950s that we can achieve more in these poorer conditions? I think so.

Technology, however, comes at a price. The advent of the cluster and of CW skimmer is seen to be the root of much evil when it comes to pile-up behaviour. This of course is only half of the story. The cluster has reduced the skill needed to work a DXpedition – you don't have to search for the DXpedition, someone else does that for you; and you don't need to work out where to call if you follow the QSX messages that others post – or do you? I think this is a big part of the problem. In the days BC (before cluster) you had to find the DX yourself, and if you couldn't hear it there would be no

point in transmitting. But hang on a minute – CDXC was started by a group of DXers who used local VHF channels and telephones to alert each other of DX on the bands. So what's the difference? Was it the calibre of those early CDXC members, or is it education, or our instant-gratification society or is it a lack of respect for our fellow operator? Probably a bit of each. There certainly seems to be a 'work it at all costs' mentality with some persistent callers.

CDXC has been trying to work out what it can do. As you know we sent out the relevant sections of the ARRL operating guide to all members and we insist our sponsored DXpeditions adopt those guidelines from the DXpedition end. There is clearly more that we can do and we are always open to suggestions – and, yes, I am following the thread(s) on DQRM and operating behaviour on the CDXC Reflector.

I am delighted to hear that the Annual Dinner sold out within less than a month and I look forward to seeing many of you there. I would also remind those attending that Michael, G7VJR, will be giving a demonstration of the CMIS system and our new website (see elsewhere in this *Digest*). This will take place in the afternoon from 3pm onwards – and there is tea and coffee available all day, with the bar open from noon until midnight. It promises to be a great event again.

And finally, if you have not already done so, please put Saturday, July 17th, in your diary for the AGM and Summer Social at Neville's QTH.

73 and good DX Chris, G3SVL

Introducing the new CDXC website

Michael Wells, G7VJR

In the last *Digest* we announced the new CDXC Membership Information System (CMIS), which will dramatically streamline the Club's operations. This project is progressing according to plan and there will be a grand opening on 2 April 2010, as well as an afternoon session by Michael, G7VJR, at the Annual Dinner on 20 March 2010.

One of the biggest benefits to members of the new CMIS system is that the Club will have a brand-new website. In fact our new site is already up and running, with many new features including an excellent DX news page maintained by Tim, MØURX, and Charles, MØOXO. While there is still a month to go before the launch, members are welcome to take a sneak preview of the new site between now and 2 April 2010.

The new website address is currently: www2.cdxc.org.uk (please note the extra number '2'). Our existing site will remain visible at www.cdxc.org.uk until 2 April, after which the CMIS web site will take over the www.cdxc.org.uk site.

Trying out the new CDXC website

To get started open this address in your browser: <http://www2.cdxc.org.uk/>

Use of the new site, like the current website, requires members to log in in order to access members-only features such as the CDXC reflector. Logging in also provides personalised options and membership renewal features. Members may log in using the box at the bottom of the menus on the left. To log in to the CDXC site you will require:

- Your registered e-mail address (not your callsign!)
- Your password

If you are accessing your account for the first time, your password has not yet been initialised. In this situation simply click on the 'Lost Password' button, which serves as a way to reset your password.

Once you have requested a password, this will be e-mailed to your account to ensure that it is not disclosed to anyone else. You will need to ensure that the password e-mail is not blocked as spam. The e-mail should arrive promptly and give you instant access to log in to the CDXC website.

Problems creating your password?

In order to create a password, your e-mail address is used to identify you. Therefore, the e-mail address you supply must be the same e-mail address as is held on record in the membership database. If the membership database contains the wrong e-mail address, or if you have not previously provided an e-mail address and no record exists, then you will not be able to request a password.

In this situation, the membership database needs to be updated with your current e-mail address. You will need to contact Tony, G4LDL, by e-mailing sec@cdxc.org.uk. Once your records have been updated, you can then create a new password, as above.

How to change your options

After logging into the CDXC website your personal profile is available in the same area where the log-in box was previously displayed. There is a link titled 'View

Profile' which allows you to open your account settings. From this page there are a number of options.

- Membership renewal options
- Your 'directory profile', which is your personal page and an optional photo, as displayed on the Member Directory
- Privacy options, providing the possibility to hide your membership in the member directory if preferred
- E-mail subscriptions, eg messages sent to you related to 'for sale' adverts or reflector activity (note - this is not related to the existing Yahoo reflector)
- Photo albums, allowing you to upload pictures to your account which will be visible to other members.

Notice that on each part of the profile pages a button appears above the details labelled 'Edit profile'. This button allows any options on that particular part of your profile to be edited.

We encourage you to explore the new website and report your findings to the Committee. Even though the new website is

not yet live, we are particularly keen to ensure we have the right e-mail address for all members, and we are grateful for your help updating records where required.

Contact addresses

Passwords and e-mail address updates:

Tony, G4LDL sec@cdxc.org.uk

General website matters:

Michael, G7VJR michael@g7vjr.org

News and DX info for the new website:

Tim, MØURX m0urx@bopenworld.com

New Member

CDXC offers a warm welcome to the following new member:

<i>Call</i>	<i>Name</i>	<i>Location</i>
G8ROG	Alison Johnston	Thames Valley

Chiltern DX Club - Aims and Objectives

To promote HF operating, to encourage excellence, particularly in DXing and contest operating, through mutual assistance and by encouraging support of DXpeditions, the issue of achievement awards, or by whatever other means is deemed to be appropriate.

Membership Full details are available from the Secretary.

Subscription £18.00 for UK members, £24.00 for overseas members (US\$48 or 40 Euros). New members joining between 1 January and 30 June pay 50% of the annual subscription. Subscriptions are due on 1 July of each year, and should be sent to the Treasurer.

Digest Published six times per year. Articles for publication should be sent to the Editor by the published deadline. Please note that views expressed in the Digest are not necessarily those of the Editor or of the Committee.

Website <http://www.cdxc.org.uk/>

CDXC Annual Dinner 2010

Saturday, 20 March 2010 at 7:30pm, Wyboston Lakes, Bedfordshire

**After-dinner speaker: Ken Cheetham, G4RWD
'The Ofcom Baldock Monitoring Station'**

[Please note: the Annual Dinner is now sold out, so the following is for reference purposes only for those of you who have already booked. Ed.]

The CDXC 2010 Annual Dinner will be held at the Waterfront Centre, Wyboston Lakes, Great North Road, Wyboston, Bedfordshire, MK44 3AL (as last year and for the RSGB Convention). Wyboston Lakes are located at the junction of the A1 and the A428.

Wyboston Lakes is the venue that hosted us very successfully in 2008 and again last year. We will have the same private room and this year we'll be entertained after dinner by Ken Cheetham, G4RWD, who is going to talk about the Ofcom Baldock Monitoring Station. With the recent debate and controversy about DQRM and the need for HF DF facilities, it will be interesting to hear Ken's views on what technology can offer!

The Dinner is again 7pm for 7:30. However, as the afternoon event was so successful last year, we are running it again this year with another informal presentation. This will be provided by Michael, G7VJR, who will demonstrate CMIS, the new CDXC Membership Information System. So why not come along any time from 3pm to get a flavour of the new system and do some pre-socialising before the main event? Tea and coffee will be available all day and the bar will be open from noon until midnight. The Annual Dinner is one of the two social events in the CDXC calendar and certainly not to be missed.

Overnight accommodation is available at the **Wyboston Lakes**. Book direct on (0845) 230 0666 and quote 'CDXC'. The

room rate is £60 (up to two people) with breakfast an extra £11 per head.

Alternative accommodation is available at the **Premier Inn** across the road from the Wyboston Centre main entrance. The current rate is £50 per room (up to two people) with breakfast £7.50 extra per head. Book direct on (0870) 990 6314 or online at www.premierinn.com and select 'St Neots (A1/Wyboston)'. Or at the **Travelodge** two miles south on the A1. Currently on offer at £29 per room, breakfast extra (Little Chef). Book direct on (0871) 984 6010 or online at: www.travelodge.co.uk and select 'Bedford Wyboston'.

If you have any other questions please contact Gordon, G3USR, at sec@CDXC.org.uk or by telephone on (01572) 737774.

CDXC
CHILTERN DX CLUB
The UK DX Foundation

DX an' all that

Don Field, G3XTT *don@g3xtt.com*

It does look as though we are finally getting an upturn in solar activity and as I write this there are plenty of reports of DX on 12m and, to a lesser extent, 10m. Hopefully this isn't just another false dawn but an indication that the new cycle is properly under way (how many times have we said that over the past couple of years?). To help things along there were some nice expeditions early in the year, such as VP8DMN, TX3D, TX4T, 9XØCW and the like. Best news for me personally was that Kermadec will be activated in November by a German team, essentially the same team which did such a great job from Willis Island last year. Kermadec is, in many ways, an easy shot from the UK, being more or less at our antipode. The problem has been that expeditions have been very limited in access to the island. It does look as though this time will be different and I certainly look forward to filling several missing band slots.

But we don't have to wait until autumn for new ones, as there are quite a few useful expeditions already announced for the coming months (see the Calendar). Which is just as well. I don't know about CDXC members as a whole, but I am very much looking forward not just to the DX but to the prospect of some decent weather. This seems to have been a long, miserable winter with the low-band DX about the only cheer on those dark, damp and, all too often, snowy days.

That said, I did get up to Riga for the Contest Club Finland event, as I mentioned last time, along with Rob, GM3YTS, and Lionel, G5LP. The daytime temperature was around minus 14, while at night it dropped to about minus 24! But the company was good, with attendees from OH, SM, LY, YL, ES and further afield. It's always fun to

swap DXing and contesting stories and the trip wasn't expensive, with a cheap Ryanair flight to Riga, just a few Euros for the bus to the hotel, and 45 Euros per night bed and breakfast (Latvia has its own currency, but the Euro is also accepted everywhere). And, yes, we did get to do some sightseeing too (the old town is a UNESCO World Heritage Site and well worth a visit).

By the way, if you haven't seen Joe/W1JR's End-of-Year Review of 2009, you need to beg, borrow or steal a copy. They are always worth reading and his report for 2009 is his most extensive yet. It appeared in the Daily DX (of course – Great publication Bernie!).

Most Wanted

The DX Magazine's Most Wanted survey was published recently. I listed the main findings in my RadCom column. Of the high ones, Navassa must be a possibility at some stage, after the favourable outcome of the Desecheo K5D operation, but I am not hearing any news as yet. Fingers crossed for those of you who need it. ZS8, at number 3, is due to be activated soon, as one of the new team on the island is an amateur. Good luck with that one. I am fortunate to have filled all the band slots I needed when Chris, ZS6RI, was there as ZS8IR over the 1996/97 season – I find it hard to believe it was so long ago! Of the others in the Top 25, there are no announced operations at this time, but no doubt some of them at least are under serious scrutiny by would-be DXpeditioners. Many are rare because they are off the beaten track (Heard Island, Bouvet, for example) but an increasing number because of access restrictions (not least the 'other' (now that Glorioso has been 'done') French Indian Ocean Islands – FR/J, FR/T, FT5W, FT5W. My brother was

telling me recently he had been visiting friends who were showing photos from their latest cruise, which took in Macquarie, Campbell Island, The Snares (south of New Zealand), etc. The irony is that many of these islands are indeed on the regular cruise ship itinerary, but overnighing is strictly prohibited. It reminds me of the ZL9CI operation from Campbell Island, which did get permission for setting up on the island and staying on shore, but only after protracted negotiations. Trey, N5KO, who was on that trip, tells me he thought he was hallucinating when, towards the end of a long operating stint, he looked out of the window of the old weather station building they were using as a shack, only to see a little old lady peering in at him! Turned out a cruise ship had just put a bunch of passengers ashore.

Incidentally, the January issue of the Clipperton DX Club (the 'other' CDXC) newsletter is available (in English) at www.cdxc.org/PJ/201001_Bulletin_EN.pdf. There are interesting articles on the recent FT5GA - Glorioso and 3D2ØCR - Conway Reef DXpeditions, plus others.

Awards

Effective January 1, 2010 K1BV's DX Awards Website has made access to the on-line DX Awards Directory available free to all. All 3,300 awards are available at www.dxawards.com. This is very welcome news for all awards chasers and Ted is to be thanked for this move, given that he must put a huge amount of work into keeping the data current.

Do I need a linear amplifier?

There seem to be quite a few UK amateurs who think that linear amplifiers are for wimps and that anything more than 100 watts (or 5 watts in the case of the hard-core QRPers) isn't necessary. There are also occasional 'letters to the editor' or posts on the reflectors to the effect that RadCom and others should not accept adverts for

amplifiers that are capable of more than 400 watts.

First comment would be, "Does that mean that car companies should not advertise cars that can go at more than 70mph?" Or indeed, are the government wasting our money when they build a bridge that can take the projected traffic levels but with, say, a 50% margin of safety built in? Whatever happened to over-engineering so that a project or piece of equipment will last beyond its guarantee period? (I note that the Menai, Forth Railway and other Victorian bridges are still going strong, whereas some recent suspension bridges including the Forth Road Bridge are in serious danger of being closed down)

My first linear was a typical sweep-tube model which, on a good day would, indeed, deliver 400 watts. But run it for an extended period in a contest, especially if using speech processing, or try to use it on RTTY, and it would quickly become dangerously hot. It simply wasn't designed for those sorts of duty cycles. Alpha and some other linear manufacturers advertise their product as meeting the specification in a 'brick on key' situation – in other words you can run continuous carrier and it will keep happily working away.

But most linears have to be de-rated significantly if running, for example, one of the increasingly popular datamodes. That, along with the fact that our 400 watt power limit is at the antenna rather than at the output of the rig (a 50m length, not untypical, of UR67, say, loses not insignificant amounts of power at 28 MHz), suggests that a linear rated at around the 1KW level is most appropriate for UK use. My Yaesu Quadra can run legal output for 48 hours without getting hot, even in a datamodes contest. I am much more comfortable with that! I was seriously impressed by the 70cm linear featured in a recent ATV talk at the Reading Club. This was designed to run 400 watts output 24/7 in ATV repeater use. It made the typical

4CX250 70cms amplifier look quite pathetic.

But why use a linear amplifier at all? Certainly, when 10m is wide open, for example (and don't we pine for those halcyon days?), 6dB more or less is pretty much irrelevant. But on marginal paths, whether on 10m or Top Band, 6dB can make a huge difference as to whether a contact is actually viable or not. Achieving 6dB gain in the antenna is better still, as it benefits both the receive and transmit sides of the equation, but few of us are able to install Top Band antennas with 6dB gain! On the high bands, especially 10m, that extra gain, ideally from good antennas along with reasonable power levels at both ends of the path, often opens up paths that simply wouldn't work at lower power budgets, particularly some of the more interesting long-path openings, for example to the antipodes in our evening time or California early in the morning. And these, surely, are the sort of propagation opportunities that are of most interest to us as DXers. We all know we can work VK most days on 20m, for example, but can we make it on 160 or 10m at odd times and over unusual paths?

So my answer would be that any serious DXer or contester needs a linear amplifier as part of his armoury, not necessarily to use all the time (many contacts are more than viable without it) but to have for those times when it really can make the difference. Yes, it may bring additional challenges in dealing with potential EMC problems with domestic household items, but isn't that all part of our self-training?

The danger, perhaps, is in the temptation to keep increasing the drive if you are having trouble breaking the pile-up. Not only could you end up running illegal power levels but it's also all too easy, especially with a solid-state amplifier, to drive it into non-linearity and cause havoc on adjacent frequencies. Mind you, some contesters appear to want exactly that effect to keep 'their frequency' clear, but that's another story!

WSPR and All That

The flip-side of what I have been saying is that there is another way of achieving an advantage of 6dB or, indeed, significantly more. Rather than increasing power to improve S/N ratio, the trick is to be able to recover signals that were previously too weak to copy. The current crop of datamodes, WSPR (Weak Signal Propagation Reporting) being a great example, do exactly that, pulling signals out of what appears to be nothing but white noise. Is it amateur radio? Some would say not, but surely this really is what the hobby is about – finding new and more efficient ways of communicating via the ether (as against Ethernet!) and, in the process, learning more about propagation. Wasn't that what SSB did when it came along? Of course, you can just call up the other side of the world using your latest state-of-the-art handheld via your local DStar repeater, but what's the fun in that?

iPHONE (if uPhone?)

But talking of state-of-the-art boxes, I wonder what applications CDXC members are currently using on their mobile phones? My wife and I seem to be the only members of the family not to have iPhones, but their range of applications does seem to be quite amazing. From a Dixer's point of view I would imagine useful applications would include Cluster access, maybe logging, perhaps even remote control of your station when you are stuck on the train home and the DXpedition is 59 and working only G stations. Maybe someone will pen an article for the *Digest* on what these handheld miracles of engineering can do for us.

Sadly I will, once again, have to miss the CDXC Dinner due to a family commitment (it falls on our wedding anniversary and there are two significant family birthdays close to that weekend too!), but will hopefully see many of you at the AGM & SS later in the year. I have also booked for the GMDX Convention in April, which

promises an excellent programme of DX-related talks and, no doubt, some very convivial chats around the bar!

73 Don, G3XTT

Borneo Bulletin

Steve Telenius-Lowe, 9M6DXX

teleniuslowe@gmail.com

Another abbreviated 'Borneo Bulletin' this time, as for once I find myself busy with both work and DXpedition planning activities. Work, in as much as I am working on a new edition of *The RSGB Operating Manual* with co-author Don, G3XTT, and this is now nearing completion. I have been working on this, off and on, since last August and incorporating input - updates and some excellent new material - from many experts in their fields, including several from CDXC members. It has been an interesting, if very time-consuming, project.

Then the RSGB Commercial Manager asked me if I could do another book, but this one with a short deadline in order for the book to be printed and shipped to the US in time for the Dayton HamVention. I agreed, but a few days after starting work on it received an enquiry from Derek, G3KHZ, asking if I would be interested in joining his IOTA DXpedition to the South Line Islands. As you may have read elsewhere, this is planned to activate four all-time 'new ones' for IOTA in March and April: Malden Island OC-279, Starbuck Island OC-280, Caroline / Millennium Island OC-281 and Vostok Island OC-281, all in the T32 area (and all counting as Eastern Kiribati for DXCC purposes). Unfortunately two of the original team had had to pull out for various reasons, leaving three committed CW operators: Derek himself, Steve, G4EDG, and Mike, K9AJ. To try to balance the operating modes, they wanted an SSB operator.

At first I had to decline as unfortunately the overall cost was more than I could justify for a 'spur of the moment' trip (I understand it has been in the planning for two years, but this was the first I had heard of it). However, the group very kindly made me an offer I could not refuse, so I didn't - refuse, that is. What a truly marvellous hobby amateur radio is.

Other than 'mini expedition' trips to places like OC-133, 9M8 or V8 I don't think I have ever been on a DXpedition with so little lead time, and there is a lot to do to book flights from here to Manila, and Manila to Honolulu, and book overnight stays in both places, as well as organise travel insurance (quite an issue here, where very few people bother with travel insurance as they rarely travel to places where it might be necessary).

I'm looking forward to working as many CDXC members as possible from the four T32 islands this month.

T32BJ

Talking of T32, it was good to work Don, G3BJ, on Kiritimati (Christmas) Island, one of the other islands in the T32 chain, during his visit there in January. Don's signal varied from a genuine 59 on one day on 20m to 'in the noise' on most days. I heard him at reasonable strength on 17m on one day but could not get through the North Americans calling. We tried a couple of skeds on 17m at the same time as I had

heard him on two subsequent days, but to no avail – obviously conditions must have deteriorated somewhat. Surprisingly, although Don could hear me on 40m, I could not hear him on that band – surprising because I normally hear KH6 / FO etc. quite well on 40m (TX4T on Tahiti, for example, was a genuine S9 at 1015 UTC – exactly at my sunset). In the end I had to be content with just one band slot – 20m – but it was a new one for me from 9M6.

Sunspots?

Could it be that Cycle 24 is really starting now, at long last? Certainly conditions have been better over the last week or 10 days, as

I write this, than they have been since at least the autumn equinox of last year. In early 2009 there seemed to be no real peak in conditions until around the spring equinox. That it has come more than a month earlier this year I hope bodes well for a continuing improvement in propagation as we get into the northern hemisphere spring season. Certainly I hope we will have some reasonable propagation into Europe from T32 in March and April.

Gong Xi Fa Cai – a Happy Chinese New Year of the Tiger - to all members and 73 from Borneo.

Steve, 9M6DXX

CDXC LF Challenge 2010

Ladies and Gentlemen,

A reminder that 1 March marks the beginning of the CDXC LF Challenge. The aim of this is to work as many DXCC entities as possible on the 160, 80 and 40m bands during the month of March. You can submit logs online via Club Log (www.clublog.org/lfchallenge.php). Please try to do so on a regular basis as it adds an extra element of interest and a competitive edge to the proceedings.

Entries via e-mail to MOZAK@ntlworld.com or to my home address (see page 2 of this *Digest*). The closing date for entries is 7 April.

You'll find more details on the LF Challenge on the CDXC website at

www.cdxc.org.uk/awards/cdxc-lf-challenge.html

Vy 73

Jim Steel, MØZAK

CDXC Awards Manager

TX4T: Working the Polynesian Pile-ups

Nigel Cawthorne, G3TXF

The TX4T project started out initially as a tentatively planned operation from either the Marquesas (FO/m) or the Australs (FO/a). However, it proved impossible to identify a really good site on either FO/a or FO/m. A 'good site' means an easily accessible location with accommodation, with a clear sea path take-off to both Japan and Europe/USA and which has adequate beach-side clear space for multiple LF and other antennas.

Several recent excellent operations from both FO/a and FO/m (including the Polish group TX5SPA/TX5SPM, the German group TX3D from the Australs and, of course, CDXC's own Don, G3BJ, who had operated as FO/G3BJ from the Australs) had significantly reduced the demand for both entities. However 'plain old FO' is still much in demand, particularly in Europe on the low bands. Several of Europe's Top Band greats, including ON4UN, OH1XX, OZ1LO and GM3POI, reported that they had never worked FO on 160m. Although there are several resident operators in FO, the lower bands are generally ignored.

Another significant advantage of staying in FO, rather than travelling on to either FO/a or FO/m, is transport cost. Although Tahiti in FO is well served by big planes which can handle large items of luggage (including amateur antennas!), this is not the case for the onward flights to either the Australs or the Marquesas, where severe baggage size and weight limitations apply. All in all, 'plain old FO', or French Polynesia, seemed like an excellent choice of DXpedition destination.

The TX4T team members

We were four in total: Jacques, F6BEE; Phil, FO8RZ (F5PHW); Gilles, VE2TZT (F6FFM), and G3TXF.

Jacques F6BEE, whose idea the trip was, is a leading contender, having represented France several times at WRTC.

G3TXF's involvement with the project started with a chance chat with Jacques, F6BEE, at Friedrichshafen in June 2009. Jacques had already been doing some preparatory work for an operation from the Marquesas, FO/m. For several months afterwards work was focussed on locating a good site on initially the Marqueses and latterly the Australs.

During this time Phil, FO8RZ, who had been transferred to French Polynesia by his employer (the French armed forces), joined in the planning work. Phil/FO8RZ's job (airborne maritime surveillance as well as search and rescue activities) involves flying regularly to both the Marquesas and the Australs on various work-related projects. However, once it had been decided to operate from 'plain old FO', rather than either FO/a or FO/m, efforts were then focussed on finding a good location on Tahiti, the main island in French Polynesia.

Gilles, VE2TZT, is a long-time amateur radio pal of Jacques, F6BEE. They were at France's top telecoms university together. Both F6BEE and VE2TZT are technically highly competent (unlike G3TXF!) and were able to implement excellent antennas for the low bands.

Finding the site on FO

Jacques, F6BEE, did detailed Google research of all possible locations in FO's main island of Tahiti and came up with the Punatea Village resort. This is a small resort on the north coast of the eastern peninsula that juts out of Tahiti. It has the all-important clear sea take-off to Europe. From Tahiti both the USA and Europe are in the

same direction (about 30°). There is also a good sea path to Japan. The site is about a 90-minute drive from the airport.

Getting ready for the trip

Prior to the trip Phil, FO8RZ, had visited and checked out the proposed location. It was excellent in many respects. There were just four bungalows at the resort and we rented all four for the TX4T operation. Right in front of the bungalows there was a large flat area, ideal for antennas, leading right onto the beach. Based on Phil/FO8RZ's photo-survey Jacques, F6BEE, and Gilles, VE2TZT, planned the layout for the antennas including the HF beam, the 160m vertical, the 2-element 80m vertical array, the 40m vertical and the run for the main Beverage. Meanwhile Phil, FO8RZ, was also busy arranging with the local licensing office for the individual licences, as well as for the group callsign TX4T. The T was for Tahiti.

Soon after our own group callsign (TX4T) had been issued, the German team (DL1AWI, DL3APO, DL5XU) heading for the Australs passed through Papeete, and Phil was also able to arrange a special call for them too, TX3D. Previously the Germans had been planning on using individual FO/DL calls, but after Phil's intervention they too had a group call. Because of hurricane Oli, which hit the Australs head-on during their operation, the three TX3D operators had to be evacuated by military plane. This brought their operation to an abrupt end. Hurricane Oli had passed through French Polynesia during the week before TX4T was due to start, but had missed the main island of Tahiti.

Meanwhile the four TX4T operators each travelled by different routes to Tahiti: Jacques, F6BEE, and XYL Brigitte from Paris, Gilles, VE2TZT, from Montreal and G3TXF from London. Phil, FO8RZ, was already living in Tahiti, right next door to the airport!

Equipment and antennas

We took three Elecraft K3 transceivers. There is no disputing that the Elecraft K3 is currently the best DXpedition operator's radio, given the receiver's excellent performance and the radio's overall size and weight. It's simply a DXpeditioner's dream radio. Having three identical K3s at TX4T also made for great flexibility. Operators could swap easily between the different stations which had identical radios.

Summary of the TX4T antenna farm:

160m: 26m-high Spiderbeam fibreglass pole, with two elevated radials running along the beach, with tuning box at bottom of mast.

80m: Two 18m verticals each with 16 quarter-wave radials fed through a home-made tuning box as a phased two-element array.

40m: A vertical with numerous radials, many of which ran into the sea. The 40m antenna was used on 15m.

30m: G3TXF brought along his much-travelled 30m vertical. This was perched about two metres above the sea with two of the four elevated radials reaching out over the water.

17m/12m : Separate two-band vertical

HF: A multi-element wire Spiderbeam. Although this covered 20-17-15-12-10m it could only be used on one band at a time.

The equipment used at TX4T also included some items left behind by several recent operations. Some coax came from the recent Polish trip to the Marquesas/Australs, TX5SPM/TX5SPA, and two Spiderbeam poles had been donated to Phil, FO8RZ, by the departing German Australs TX3D operators. The TX4T group in turn left behind coax and other items which would

be available for use by future DXpeditions passing through FO.

Multi-Station Operating

Although it had originally been planned that there would be two stations operating, once the antennas had been set up it was obvious that we could operate with three stations at the same time. G3TXF's station was therefore dedicated to 30m CW (as well as some operation on the other WARC bands). Two other main stations with amplifiers were set up in an adjacent bungalow.

Amplifiers

The two amplifiers used at TX4T could hardly be more different. One was an ancient Alpha 86 which had been shipped out from France prior to our arrival - and the other was the ultra-modern solid-state Tokyo Hi-Power HL-1.1KFX, which had recently been purchased by Jacques, F6BEE. Both linear amps worked well, despite the one (the THP) being about one third the weight of the other (the Alpha)!

Beverage Antennas

A Beverage antenna for reception on 160m/80m had been planned. The site was aligned perfectly for the 110m-long Europe/USA Beverage with the terminated end running right into the sea. On 160m we could receive very well on the Beverage while transmitting on the 26m-high vertical. After a day or two a second Beverage was also installed for the JAs who were at a right angle compared to Europe/USA. The difference in reception on the two Beverages was amazing, when switching between USA and Japan on 160m.

Operating and WinTest

With three stations and four operators there was plenty of operating flexibility. In practice this meant that everybody could operate until they collapsed, which was usually the case! Even though two stations

were running linears, there were no problems with inter-station QRM. This is probably largely due to the use of K3s, which have an excellent reputation for clean inter-station operation. Single-band DuneStar filters were used at each station. The best example of QRM-free multi-station operation was when the 80m and 160m stations were operated side by side in the same shack without any problem at all.

WinTest was used for logging and all stations were linked together through a hub and Wifi. The robustness of WinTest is remarkable. Even though Wifi links may have been lost on several occasions between the operating bungalows, WinTest never failed to catch up and correctly synchronise the logs. Having a common log in use at the different stations was a great boon, as it often helped to keep interest going (and the operator awake), even when conditions were poor or rates were slow on your own band. Just watching what the other stations were working increased the fun!

Band notes : 30m and 17m

During the early part of the operation G3TXF concentrated mainly on 30m CW. Operation on 30m started an hour or so before sunset (0430z) and would continue, subject only to the operator keeping awake, until about an hour after sunrise at 1600z. However, 30m would sometimes collapse completely during the latter part of the night (after 1200z) and the operator would then grab a few hours of sleep before getting back on the band again just before dawn.

Immediately after dawn (1600z) the MUF would start rushing up through the bands and 20m, 17m and possibly 15m would all spring into life in quick succession. On 17m in particular there was almost every day a short opening to Europe at about 1630-1700z. For a short while there would be strong signals and mind-bogglingly chaotic pile-ups from Europe, but as quickly as they had arrived, they would then fade away, leaving just the USA stations which had

been standing by during this short 'afternoon/evening in Europe' opening.

Band notes : Europe on 80m/160m

The window of opportunity for possible 80m and 160m QSOs was about three hours wide. It started with sunset in FO (0430z) and finished with sunrise in the far west of Europe about three hours later. In FO local time this corresponded to the period from 6.30pm to about 9.30pm. Meal times are important in France, and it had to be emphasised: "No, we are not going to dinner now, but we're going to concentrate on Europe on 80m and 160m!"

ClubLog

ClubLog is a highly valuable tool for any super-active multi-band DXpedition! Although we tried to upload the TX4T log to ClubLog regularly, we were often frustrated by an inadequate level of Internet access at the resort. Phil, FO8RZ, did most of the ClubLog uploading. He would take a copy of the TX4T log file from the shack and put it onto a laptop. He would then have to walk over to where there was, occasionally at least, a decent Internet access on Wifi and hope that the Internet access would last long enough to upload the TX4T log.

ClubLog contributes greatly to the fun of a DXpedition from all sides. DXers are able to track how many band-mode slots have been worked, to have access to the various leaderboard tables as well as to study the extremely useful 'actual-propagation charts' based on real QSOs.

For the DXpedition ClubLog definitely contributes to the general level of 'buzz' around the operation and therefore to the size of the pile-ups across the bands. ClubLog also encourages those who might not otherwise think that they can make a QSO to have a go. On the Win-Test logging screen we could immediately see how many bands a given station had worked, so that

when the ninth-band QSO was made, a quick 'FB on ur 9B' message could be sent with the QSO.

Logbook of the World

An initial LoTW upload of the first 23,000 QSOs was made just as soon as G3TXF got home. The remainder of the TX4T log would then be uploaded to LoTW soon after the end of the operation. There is no holding back or selective uploading to LoTW. Uploading the whole of a DXpedition log immediately after the operation (or even during the operation, if you can) is definitely today's 'best practice' by DXpeditions. It is really much appreciated by DXers using LoTW.

TX4T Finale

Unlike most DXpedition reports which are written after the end of the operation, this report on TX4T has been drafted while the operation is still running. Jacques, F6BEE; Gilles, VE2TZT, and Phil, FO8RZ, were due to operate for a further week or so after G3TXF had returned to the UK. This would include participation in ARRL CW Contest as well as more low-band activity with Europe. However, there were already 23,000 QSOs in the TX4T log when the time came for G3TXF to leave the DXpedition site and to return home from Papeete via Los Angeles.

During this short visit to French Polynesia nothing was seen of Tahiti other than the airport (which has the amusing name of Faaa), FO8RZ's shack and TX4T's seaside QTH! However, it's the other islands which are the nicer places to visit for tourists rather than Tahiti. Tahiti itself has traffic jams not unlike those found in metropolitan France!

For G3TXF the TX4T operation was not only a chance to take part in a fun DXpedition from a new overseas French territory, but also to run some nice pile-ups handing out new CW band-points from French Polynesia!

The Austral Islands and Niue – September 2009

Part 2: Niue

Don Beattie, G3BJ with photographs by Hilary, G4JKS

In the first part of this article [January 2010 *Digest*] I described our trip to the Austral Islands and Tahiti. We now pick up the story as we return to Auckland for our visit to Niue.

After an overnight stopover in Auckland, we take the flight to Niue. No problems with the Butternut this time – sports equipment has an extra 10Kg per person allowance on Air New Zealand! The plane (a Boeing 737) is three-quarters full, and the weekly flight takes 3 hours and 15 minutes. Koji, JM1CAX, is on the plane, and will be ZK2NX whilst we are ZK2BJ. After a clear flight (great view of Kermadec), we approach Niue, the clouds return, and we land in thick cloud. The island gives the impression of desolation as we land – nothing but scrub and rarely a house. A clean airport hut, with a quaint baggage delivery system – it is dumped in two rows on a concrete floor, and it's a free-for-all.

Our hotel

Eventually we emerge for the five-minute drive to the hotel. This is a low-rise set of buildings built around a small depression in the cliff (bad news for radio to Europe) right on the edge of the ocean (good news for radio to Japan). Functional rooms (some with air con) and a large public area – bar/restaurant/balcony. We have the choice of two rooms and chose the one in the middle of the hotel (first floor). A scout round shows little prospect of a good location for an antenna, but in the dive school next door is an old container. I elect to put the antenna on top of that and within a couple of hours all is up and tuned. The bands are rough to the East – the hill is in the way – but I work some US and a couple of EA8s on 40m.

The supply boat

The supply boat is overdue. It is 'broken' in Apia and waiting for a part. It may be here on Thursday (two weeks late). Supplies are said to be running low in the hotel.

The car was delivered overnight (no papers signed, nothing paid) and we head for the 'big city'. We are the only car on the road. Alofi is a neat and functional capital, spread along the coast high above the wharf. We note the location of Niue Telecom (for the licence tomorrow) and the shopping centre. Everything is shut and deserted today, being Sunday. Then we head for the island road. It is getting hot, and the island looks very pretty. The road is good – palm groves and scrub either side with occasional lived-in houses. But lots of deserted buildings give the whole area a rather sad appearance. Niue has dramatically de-populated in the last 30 years and there are said to be 20,000 in New Zealand, 9,000 in Australia, yet only 1,500 on the island itself.

We stop at the Namukulu Motel (where Chris, GM3WOJ, operated). A lovely spot, high on the hill above the village. We meet Joe Wright, who runs it, and says he has had lots of 'hamsters' stay there and they are welcome. The motel is being sold, but as a going concern to Brian Scott (Canadian/Australian). He too is keen to encourage amateurs.

Arches and Chasms

Then up around the North-East tip to the Talava Arches and the Matapa Chasm. Both impressive sights – totally deserted. The soil in most parts of the island is very poor, preventing crop growing. It is essentially very rough coral with ground soil build-up

allowing shallow-root plants to take hold. Some of the land has been cleared for crops (after appropriate soil treatment), but the rest is really rough scrub about 20ft high.

The power distribution on the island is impressive – 11 KV all underground. There is not one overhead cable. The supply is from a diesel generator plant and is alleged to be reliable. But there is a programme beginning to replace the cables as they are ‘shot’. The new cable will also be underground.

We are surprised at the number of private yachts in the bay at Alofi. Generally large ocean-going cruisers, presumably making the Pacific round tour.

Further round the island, on the East coast, the main road becomes a track, with a central grass strip. It is quite rough in places, but this side of the island is sparsely populated, so presumably there is not the need for more. Most of the East side is a conservation area, with bee-keeping and (later on) the one farm which grows fruit and veg (organic). When we get to the South-East corner, the tarmac starts again and continues for the rest of the circuit.

Alofi

The next day, we go into Alofi, for a number of things, including the ZK2BJ licence and a driving licence. The ZK2BJ licence is ready and handed over. The driving licence is another thing. I pay the money, and then get the response “Please come back after lunch”. When we return “the licence is not ready – very sorry. The computer has gone wrong. Please come back tomorrow”. We do some Wi-fi (horrendously slow) and survey the shopping centre. All very basic. A post office, bank, café, three or four small shops (two food ones) an artist’s studio, the tourism people and the philately store. Things are running low, and shops have very limited stock.

We meet Koji, JM1CAX (and KØJI), for lunch, and go to Crazy Uga’s. A very passable panini, and two beers each – which represents 60% of their remaining stock of beer. We meet an Anglo-Japanese entrepreneur who is looking to undertake some modest development on Niue to help stimulate the island economy. His idea is to purchase a deserted village, refurbish it, and use it as holiday accommodation. If he can pull this off, Niue could become an even more desirable destination, but any development will need to be done with great care and sensitivity. We suggested to him that one thing he might do is buy a house and equip it as an amateur radio station!

The drive up the coast

We then drive up the coast, visiting three Sea Tracks down to the coast. The first (Avaiki) is a walk through a cave to a great pool in the lagoon. A two-level cave, and crystal-clear water when we reach the lagoon. Then to Paiaha, with another cave and great sea views. Finally to Limu pools – where there are deep pools in the lagoon and great swimming when the tide is out. A great cross-section of fish in the pools, and clear, clear water.

Next day Koji phones just after breakfast, asking if he can come with us around the island (we had offered the previous day). We go to town to do the mail, and then collect him and start off clockwise, stopping at various sea tracks for a scramble down to the shore, including Toga, where the walk is long, but brings you to a ‘moonscape’ shoreline, with a scramble down a long ladder to a hidden cove with palms. Really atmospheric.

In the afternoon we return Koji to town and shop for a light evening meal. There is little in the shops, and the boat is keenly awaited. We then visit the power station and meet ZL2BNP, the chief engineer. He is not active on the bands. We also meet a cabinet minister with a view to seeing if there is any site for a possible FSDXA operation from

Niue. We locate a wonderful spot, with a great take-off to Europe, US and Japan. Finally we meet Commodore Keith – of the Niue Yacht Club, ‘the smallest yacht club in the world’ (ie no yachts!). Everyone is so very helpful in this little oasis of peace and tranquillity and we feel very much at home.

Our last full day

Our last full day. Up as usual at 6.00 am and down to the hotel terrace to see what’s about. Whales as usual, and a lot of fin flapping and tail wagging. We try to get more photos, but need infinite patience to get the right moment. Then to town to do e-mails and collect the long-awaited driver’s licence. “Very sorry for the inconvenience”. But it was worth waiting for – very colourful.

Then over the island by the cross-island route. Lovely countryside, with lots of crops in the clearings. We get to Liku, on the east coast and try to find its Sea Track. Eventually we find it over the village green and cautiously drive down. Then we lose our nerve, and park, walking the rest of the way down the steep track. The view is stunning as we reach the sea.

Back to the hotel, and some radio. Conditions interesting to Europe, with clear evidence of a double-peak in propagation, the second easily missed, as by then the JAs are in full spate (S9+) and the weak EU stations don’t have a chance unless you stand by specifically for Europe.

Next day, at 07.45 local, we take the Butternut down from off its container and pack it away for the last time. It has done well. By 10.00 we are out of our rooms and sit around waiting for airport transfer.

Leaving Niue

We are very sad to be leaving Niue. It has grown on us like Rodrigues did. Great place, fabulous weather (typically tropical, with a mix of short sharp showers and hot

sun, but with relatively low humidity at this time of year), great people and ultra-relaxing. We could happily become beach bums here.

Back at the airport

We expect the hassle of flying (this is flight number 11 of this trip) to come back. But Niue Airport is a revelation. It's party time. Everyone is there – the police driving licence girl is handling departure forms, the Manager of Niue Power is there for the flight, as a member of the Niue weight-lifting team at the Mini-Games in the Cook Islands. Paul Johnson, power engineer, is there. Nellie the handbag lady is there. Taichi, the Japanese developer, is there with Chinese partner to say goodbye. Commodore Keith of the yacht club is there. The car rental man is there – going back to Auckland for a trip. The guy from the travel agency in town is there, doing the check-in. No computer – he simply has a list of passengers and hand-writes the boarding cards.

Tip for Air New Zealand travellers – the first 12 rows in economy have super extra legroom – so try to get a seat there. The Niue Airport café is open in the car park – a lady selling smoked banana, and another selling hot dogs on a BBQ and chilled coconuts. Check-in is a small room with a table and scales (and a modern-looking X-ray). The luggage goes from check-in to the X-ray to the trolley in one movement.

We are 14 Kg overweight, we are told. I explain we were given an additional 10 Kg each as sporting equipment. The travel man looks at the Butternut box and says, “Well, as long as it's sporting equipment”. Then to immigration to pay our \$34 per person departure tax (more support for the Niue economy) and to have our passports ceremonially stamped. Then we are free to go back into Alofi if we wish, but “Please remember the plane will go when it is ready – perhaps early”.

We elect to stay at the airport and chat to our many new friends. Time passes in a flash and everyone moves into the departure lounge to watch the plane land 25 minutes early. A few walk onto the tarmac to get a better picture – no one cares. A small round of applause, and the Air New Zealand 737 turns round at the end of the runway and runs back to the terminal. In no time at all it is surrounded by firemen – on foot – who stand there the whole time it is on the ground. The fire truck is parked by the refuelling rig, about 100 metres away, with no fireman near it. The plane disgorges its

passengers and freight, the latter including chilled chickens, supplies of which have run out on the island. The boat is now promised for the 29th. Once refuelling is complete we all clamber on board – much joviality, as half the plane seems to be filled by the Niue Mini-Games team. Once we are in the air all falls silent and after a 3½-hour flight we are back in what passes for ‘civilisation’, 27.5 clock hours after leaving Niue (having crossed the date line yet again). Back to the downtown hotel, and a civilised air-conditioned room – but we’d rather still be on Niue!

That *Digest* Questionnaire again

Here are ten questions. Please e-mail your comments to Jane, who kindly agreed to compile and evaluate this questionnaire (the results will be published in a later *Digest*). Alternatively, you can send your comments anonymously to the address at the end of this questionnaire.

1. What do you turn to first in the *Digest*?
2. Is there anything you would like *less* of?
3. What would you like *more* of?
4. What topics etc. would you like to be covered which are not currently included
5. Generally speaking, is the length of the articles about right, too long or too short?
6. What did you like *best* in this month’s *Digest* and why?
7. And what did you like *least* and why?
8. There are a number of regular columns in the *Digest*. Which of these do you like best – and least?
9. If you were the *Digest* Editor, what would you do differently?
10. Any other thoughts?

Needless to say, you don’t have to answer all these questions. We have included them simply to give you some ideas. Meanwhile we look forward to hearing from you.

Send your comments to jane1706@btinternet.com or Jane Phillips, 17 Richmond Hill, Clifton, Bristol BS8 1BA.

DXpeditioning in the Falkland Islands

Martin Atherton, G3ZAY, and Michael Wells, G7VJR

Michael, G7VJR, and I had been talking about the possibility of a VP8 trip for some time, but meeting Bob, VP8LP, and his XYL Janet at the 2009 HF Convention crystallised the idea in our minds and we got in contact with CDXC member Mike, VP8NO, in Port Stanley.

We needed a waterfront QTH with space to erect LF antennas, salt water take-off to the USA and Europe, and low noise levels. Mike suggested that Darwin House some 50 miles west of Stanley would meet these requirements superbly as it backed on to the south coast of a wide bay and was surrounded by acres of grassland. He made several trips out there to check its suitability, discuss our plans with the manager, Sheena Ross, and check out the noise levels from the generator/battery/inverter combination used for mains power. He reported that all seemed fine, so we paid a deposit and started to make plans.

I already held the call VP8DFK from my Antarctic trip and Michael was issued VP8DMN – but we wanted to use a single shared callsign. To our horror we were initially issued VP8XPGW for shared use and it took several interventions by Mike, VP8NO, and numerous e-mails from Michael, G7VJR, before the authorities eventually agreed we could both use VP8DMN.

Getting there

Transport options to the Falklands are limited. The cheapest way is with LAN Chile via Madrid, Santiago and Punta Arenas and costs £1,200-£1,400 depending on the time of year. Unfortunately LAN only flies the final leg to the Falklands on Saturdays (Argentina won't allow any more flights through its airspace) so you have to leave the UK on a Thursday and will get

back on a Monday after a night flight and a transit night in Santiago each way.

The alternative and much quicker route is with the twice-weekly RAF 'airbridge' from Brize Norton via Ascension Island. This costs a staggering £2,000 because the plane has to be less than half full in order to have enough fuel to reach alternative airports if those in Ascension or the Falklands should be unavailable.

The international airport for the Falklands is the RAF base at Mount Pleasant, about 30 miles west of Port Stanley. Our operating QTH was about 20 miles further west of the airport and we finally reached it at around 2230 after more than 24 hours travelling.

The antennas

We had already shipped two 18-metre Spiderbeam fibreglass poles, 1km of wire, and 400 metres of co-ax, and flew out with a 10m pole and another 400 metres of wire as well as the radios.

Sheena, our hostess and landlady for the week, greeted us with the news that Bob, VP8LP; Janet, VP8AIB; Mike, VP8NO, and Heather, VP8OD, would be arriving at 0800 the next morning for an antenna party, so we went quickly to bed and counted on jet lag to get us up in time. This worked, but the waking-up process was assisted by the noise of wind howling around the building; something that was to be a permanent feature of the next week. Our inability to close the window because of the co-ax bundles coming through it meant that the shack/bedroom was rather chilly when the wind blew.

With all the help from the Port Stanley contingent we very quickly had the 160m and 80m verticals set up on the 18m poles

as well as a 15/40m vertical on the 10m pole. The wind was strong but the Spiderbeam poles were robust and didn't seem too troubled by it. Our plan was to leave the LF antennas up and to place various elements on the 10m pole as required for the other HF bands. On the receiving side Mike, VP8NO, supplied a large number of bamboo canes and soon erected a Beverage receiving antenna pointing due north.

We used a Vincom transformer unit on the Beverage and fed the 160m vertical via a 1:2 un-un transformer from Balun Solutions. The 80m vertical was fed directly with coax. All the transmitting antennas benefited from runs of RG213 supplied by Mike and Bob, rather than the RG8 mini we'd planned to use. Radials were untuned and laid directly on the ground/into the sea – and helpfully, many of our radials we dragged out with the tide daily, accumulating large bundles of seaweed.

The rigs

On the equipment side we'd taken two K3s, a Tokyo High Power linear for 160m and a homebrew unit loaned by Bob, G3PJT, for the other bands. The operation was to be almost exclusively CW (the exception being a couple of phone skeds for members of the Cambridge University Wireless Society), so we also had two WinKey USB units and two laptops running WinTest.

VP8 is three hours behind GMT and it started getting dark around 2100 local and light at around 0430 local. The general plan was that Michael would operate from dusk to dawn on 160m, go to bed and then operate HF in the afternoon before dinner. Martin would go to bed before dusk and get up in the middle of the night to catch the European sunrise on 80m and then continue until the band closed after JA sunset and VP8 sunrise. After a short break for breakfast Martin would then continue on HF until lunchtime or later.

Conditions

Conditions on 160m were extremely variable, but European and North American signals tended to be audible from shortly after sunset to shortly before sunrise. On the last day Michael worked four JA stations at their sunset and shortly after VP8 sunrise. According to the Japanese 59 Magazine, these were the first JA-VP8 QSOs on 160m for 36 years, and generated a large volume of correspondence via e-mail. On 80m there was an EU peak around 0500-0730z, a JA opening from 0800-0930z, and North America until 0930z. The MUF rose during the morning and tended to peak at around 1300 (1600z), with EU openings on 21 and sometimes 24 MHz.

Rather surprisingly we discovered that the British Antarctic Survey was erecting 16 HF log periodics on 50ft towers about two miles from our QTH. Rather annoyingly they were all pointing due south as part of the SHARE (Southern Hemisphere Auroral Radar Experiment) project! Martin went over to see them and enquired if one could be swung round to the north for a few days, but apparently this would have been too tricky. VP8ALJ from Port Stanley was part of the erection team and said he'd worked a few stations long path when testing the antennas.

The wind

Wind was a constant factor during our stay and on one day it peaked at around 95 km/h. The Spiderbeam poles handled this remarkably well despite being bent into S shapes at times – although we did have to make a small repair to the one holding the 160m antenna as the top-loading provided a little too much windage. An unexpected consequence of the strongest wind periods was S9 static caused by saltwater spray blown off the surface of the sea.

January is high season in the Falklands, so Darwin House was home to a number of other travellers during our stay – including a

Channel 4 film crew making a documentary about one of the 'Secret Millionaire' subjects returning to the battlefield where he'd fought during the conflict with Argentina. The whole area contains reminders of the battles as there are military cemeteries nearby and numerous uncleared minefields fenced off and marked with warning signs.

Finale

The final QSO total was 7,500 and some statistics are shown below. Martin and Michael would like to thank the Chiltern

Operating Time

First QSO: 2010-01-22 19:05:32

Last QSO: 2010-01-29 02:35:35

Band/Mode breakdown

Band	CW	PH	Total
160	669	0	669
80	1453	0	1453
40	1166	0	1166
30	1218	0	1218
20	703	0	703
17	1226	6	1232
15	859	1	860
12	252	0	252
Totals	7546	7	7553

DX Club, the GM DX Group, Mark/G4AXX and Neil/GØJHC for their financial support; Nigel, G3TXF, for delivering equipment to the shippers; and Bob, G3PJT, for lending us his excellent homebrew linear.

Sheena is keen to host more DXpeditions at Darwin House, so we left all the poles/guys/wire/co-ax behind for future visitors. Mike, VP8NO, has checked it over and is looking after it until required. Martin and Michael would like to encourage other CDXC members to make the trip.

Number of QSOs

Total QSOs: 7553

Unique Calls: 4204

DXCC by Band/Mode breakdown

Band	CW	PH	Total
160	52	0	52
80	61	0	61
40	60	0	60
30	63	0	63
20	50	0	50
17	63	2	63
15	54	1	54
12	37	0	37
Totals	100	2	100

CDXC
 CHILTERN DX CLUB
 The UK DX Foundation

TY1MS Benin 2009

DXpedition to a forgotten country

Ad van Ginneken, PA8AD

From 07–30 October 2009 Henk, PA3AWW; Bas, PDØCAV, and Ad, PA8AD, stayed for a DXpedition in Africa. Their stay was again under the umbrella of the DAGOE Foundation and Mercy Ships, with the goal to use the hobby for charity work. Besides the typical DXpedition information this article also provides the day-to-day reality in one of the poorest countries in the world.

Mercy Ships

It's over 35° C, the sun shines brightly, the air feels sultry and I am sweating. A group of men and women are sitting quietly under a shed waiting to be called by the staff. A little bit further instruction is being given to another group. One of the participants is translating the instructions from French into Fon. Both are difficult to follow for me, but the supporting materials make clear what it is all about. I notice a lot of activity in the buildings. Material is disinfected, the administration is updating information and simultaneously 15 people are treated. I try to talk to one of them. The woman thanks God that she will be treated and continues to wait in silence.

We are visiting a dental clinic, one of the Mercy Ships projects in a suburb of the port of Cotonou in Benin. The clinic feels to me like an oasis in a hectic, heavily polluted, crowded and very poor city. With nearly 20,000 treatments in nine months and a comprehensive training program again a successful Mercy Ships field project. During a flashback I think about our previous successful expedition to Liberia in 2007 where we visited and supported the Gaye Town Clinic. Now in 2010 we are again in a DXpedition project in co-operation with Mercy Ships!

The DXpedition virus again

At the end of 2008 the DXpedition virus re-emerged and the idea raised to see if it was possible to organise a project with support for charity work again. This time the Africa Mercy was anchored for nine months in Cotonou and Mercy Ships were keen to support a second expedition. Based on the approach of the previous expedition and the experiences gained, quickly a detailed project plan was written.

Why a project plan you might wonder? Benin belongs to the world's poorest countries. The facilities in the country are therefore very limited. Accommodation, transport, communications, food, electricity and water are things that are not common. Good preparation and local assistance are therefore indispensable. Luckily we were supported by Mercy Ships and able to use some of their facilities like forwarding material. Unlike the previous expedition we also decided to go for a lightweight set-up with minimal weight, antennas for all bands, two or three stations and enough HF power. The base was formed by Spiderbeam antenna materials, transistor linear amplifiers, lightweight 60 Amp power supplies from Difona, notebooks from Fujitsu, much RG58 and lightweight transceivers.

The licences

Starting our preparations in February 2009 for a trip in October proved to be a good move, especially because of the difficulties to obtain the required radio licences. Without a proper licence no DXpedition! At first it seemed to be no problem. Indeed in the years 2002-2006 there had been several expeditions, the application process was

clear and help from the only active amateur, TY5ZR/Romano, was available. The reality proved more stubborn. Since 2006 the Ministry of Post and Telegraphs has not existed any longer in the old structure, the national telephone company formerly providing permissions was privatised and several new authorities were established. Again, local help was essential. How do you explain to an outsider that you need radio amateur permission? After three months of submitting applications we finally found the right authority with the right permissions to issue licences. For the umpteenth time all papers were completed, attachments filled in and the accompanying letter adapted. An additional problem was that usually no faxes, e-mails or copies are accepted and only original documents will be processed. An extra difficulty: mail delivery takes 4-8 weeks. With the tremendous help and commitment of the liaison officer of Mercy Ships we finally managed to get the right papers a couple of days before our departure. They were signed by the Minister of the Interior, Defense, Telecommunications and five other people! With the signature of the President of the ATRPT, a legislative and regulatory authority for telecommunications, TY1MS in October 2009 was a fact.

The fishermen

A strong breeze is waving the palms while the surf pounds incessantly on the slope of the beach. It is still very warm and the sea idyllic turquoise colored. On the beach I see a large group of men and women singing in a monotonous rhythm slowly coming in my direction. Just before the house where we are bivouacked their walk ends. They are fishermen. After a little while and heavy work the fishing nets are on the beach and the fish is distributed between the members of the group. It seems almost the ultimate holiday picture. Yet the reality here in Grand Popo is different. Fishermen have to fish twice a day almost every day of the week. The yield is a few baskets of fish. The fish should be split between the group of

men, women and children containing around 100 people. There is no other form of income. Rice, fruit, bread and onions have to be bought from the remains of the meagre catch. I ask one of the fishermen if this is the number of fish they always catch. With a sigh he tells me that once the sea was full of fish, but this is what is left now. How cynical to see on the horizon every day again the large foreign sea-fishing trawlers taking everything out of the sea, usable or not. Knowing also that in the surroundings of this tourist resort no shops are available, I realize also that we are privileged to have good food and water supplies with us.

Setting up the stations

The local fishermen also played a role in building our stations. Obviously there was a prior plan how to place the antennas with maximum space, space for the radials, the guys and optimal use of the available co-ax. Based on available information obtained we had the intention to position many of the antennas on the beautiful wide beach. The daily activities of the fishermen made our plans unusable.

Given the importance of the work of the fishermen we adjusted our plan. Some puzzle work within the confines of the home and in the adjacent plots yielded into a new plan. The 5-band Spiderbeam was installed on the roof of the house. The 3-band Spiderbeam found its place on the edge of the beach. The verticals for 160, 80, 40, 30 and 17m were placed in the garden. This plot surrounded by cactus next to the house initially looked rather bare and sandy. Later we found out that by carefully providing water the garden turned into an oasis of green onions and corn in three weeks' time!

Of course the garden was too small for all radials. With help from our caretaker and some local youths, a large number of radials were spread among the cacti. Something we respectfully remember because of the very poisonous snakes that live there. With a collection of antennas and three fully

equipped HF stations we were ready for the pile-up. It soon became clear that the expected propagation, the predicted rain and thunderstorms did not come. Knowing that the number of sunspots is low or zero, we carefully analysed band openings. During large parts of the day there was nothing to hear - and sometimes there was an unexpected opening in the middle of the night. These effects were experienced also by several stations in Africa and other DX-peditions around the globe. During the CQ WW SSB Contest this effect was exacerbated because during openings no antennas were pointed in the direction of Africa and our weak signals were completely lost in the extreme number of strong signals.

Fortunately during our stay in Benin there were also openings on 15m, 17m, 20m, 30m and several times on 40m, 80m 160m which we used as best as we could. At certain moments in time we also faced poor standing waves and reports that the signals were very weak.

After some puzzle work we found the cause: the continuous wind from the south, the high temperature, the coarse sand, the veil over the beach and the sea salt from the seawater was corroding our material dramatically. In no time all metal parts lost connection or resulted in short circuits. Even the soldered joints in the sealed boxes were regularly broken. As real radio amateurs we finally came up with a practical solution so the co-ax plugs were eventually cut, the connection boxes removed and everything was directly soldered with flexible cable.

Daily reality in Benin

I watch a group of women collecting water from the newly constructed water well. The colourfully dressed women were part of a women's group that focuses on improving the living conditions within the village. With limited resources they produce palm oil soap balls which are sold by them at the

market in the direct neighbourhood. As visitors we were placed in front of the ladies on hurriedly collected chairs. While singing and swinging they show us how they work and inform us on the lack of material they have. A confirmation of something I noticed already. A metal cup of water is handed to me. It is intended that I take a sip. In the various inland communities where we visited charity projects this happened to us. Suddenly I see the light. Clean drinking water is the greatest good. These poor people share their only clean water with their guest. I am grateful to the Le Pont Foundation that they showed us their water well and school projects in order to experience daily reality in Benin.

Benin the Forgotten

At another location I find myself at a dusty square again placed on a chair and watched as a tourist attraction. While the people are dancing and singing, food is offered and as guests we cannot refuse. It seems to me that people are happy in a certain way, but at the same time are struggling to survive. Living under time pressure, an overload of information from the media and the Internet is unknown by these people. Even non-Benin people are almost unknown to these people, although they live just a few kilometres from the more touristic Grand Popo.

In my mind I review all recent images of villages, the bush, many motorbikes, the few threadbare cars and trucks, the big city of Cotonou with its dust and stench. In all these memories I see nobody from the Western world. Benin is not torn by war, mass starvation or terrible diseases, but a country that lacks attention and investments from the Western world. No disaster means no news, so almost none of the hundreds of charity agencies I saw in Liberia seem to be present here. Benin is a forgotten country in West Africa. Charity organizations that are present in Benin do mighty good and well perceived work.

But you will be surprised: even in the poorest countries people have mobile phones. Therefore we initially planned to have Internet access by the local GSM network. Nice in theory, but in practice impossible. Eventually we managed to connect the phone to the Internet, but linking the notebook proved to be impossible. While trying this, spontaneously the telephone company called us and an English-speaking technician offered his help. Amazing in a French-speaking country and what a service! The only problem was that the problem could only be fixed at the office in Cotonou, 80 kms away.

Finding transport is also hard and using motorbikes 2 x 80 km is playing with your life, so finally we dropped that plan. At that time we also experienced the lack of access to a DX cluster and the luxury of having that service sitting in your own shack at home. Especially with our weak SSB signals it took a lot of effort to get noticed by the radio community. Another consequence was that it became impossible to upload online logs. Internet cafes, which you can find all over the world in the most remote places, were also not available in Grand Popo with its 50,000 inhabitants.

After all we were able to be on-air for 15 days with on average two stations during blocks of several hours. Ultimately nearly 15,000 QSOs landed in the log. The poor propagation resulted in a larger number of CW than SSB QSOs. Also the number of 160m QSOs was limited.

Also noteworthy is the initiative to take WSPR along. OE1IFM, Gernot, kindly provided us with an automatic WSPR beacon. With that beacon and his beacon in Namibia we coloured the map of Africa with WSPR spots. It is incredible how those signals from just a few watts into an un-tuned antenna for 80 and 40m are spotted and automatically detected all over the world.

The end of our stay

It is the end of our stay and we are guests on the Africa Mercy. I'm on the top deck watching the wooden boats adorned with little coloured flags carrying large groups of fishermen departing in the direction of the sea. Coming back with a very meagre catch. Fish trawlers are still on the horizon. With respect and admiration I also observe the activity on the world's largest private hospital ship.

Then suddenly a siren: the start of a fire drill. The vessel is evacuated except the patients and the necessary medical staff. A little later I find myself on the quayside together with 400 men, women and children. They all stay for a short term or long term, individually or as a family on board.

The solidarity and belief in the usefulness of their mission, 'Bringing Hope and Healing' is overwhelming, just like the gratitude of those who can be helped or are trained to help others. At that moment I realize how fortunate we are to use our hobby to increase awareness and support the projects of these organisations.

For the amateur there is also a little extra. After we returned the ATRPT informed us that they will create easy access to radio amateur licenses again and that they will support the foundation of a national radio amateur association. For more information see:

www.benin2009.com
www.mercyships.com
www.dagoe.com
www.lepont.nl

XRØY – DXpedition to Easter Island

Stan Strzyzewski, SQ8X

When I started to think about organising a DXpedition to Easter Island, my first thoughts were of admiration for all the DXpedition organisers who have activated those interesting places around the world. Why? Well, it really is almost impossible to imagine how much effort it takes to bring an entity onto the airwaves until you give it a try for yourself. I now understand that there is far more than just technical and logistical challenges to overcome to organise a successful DXpedition like XRØY.

The initial idea to organize a DXpedition to Easter Island emerged in 2006. It was conceived as a small event of 1-2 operators, but once the operation had been announced we received far more interest and enquires than expected. The final XRØY 2009 team consisted of six international operators, four of whom applied to participate via e-mail. The final team was Stan, SQ8X (Poland) – team leader; Zbig, SP7HOV (Poland); Aart, PA3C (Holland); Leszek, NI1L (USA); Victoria, SV2KBS (Greece) and Marco, CE6TBN (Chile).

Of the six team members only Stan, SQ8X, and Victoria, SV2KBS, knew each other - they had met on VK9LA, Lord Howe Island, in March 2009. Bringing together a group with different nationalities and personalities was a very interesting experience, but after 1-2 days all participants adjusted to one another and we got along just fine.

The assistance of the President of the Radio Club of Chile, Mr Galdino Besomi, CE3PG, was invaluable in the preparations for the expedition. One of the major goals for our expedition was activity on the 30m band (30m operation in Chile requires a special

permit in addition to the regular amateur radio licence) and Mr Besomi was really helpful in securing such a permit from the Chilean Ministry of Telecommunication (aka Subtel). The organisers of XRØY were also supported by the Polish Radio League (PZK) with a special letter of support signed by its President, Mr Piotr Skrzypczak, SP2JMR.

To reduce the cost of transportation and expenses, we decided to use lightweight antenna systems consisting of:

- 160/80m and 30m designed by SP3GEM
- Homebrew 40m fibreglass vertical
- Homebrew 20m fibreglass vertical
- 5-band Spiderbeam yagi
- a backup vertical multibander for 30, 17 and 12 metres
- an FOØAAA delta loop and a 100m long beverage for LF RX.

Our transceivers were two Icom IC-756 PRO 3s, one Icom IC-7000 and one Icom IC-718 as backup. For amplifiers we had an Acom 1000 and an SPE Expert 1K-FA.

Since we were not able to carry all the equipment with us, we decided to ship our gear (especially antennas) to Easter Island prior to the expedition. This was made possible by the generous support and donation from the Chiltern DX Club (CDXC), which covered part of the cargo expenses from Europe to Easter Island.

We arrived in Santiago on 29th October 2009 and stayed overnight thanks to the generous help of Chilean hams, especially Pedro, CE3FZ, and Oscar, CE3FG. The trip from Santiago to Easter Island takes approx. 5 hours. Our vertical antennas, sent via cargo, were waiting for us at the airport when we arrived. Once we had collected

them, we started our trip to the Puna Pau location - a settlement which is located approximately 5km North-East of the only real town on the island, and its capital, Hanga Roa.

We were fortunate to be able to set up the 160/80, 40 and 30m verticals on the very first day, because as it turned out that was the only nice sunny day in the first week of our stay! There was a huge cyclone wandering nearby the island hitting us with extremely strong winds and it started to flood Easter Island with constant rain lasting almost six days. Later the local people told us they could not recall having such bad weather conditions for several dozen years. The strong winds resulted in trees falling onto electricity lines on a daily basis and even when the electricity was available it was totally unstable and pretty much useless - the voltage changed rapidly from 56 to 464 Volts in milliseconds! When the first very large voltage spike struck we lost our IC-7000 and Icom power supply. Fortunately it was the only equipment that suffered from these issues and we were forced to unplug all equipment immediately. That turned out to be a good decision as we later heard that our neighbour had lost all his electronic equipment, fridge, stove etc. in his home because of the violent voltage spikes.

Our verticals were all well secured against wind gusts which at times reached 100km/h (55 knots). But the storms and lightning were extremely disturbing on the lower bands, creating a high level of QRN. There was also another issue that really bothered us on Top Band: sodium street lamps. They all use some sort of dimmer so they consume less electricity, but that significantly increases the electrical noise level on the island during the evening and night hours. Our Icom IC-756 PRO 3s did manage to deal somewhat with the problem thanks to their noise cancellation and noise blankers. Running pile-ups on Top Band was extremely tiring as extreme QRN noise was bashing our ears. The impulse noise spikes and buzzes were producing

distortions that caused the signals to sound smeared and merged. As the strong winds in the first few days did not allow us to install our Spiderbeam for the higher bands, we decided to re-engineer our 40m fibreglass vertical for 20 meters during the daylight hours. Full flexibility and creative invention really ruled on this DXpedition!

After almost seven days of storms the weather finally improved and we could start installing our 5-band beam. Once we had it installed, the weather turned nasty again and tree branches and entire trees started to fall down again, leading to more power blackouts. For some reason our Spiderbeam's 10m element suffered and that's the reason we couldn't be on 10m as promised.

We were extremely surprised with the conditions we encountered on the island. Almost all bands except 12 and 10m were workable every day. Openings were strong, especially on 40 and 30m. There were several long path openings on 20m to Australia and Europe too. 15 and 17m opened in the early morning, right after local sunrise. 12m opened sporadically, but with exceptional signals, especially to North America and Japan. 20m - the band where Easter Island is at its most confirmed - was workable until very late in the evening. I even recall working somebody in VK at 0100 local! 30m, like 40m, was in good shape during the entire expedition and signals were exceptional. Copying stations from all over the world at the same time, especially on 30m, was not unusual. 160m was the hardest band to work due to high electrical QRN. However, signals were sometimes pretty strong. Some of the most distant stations from Central Asia (Rapa Nui's antipodes) were coming in at 559. We even received an SWL report on 160m from Iceland, which was really exceptional due to the often auroral activity there.

Weather conditions, electricity blackouts and AC power issues meant that we could only operate for 9 days in total, not 15 as we

had intended to. Despite technical issues, our two stations managed to make 22,281 contacts. We were the first amateur radio station to use the PSK-31 mode from Easter Island. We also experimented with the faster mode - PSK-63. Results from our tests in running pile-ups in this mode were surprisingly good. Some people in the ham community around the world criticised our operation with PSK-63 as not suitable for a 'serious DXpedition', but we are proud we

did those tests as we believe that invention and experiments should always be a part of DXpeditioning. Moreover, PSK-63 turned out to be a **very** effective DXpedition mode with fast and good readability and very little decoding errors.

The XRØY DX-pedition has already been approved by ARRL and logs have been uploaded to LoTW.

Operating Time

First QSO: 2009-11-01 05:32:09
Last QSO: 2009-11-14 22:41:35

Number of QSOs

Total QSOs: 22281
Unique Calls: 9528

Band/Mode breakdown

Band	CW	PH	RTTY	PSK	Total
160	681	0	0	0	681
80	1441	519	1	0	1961
40	2627	1765	964	0	5356
30	3938	0	0	0	3938
20	747	1321	663	4	2735
17	1781	2467	340	62	4650
15	1099	1014	0	0	2113
12	463	292	92	0	847
Totals	12777	7378	2060	66	22281

DXCC by Band/Mode breakdown

Band	CW	PH	RTTY	PSK	Total
160	48	0	0	0	48
80	63	46	1	0	67
40	89	83	57	0	101
30	101	0	0	0	101
20	43	57	46	1	71
17	68	74	35	20	83
15	54	41	0	0	61
12	20	11	5	0	22
Totals	113	105	66	20	125

On behalf of the entire XRØY team I'd like to thank CDXC for supporting and donating to our international project. Thanks to your help we were able to provide more contacts with Easter Island worldwide. Although the island isn't listed among the Top 100 most wanted DXCC entities now, there was still a big demand for contacts across the world. The pile-ups we heard and feedback we received are good proof of that!

We regret to record the passing of the following CDXC members:

BRS 48462 Albert Tideswell
G4KTI Robert Taylor

3D2ØCR - DXpedition to Conway Reef 2009

Ronald Stuy, PA3EWP

Twenty years ago, in 1989, Conway Reef was activated as 3D2CR for the first time by a German group under the leadership of Hawa, DK9KX. The rest of the team comprised Dieter, DJ9ON, as co-leader; Hawa's XYL Annemie, DF3KX; Rolf, DF9KH, and Harry, DL8CM (who became SK a few years ago). Since then operations have taken place in 1989, 1990, 1995, 2001. In order to commemorate the 20th anniversary of the first activation the special callsign 3D2ØCR was issued by the authorities in Suva on Fiji.

Conway Reef is a coral island in the Pacific which belongs to Fiji and is located about 450km southwest of the main island. During low water it has a size of approximately 300m by 100m and tens of thousands of birds live on the island. There are no trees, only bushes about 2m high and this is where all these birds live. There is nothing else on the island.

Our operation lasted for 10 days from the 30th September to 9th October 2009. The team was: Norbert, DJ7JC; Jan, DJ8NK; Uwe, DJ9HX; Dieter, DJ9ON; Heye, DJ9RR; Hawa, DK9KX (team-leader); Hans, DL6JGN, and Ron, PA3EWP. Five of the team belonged to the team which activated Chesterfield Island (TX9) in 2004. Hawa negotiated for almost a year with the authorities on Fiji to get our special callsign and the landing permission for Conway Reef. In parallel with those negotiations an appropriate boat had to be found, which ended up being the very same catamaran that had taken the team to Chesterfield Island. Then there was the usual planning. Flights were found and booked, sponsors were contacted, rigs, generators, antennas and all the necessary expedition equipment determined, purchased, borrowed and tested. In particular the antenna testing took a considerable amount of time. Of outstanding help was our good friend Eric,

FK8GM, who has plenty of expedition material in his home garage and who loaned us mainly all those heavy 'goodies' like masts, cable and a generator.

The entire team left from Amsterdam for flights via Osaka, Japan into New Caledonia, which lasted 24 hours altogether. The next day we did the last-minute shopping and collected all of the materials from Eric's QTH. We had previously sent over 200kg of equipment from Germany. All was finally loaded onto the chartered boat and on Sunday 27th September at around 1200 we sailed off for Conway Reef. The trip was very quiet. There was so little wind that we had to use the engine almost all the time. We arrived at Conway Reef on Wednesday around 1000.

At that time we got a notice via satellite telephone that there was a tsunami warning for our area. We were all very alert, but we did not witness any tsunami and half an hour later the warning was withdrawn.

Because it was still low tide, we still had to wait about 2 hours until we could get to the Island in the zodiac. It took over seven hours to get everything to the island. Everyone had their responsibilities, with our main goal to be on the air as soon as possible. That evening at around 2000 hours local time the first QSOs were made. We were active and the pile-ups were huge as we all had expected.

We had created two camps, one at each end of the island, approximately 200m apart. One camp was used for CW and one for SSB / RTTY. At both camps we had two complete stations. We used Elecraft K2 and K3 radios.

The next day we built most of the other antennas, except the one for 160m, which was done one day later. We used the following antennas:

Band	Antenna	Remarks	Camp
10-20 meter	3 elements spider beam	4 meter high	SSB/RTTY
6-40 meter	HyGain AV640	On the beach	SSB/RTTY
10-20 meter	3 elements spider beam	4 meter high	CW
10-20 meter	Log Periodic LP5	4 meter high	CW
30 meter	¼ vertical	On the beach	CW
40 meter	4-Square	1 elevated radial	CW
80 meter	¼ vertical	2 elevated radials	CW
160 meter	Inverted L	2 elevated radials	CW

Unfortunately we could not install the beams higher due to the very heavy winds. There was a continuous wind blowing of about Force 6-7, sometimes harder. The temperature on the island was good, but the wind made it very uncomfortable, especially after sunset.

For 160m reception we used a K9AY, but the QRN from the generator was around S5 so it was impossible to use this RX antenna. We moved the generator as far as possible away from the K9AY, but the QRN was still there, so unfortunately we had to listen on the vertical all the time. Ron, PA3EPW, was our '160m guy', well experienced with 'sharp' ears. Almost every evening / night he was active on 160m and just over 600 QSOs were made with about 50 QSOs from Europe. These QSOs were with stations located in Eastern Europe, no one was heard from the west and there were only two DL stations in the log. It is still a big challenge to work the European pile-up. One can imagine that many DXpeditions ignore Europe - it is always a big mess, sorry! (And remember, it's not just the Southern Europeans, but also the Northern Europeans).

The catamaran was stood off for the entire period at around 1km from the shore; it anchored behind the coral reef. Twice a day they brought us a meal that was prepared on the catamaran and once a day they brought filled jerry cans with fuel for the generators. We had a few problems during our stay, but nothing major. One night during a strong

wind two of our beams were blown down, but there was no damage. We had two nights when during high tide under a full moon the water came very far inland. The tuner boxes of all the verticals were completely in the water and we had to move one of our sleeping tents in a hurry!

Throughout the period we were active, we made 31,692 QSOs excluding dupes with more than 11,000 individuals. On all bands there were huge pile-ups. Japanese and W6s could be worked almost 24 hours a day on all bands, but we focused on making as many QSOs as possible into all areas - Europe, North America and Japan with a balanced score. Most QSOs were made on 17m and 20m, but more than 1,000 QSOs were made on 10m - these were mainly with JA and NA. Jan, DJ8NK, was only active on RTTY and, during our final days, on PSK31. He worked over 3,000 data mode QSOs.

Around the island are three ship wrecks, one has completely disappeared, but the wreck of 1981 is partially visible. The Chinese fishing vessel which sank in 2008 is located just 200m from the shore.

At dawn on Friday, October 9th, we started breaking down the stations. It took approximately ten round trips for the zodiac to transport all the equipment and team members back to the catamaran. Around 1200 local time the anchor was lifted and we went back to Noumea. The return journey was much more restless than the

outward one. Waves more than 3m high for the first 36 hours were quite normal. Later it became a lot quieter. On Monday 12th October after 66 hours of sailing we arrived in the port of Noumea at 0330 local time.

In the morning after an early wake-up call we could finally, after 16 days, have a hot shower in a washroom at the harbour. And at around 1100 we had our first 'cold' tap beer on the terrace - and that tasted good! Much better than the canned beer from the boat with its temperature of 25°C!

We said that all the individual sponsors, who donated before 23rd September would receive their QSL cards from New Caledonia as soon as we got back. This we did and more than 200 cards were sent to our sponsors. All were handwritten, which took us a whole day's work, but that was the deal. That same day we took all the equipment back to Eric, FK8GM, to be

stored for a next occasion. The following days we stayed in Noumea, which we had planned to ensure we were not late for our return flight. On the day before our flight we packed >200Kgs of equipment to be shipped as cargo home to Germany. That evening we were invited by Eric and his wife for a barbecue, which we gratefully accepted. Then we went to the airport to begin our journey home.

This was one of the DXpeditions which we will remember for a long time. It was a very special experience to be on a very small island in the ocean without any luxuries. We hope that there will be a next DXpedition to Conway Reef in a couple of years' time, so that we (this year's operators) can also work this DXCC entity ourselves!

Many thanks to all, who called us!

CDXC QSL card

The CDXC QSL card is available to all members by direct order from Hertfordshire Display PLC, 51 High Street, Ware, Herts. SG12 9BA. Tel: (01920) 461191, Fax: (01920) 463212 or www.hdprint.co.uk.

HD Print have asked if we can update our order form to add a daytime telephone number as this is needed for verification of credit card details. We have updated the form on our website, but if you use an old form, please add your daytime contact number to avoid unnecessary processing delays.

E-mail from a satisfied customer:

"Just a short note to praise the CDXC QSL card printers (HD Print). I ordered 500 on Monday AM at 0900. I had a proof by e-mail at 1100. They were then delivered on Wednesday PM. What good service! They were also very helpful on the phone and via e-mail."

73 Dick, G4DJC

VYØO – The first activation of NA-230

Cezar Trifu, VE3LYC

Gilmour, the largest of the 34 volcanic islands which form the Ottawa group, is situated 160 km west of Puvirnituk, Quebec, in the Hudson Bay. The only available transportation was a 26ft boat named Tullaaq (Baby Loon), whose crew was the only one to accept the challenge. With a sump pump and cabin ventilation out following a short circuit at sea, and the main engine dead 40 km from the destination, we continued sailing slowly using a small, spare engine. The night was dramatic as we fought very hard at one point to avoid sinking by frantically bucketing water overboard and moving everything forward to shift weight, before plugging several holes that appeared from out of nowhere.

We landed 700 m away from the end of a long and meandering, north striking bay. By the evening the weather worsened, becoming windy and rainy. Next day we were pounded by 80 km/h winds, unsure the mast would hold, while temperatures neared 0°C. My radio equipment consisted of an Icom IC-7000 with 100W and a multi-band vertical wire with a 10m fibreglass mast. During three days 3,087 QSOs were logged, 49% on each of 20m SSB and 30m CW, the rest on 20/40 m CW, with 2,602 stations from 66 DXCC entities on 6 continents:

CONT	QSO	%	STN	%	DUPE
AF	14	<1	11	<1	2
AS	96	3	82	3	14
EU	1463	47	1190	46	87
NA	1484	48	1291	50	53
OC	6	<1	6	<1	0
SA	24	<1	22	<1	0
TOT	3087		2602		156

About 52% contacts were in CW and 48% in SSB, with an even split of 49% between 20m and 30m, and 2% on 40m. The 10 top

DXCC entities by number of QSOs and stations are as follows:

#	DXCC	QSO	STN	DUPE
1	K	1318	1149	48
2	I	240	201	15
3	DL	230	182	15
4	VE	156	130	5
5	UA	106	84	5
6	G	100	85	2
7	F	100	85	7
9	SM	79	58	5
8	EA	76	64	2
10	JA	75	61	14

Main engine fixed, the return went well until past mid-distance to the mainland when the gear broke and we had to go back to the spare engine. With changing weather in the forecast, a larger boat came to our rescue and towed us to shore. Meanwhile, a CC-130 Hercules plane dispatched by the Search & Rescue Center stayed with us for some time, just in case. Flanked by boats and motor canoes, we reached the port at sunset.

I am deeply grateful to my wife Lucia and son Tiberius for their strong and continuous support all along. Mario Aubin is graciously thanked for his logistical help in bringing this project to life. I am particularly indebted to Jakussie, Peter, Qalingo and Sailasie for their skills and dedication, so very critical to our survival and success. By naming the southern tip of Gilmour Island 'Cezar Point' they kept a piece of me up north, a symbol of the bond established between us following our unforgettable adventures.

The financial support received from the International Radio Expedition Foundation, German DX Foundation, Chiltern DX Club,

ICOM – Canada and Clipperton DX Club is graciously acknowledged.

W5BXX and VE7DP are gratefully outlined for their enthusiasm, encouragement and significant support. Special thanks to top - JM1PXG, DK8UH, GØPHY, K6DT, OH1JO, PA3EXX, RN6BY, UA6AF, VE7IG, large - DL1BDD, EA8AKN, I2YDX, IK8DDN, JA1BPA, JA1QXY, JE1DXC, JF4VZT, JA8MS, ON4ATW, VE7QCR, VE7YL, KD1CT, W3AWU, W5BOS, N6AWD, N6PYN, and generous

donors - G3KMA, G4SOZ, G4VMX, HB9DKZ, I1SNW, IZ2AMW, I4MKN, JA1SKE, JH1QVW, JE2QYZ, JA5IU, JRØDLU, SM3NXS, VE1VOX, VE3FOI, VE3IQ, VE3JV, VE3LDT, VE3UW, VE3XN, VE3ZZ, VE6VK, W1NG, W1OX, WB2YQH, K3FN, WA3GNW, WA3HIC, W4DKS, W4LSC, W5GAI, KB5GL, W5PF, AB5SG, W6RLL, W7CNL, K7SO, K8NA, W8NGA, W9DC. I would also like to thank all those who included some support with their QSL request (see VYØO page at QRZ.com for the complete list).

Recording the *Digest* for members with low vision

We are looking for an individual - or small team - from within the membership to record the *Digest*. We know of half a dozen CDXC members with low vision, but there may be more who would find a recording useful.

Recruiting from within the membership will mean the magazine is read with knowledge and authority, and the reader's own enthusiasm will shine through. Anyone with a good reading voice, PC, and microphone can help. You will produce MP3 tracks for each article, using free software, and we have a series of video tutorials produced by DJØHF, on the web, for the use of amateurs producing this kind of recorded material.

We're not looking for a BBC-quality production, but a relaxed informal read, as if you were reading to friends.

If you are interested in learning more, or indeed would like to have a go, I am happy to coordinate the project on behalf of CDXC. The first step would be to send me a sample article read from a recent *Digest*, but if at this stage you're unfamiliar with MP3, I'll take any format from tape to minidisc!

Chris, G3SVL, is also very enthusiastic about this project, and we are already musing on ways of archiving the audio material for the future!

73 Kelvin, MØAID

m0aid@qti.org.uk

(01823) 412087

Bob and Janet McLeod visit the UK

Rob McTait, G2BKZ / 9H1KZ

A contact with Bob McLeod, VP8LP, on 17m in March of this year led to various meetings with himself and his wife Janet, VP8AIB. They read with interest that I was to activate Cromer Windmill, (GB6CW) near Stevenage on 'Mills' weekend in May 2009. Bob said he would like to visit as he was coming to the UK for an operation and would be staying in Buntingford with relatives, not too far from me in Stevenage.

As planned after various phone calls, we arranged to meet on the afternoon of the 8th of May. Bob and Janet, Dave and his young son Josh arrived to help me string up an inverted 'L' for 80 and 40m ready for the 'Mills Weekend' action.

The weather wasn't all that good; a strong gusty wind kept blowing my arrow off course and it took me and the others a long time to put a line over a tree in Mike and Dot's garden next to the windmill. Three hours later the 40 and 80m end-fed aerial was up.

The next day was calmer, but cold. All who turned up were suitably attired in warm clothing.

The station set-up consisted of my TS-450S, an FP 707 power supply and an MFJ 993B auto-tuner set up on a picnic table, plus the usual bits and pieces required for a portable operation. (Guess who forgot the mains lead and had to go back to Stevenage? Yep me! None of the neighbours could muster one up).

We used the mains from the windmill, which is fed from overhead lines. The 80 and 40m bands were almost impossible to use because of the noise being picked up on the aerial from those lines. (I wonder if the electric companies are using PLT?) The

higher bands were less noisy and contacts on 20 and 17m were made during a contest with less stress on the ears. The contest helped increase our log input.

Mike, 2EØHOG, one of our Stevenage and District ARS members, managed a few CW contacts, but it was hard going. Nicolas, M1HOG, ran a 2m station and passed on details that GB6CW was also on 40 or 80m.

Although the weather was cold, we were spared the rain and made a few log pages during 'Mills' weekend. Nicolas had a big run on 2m, thoroughly enjoying a quiet band.

Bob and Janet declined the chance to operate as they were more interested in how we operated.

In between Bob's hospital admittances he acquired a FT-857D and rigged up a dipole. I suggested Bob use G/VP8LP, but he reminded me that there was no CEPT agreement between the UK and the Falklands. (That rather puzzled me, as we have a lot of interest there).

So what did he do? He went on a Foundation Course and became M6ALP. He made many contacts whilst awaiting keyhole surgery. Unfortunately the operation was not successful and he contracted an infection. He was admitted to hospital in Stevenage until his infection was under control. He was pleased to see visitors from the Stevenage who brought in magazines and books for him to read.

When he returned to Buntingford he occupied himself on the air and made quite a few SSB contacts, including myself and a few Club members, one of which was with his friend, Mike, in the Falklands on 20m.

Finding SSB hard work, he turned his attention to PSK using his 10W.

Bob and Janet made a return trip to Cromer Windmill for 'Heritage Weekend'. This time I was allowed to put a loop around the sails of the windmill. This too picked up a lot of noise from the overhead lines, but it was a little easier to work 40 and 80m. It worked well on the higher bands. A lot more contacts were made in the WAE contest. My best was with James, 9V1YC, in Singapore on 20m.

I tried a 10m CQ and was immediately called by John, G3NNY, in Luton. The signal was stronger than any inter-G station that I've ever worked, showing how good the loop around the sails was. Rob, G6BDV, from Harpenden also joined in, but not as strong.

In October Bob was admitted to hospital again for his 'proper' operation, which was a success.

The recovery time was spent, as you would expect, operating his radio. He often joined us on the Stevenage Net in the mornings on 80m, with excellent signals.

Bob recovered well from his operation and went home with Janet in mid-November and is now enjoying the pile-ups from his home QTH. I've since made numerous contacts with Bob, mainly on 17m. He's an early riser, 0400z, and enjoys the contacts with Europe on 20m at around 0800-0900z. He is hoping to make contact with one of our young club members, Josh, M6DMF.

It was a great pleasure for me and the Stevenage Club members to have met Bob and Janet. They're a great couple and so enthusiastic about ham radio!

I'm looking forward to making many more contacts with Bob. Maybe Janet will appear on the band some day too.

Letter to the Editor

From SVØXBN/9

Hi Martyn,

Just a comment about Roger/G3LDI's paragraph entitled 'Conversation' on page 40 of the last *Digest*.

He is not alone in noticing this trend to very quick QSOs these days. Sometimes it is difficult to even have a 'rubber stamp' QSO on CW now as all the other fella just wants is a report and a 73. Any request for QTH information is often greeted with 'Details on QRZ.com'. Seeing as I have no access to this Internet thing, this really helps.

I'm not sure what the answer is, but if I call CQ and some chap comes back, he gets the full name, QTH and inside leg measurements before handing it back to him. If he then does a quick RST and 73, he still gets the rig details, the WX and 'QSL via Buro' stuff. It might not be much in the greater scheme of things, but I feel better for doing it!

73 es details on QRZ.com

Dick Whittering, SVØXBN/9

A Review of the Mastrant Guy and Mast Calculators

Derek Moffatt, G3RAU

At the RSGB National Convention last year a firm from the Czech Republic by the name of Mastrant were exhibiting their range of man-made ropes and accessories which are aimed at guying amateur masts and supporting wire antennas etc.

As you would expect, they have a website and on it they have provided a 'calculator' to assist in the design of mast guying. This article is not a review of their rope and accessory products as such, just a look at their web-based free calculator tools. CDXC were asked to do this and I happened to be standing in the wrong place at the wrong time (!), and hence found myself volunteered.

Actually it has been quite interesting because in order to review any tool it is best to try using it a few times and to get a feel for it. Like most things in life there is a bit more to it than meets the eye. The calculator is actually four separate calculators, each designed for a specific purpose, and the whole thing seems to be a quite clever and well-thought-out idea. They can all be found at www.mastrant.com/calculations.

The calculator can make calculations which can be very useful. Let's say you want to put up a couple of 50ft masts to support a horizontal wire antenna. If you guy them both at 2 levels with 3 guys at each level, how much rope would you need?

The calculator is quite clever because it was developed by amateurs with practical experience, so it asks you if you want to make the lower part of the guy out of something little furry creatures can't eat through? It asks you if you are going to bang your ground stakes in not quite in the right place, so you will need longer ropes than you anticipated? It will ask you if you want to use different types of rope for the

top and bottom guys? It will also let you choose to work in feet or metres, whichever is easiest for you. It won't remind you that you have forgotten to allow for fold back around the thimbles at the end though!

Your next mistake when it comes to doing the job might be to physically cut off too much spare for each guy and run out before you are finished, so again the clever calculator anticipates that problem by telling you how long to cut each rope so the problem shouldn't arise in the first place, or working out beforehand how much spare can go on each guy to use the entire reel up with no wastage. (The answer to the earlier question, by the way, is a 100m reel)

But Mastrant don't stop there. Their 4th calculator will analyse and tell you if the masts themselves are too flimsy or not. It delves into the stress on masts as well as guys and lists the various loadings. You can soon see if more guys are needed or a tougher mast.

There are actually 4 different calculators on their website

- "linear layout" guy loadings for evenly spaced guy heights
- "user-defined layout" for irregular guy tier heights like Versatowers
- "forces in guy wires" gives various antenna wind loads
- "mast fixing 1 level" analyses loading on the mast/guys

Let's take a look at the case of renewing existing guys on a telescopic tower. If you feed in the distance from your mast to the guy anchor points and tell it how high each tier of guys is, it will calculate for you the lengths or rope you will need to do the job. You must select "user defined layout". Easy, you might say, it's just Pythagoras!

Well, yes it is, but let's say you want to do the job economically and not have lots of left-over lengths of rope on the reels. The calculator will automatically work out how to juggle the cutting lengths most economically, and additionally work out how to do the job as cheaply as possible by joining left-over lengths of rope to minimise wastage, should you so wish. You can then choose.

This gets even more fun if you are trying to use different sizes of rope on some guys.

The other obvious calculation you will need to make when replacing guys is regarding the strength of the guy rope you are proposing, and once again the calculator will do this for you. Tell it the type of antenna(s) on the top and it will calculate the strength of guy ropes necessary for your specific mast and guying set-up, but you must tell it the maximum wind speed you want it to withstand as part of the calculation. Obviously you shouldn't use replacement rope which is any weaker than the original manufacturer's fit without good reason.

Mastrant manufacturers make a whole range of rope types and you have to decide for

yourself which particular type suits your needs and pocket. You can have ropes with identical breaking strain; one being high tech and amazingly thin, the other with exactly the same strength, but far less high tech, hence thicker and cheaper.

Please do have a play with the calculators. They are quite educational, and you might even find they save you from an embarrassing mast collapse one day. This review just skims the surface really, the more you play, the more you will start to learn and appreciate.

Derek G3RAU

Mastrant contact info:

Jana, OK3FLY

Cassiopeia Consulting
Vlastina 23
161 00 Praha 6
Czech Republic

malurova@mastrant.com

www.mastrant.com

DXpedition generators

Does any CDXC member have a good contact at Honda UK? FSDXA is considering purchasing four Honda EM65is 5.5 kVA – 6.5 kVA quiet generators (or similar) for their next DXpedition to the Pacific in October 2011. We have a number of technical queries, hence this enquiry. Please drop a note to Neville, G3NUG, at g3nug@btinternet.com if you can help. We'd also like to hear from members who have contacts with other generator manufacturers.

Members may be interested in purchasing one of these generators, which are ideal for home use. They will each cost £2,000 to £2,200. FSDXA will sell these to members for 66% of the purchase price (plus shipping) on the condition that they are paid for well in advance of our DXpedition, as this helps our funding. The generators will be fully serviced on our return. One generator has been sold already. Please write to Gordon, FSDXA Treasurer, at g3usr@btinternet.com if you are interested.

IOTA News

Update of data in IOTA Directory (2009 edition)

Operations which have provided acceptable validation material

AF-011 FT5GA Glorioso Islands (September/October 2009)
AF-075 5H3EE/3 Bongoyo Island (February 2010)
AF-075 5I3A/3 Bongoyo Island (February 2010)
AS-162 XV7RRC Cham Island (September 2009)

NA-191 TI7XX San Jose Island, Murcielago Islands (December 2009/January 2010)

OC-008 P29VSR New Britain Island (October 2009)
OC-102 P29VCX Lif Island, Tanga Islands (October 2009)
OC-116 P29VCX Normanby Island, D'Entrecasteaux Islands (November 2009)
OC-149 H44MY Liapari Island, New Georgia Islands (October 2009)
OC-205 P29NI Madau Island, Woodlark group (November 2009)
OC-211 VK6IOA Robertson Island, Pelsaert Group, Houtman Abrolhos (December 2009/January 2010)
OC-231 P29VLR Nissan Island, Green Islands (October 2009) OC-240 P29VCX Loloata Island (November 2009)

SA-062 PW6C Coroa Vermelha Island (November 2009)
SA-071 PW2IO Cabras Island (November 2009)
SA-071 PW2TA Cabras Island (November 2009)

Note: This list includes operations where validation material was volunteered, ie not specifically required for credit to be given. In all cases, cards now submitted will be accepted by Checkpoints if they meet normal standards. This means that the island name should be printed on the card.

Roger Balister, G3KMA, RSGB IOTA Manager

15 February 2010

FSDXA seeks Martin Scorsese

The next FSDXA expedition will be to the Pacific in 2011. We are looking for someone well experienced in video filming and production to take over the responsibility for the FSDXA video of this expedition. Previous videos (D68C, 3B9C and 3B7C) have sold in ever-increasing quantities, and we want to build on this with an HD video of the 2011 expedition. If you have access to HD video camera(s), are skilled in filming and/or editing (these roles could be split) and would like four weeks in the tropics, please contact Don, G3BJ, at g3ozf@btinternet.com.

The RTTY Column

Roger Cooke, G3LDI *roger@g3ldi.co.uk*

75 Bauds Tests

Since my last column there has been considerable interest in trying 75 Baud RTTY and I have had several contacts on 20m. I have worked one station several times now. Charles, KK5OQ, is a good signal on 20m along with Joe, K4HMB. Trying to keep up with the typing at that speed is difficult, but copy was good every time. I also worked a couple of Europeans after calling CQ at that speed, so some are quite open to trying it. Using MMTTY and the type-ahead buffer, it is possible to manage it, but only if the overs are long enough. I think it would help to have a few back-up macros with the normal 'brag tape'-type fills that we used to use on teletype. This would help relieve the agony of trying to keep up. However, bearing in mind that RTTY is a 100% duty cycle mode, it would also help to keep the linear cool.

Of course in the early days of RTTY the only machines available in the UK at that time were the Creed 7B, an old Lorenz machine and if you were lucky, a Model 19 set from the US military. They got rid of these to update to the 28ASR. This later became the Holy Grail of teleprinters. I well remember getting a whiff of one for sale up in Chester, but despite driving all the way there on a winter's day, it had gone. I must have been mad. But I digress. The older machines were limited in speed and the design was for a maximum of 50 Bauds, which was used in the UK, whereas 45.45 was a US standard.

David, G3YYD, makes a valid point:

There is a very practical reason to use 45 baud FSK and that is its resistance to multi-path. Multi-path has a lower impact on a 22 millisecond element length (45.45 baud) than a 13.33 millisecond element at 75

baud. 80m is particularly bad for multi-path within the UK, especially in the evening. Even with 22msec element length multi-path can be so bad at times as to destroy even good signal-to-noise ratio FSK. This is why PSK31 is often a hopeless mode to use - multi path and doppler shift destroys it.

Incidentally, RTTY format with its start and stop elements is very poor at handling bit errors. An error in a critical part can cause subsequent decoding of characters to get out of step so a one element error results in many more characters in error. The same data could be sent in the same time using a synchronous coding/decoding format to reduce errors (with out any correction coding) by about 34 times. This huge improvement comes about because a single element error only results in one error character and extra "gain" is also obtained as element 0 or 1 determination is always at the optimum element middle point, which is not so with the start, data, stop method of standard RTTY. It also requires less bandwidth to send the data at the same rate as only 5 elements are required rather than 7.5 of RTTY. Therefore element lengths can be made longer, further improving its resistance to multi-path.

However, after having had a lot of contacts with a good deal of success I still feel it will be worth trying to set a new standard. 80m can be a pig to operate data on sometimes, so it will be interesting to see how we cope with 75 Baud operation.

Several people tried changing over to 75 Bauds in the XE contest, including me, but found that nobody was interested. This is obvious really and had I thought more about it I would not have tried changing. The main object of contesting is obtaining points and

if a station is not printable, then they will be ignored, as we were.

75 Baud Sprint

Since discussing this on the reflector, BARTG has decided to run a 75 Baud Sprint in order to test the water. John, GW4SKA, has finished the details on this short, four-hour contest and here they are.

BARTG will be running a new contest for 75 baud RTTY only in June 2010. It will be run as a one-off trial to see how much interest and support is generated. The aim is to broaden our knowledge of how 75 baud RTTY will work in contest conditions, how well it stands up in varying HF propagation and what equipment configurations are best used.

The full rules will be on the BARTG website very soon; this is a short summary:

BARTG Sprint 75

Mode: 75 Baud RTTY only

Time/Date: 2000-2359 GMT on Saturday, June 12th 2010

Classes: SOE Single Operator Expert; SOAB Single Operator All Band

Bands: 14 , 21 and 28 MHz

Exchange: Serial number only.

QSO points: Each completed QSO scores one point. Stations may be contacted again on other bands.

Multipliers:

All DXCC countries and JA, W, VE and VK areas count as multipliers. Multipliers and continents count only once in the contest regardless of band. U.S. stations must use correct call or suffix for area of operation.

Scoring: QSO points x Multipliers x Continents (max 6).

We are hoping for a good deal of support, so please try to take part. It is only four hours and could be quite interesting. Comments and thoughts will be welcome and if you have any suggestions, please send them to John at ska@bartg.org.uk.

CQ WPX 2010 and Band Plans

I had a dabble in this popular contest, but had limited time as usual. However, I decided to enter a single op single band category and chose 15m, thinking that there wouldn't be too much activity. How wrong I was. The SFI is creeping up now that Cycle 24 has started and with it up to 94. 15m was nicely open. I ran a pile of JA stations and worked a couple of VK and ZL stations - with North America and some South America in the afternoon. With the improving propagation, occupancy is increasing and this contest is no exception. Reading the rules, it does state that, and I quote: 'Observance of established band plans is strongly encouraged'.

Whilst this may be very ethical, it is impossible to enforce. RTTY is gaining in popularity, especially in contesting, and listening just on 15m, RTTY stations could be heard from around 21.050 MHz up as far as 21.150 MHz. Obviously this is not within the recommended band plan. Even ignoring this, the QRM was horrendous on occasions, and not many were observing the frequencies to be avoided either.

For example:

In the section 21.065 to 21.070 MHz there are Pactor stations.

PSK stations are on 21.070 MHz and obviously take up about 3 kHz.

Other data activity, Pactor MFSK, Olivia etc. should be on 21.075 to 21.080 MHz.

RTTY should be on 21.080 to 21.090 MHz (used to be up to 21.100 MHz)

21.090 to 21.120 MHz is allocated to HF Packet.

Now we all know that this is impractical and to be frank there are not that many HF Packet stations at all these days. Pactor is not used that much either. PSK is, however, and there were RTTY stations in that segment. It is impossible to contain all the participating stations within the 'RTTY segment'. Obviously that 10 kHz segment is way too small for contesting. If all the participants were within that section it would sound just like white noise! However, during non-contest periods it is usually ample.

This same problem can be transposed to other bands, of course, especially on 40m here in the UK where the Digimode segment is 7.040 to 7.050 MHz and this includes other Digi modes that can be called narrow-band modes. Tempers are often frayed near to that section when overspill occurs and I have had lots of e-mails in the past regarding QRM to the CW QRP crowd. Again, the same problem can be applied to the CQ WW CW and SSB events. I have

heard SSB on 40m all over the CW segment as low as 7.005 MHz. I don't think that can quite be condoned. Similarly CW is all over the Data section in their contest. It's a chestnut of a problem that has been with us for years and is only getting worse. Several friends of mine who have been contesters themselves in the past, now abhor them. One man's meat and all that. However, when it comes to occupying the whole band for 48 hours at a weekend, it can lead to fractured friendships!

However, contests are a wonderful way of increasing one's DXCC score, awards can be obtained with the log from just one such contest, so to the initiated among us they are both useful and good fun. There again, some manners and patience would not go amiss in some cases. The next main event will be the BARTG Spring, another very popular contest, so I hope to see some of you there. It's a good chance to practice some of the less used moves in N1MM too. The full rules are on the BARTG website.

See you next time on the green keys.

73 de Roger, G3LDI

Contest

Lee Volante, GØMTN

Over the years I've been writing this column I've physically typed it up in a variety of locations. Whilst often I've just been at home with the radio on in the background, sometimes I've been on trains, or planes, on holiday or even reporting 'live' from the field during an NFD weekend. This time I'm in the relaxed surroundings of my living room, albeit with the Mini-skirted Maidens' deadline looming. Trying to squeeze in some extra operating time and getting some contest adjudication out of the way has taken its

toll. Belated congratulations from me to the CDXC team for their efforts in the last CQ WW SSB contest, organised by Steve, 9M6DXX. I'd missed news of this on the CDXC Reflector, so it was a pleasant surprise to read about.

On the Air

As usual the first few months of the New Year are very busy for HF contests. Once again this year I rose bleary-eyed from bed on New Year's Day and had a play in the

SARTG New Year's Contest. This was soon followed by the AGCW contest, and later in the afternoon the IRTS 80m Counties contest. I've mentioned before that I think there are too many contests in the calendar, but at least these particular events are just a couple of hours long each and don't cause congestion on the bands.

One key part of improving in contesting is to track your own score, and improve from year to year. Sometimes the propagation or activity levels are a deciding factor, and other times a better strategy in band changing, running versus searching, or your off-time choices are the reason for success. When an operator has reached a certain level of competence, operating from a better station or different location (perhaps in a different country, depending on the contest) will probably give the biggest improvements. Looking at my scores for these New Year events showed that I'd not really stretched myself compared with previous attempts – so maybe I'll have better luck next year.

The 80m Club Championships have begun again, and each session so far has been an interesting lesson in propagation around the UK. It's been fascinating to read the post-contest reports, which often reveal a very different perspective to the one being heard from your own station.

AFS

Later in January are the perennially popular 80m AFS contests, which have maintained a high number of entrants despite the success of the ongoing 80m CC contests throughout the year, which are a similar format. I try not to take the AFS contests too seriously, as the luck factor can conspire against you so easily. A good run frequency can disappear in seconds, with another one so clear never to be regained again in the contest. For the 80m SSB event I didn't even manage to find a frequency to call CQ on at the beginning of the contest, but was lucky enough to find some clear run

frequencies over the next couple of hours. They never last, of course. After returning to the band after a short power cut in the last hour, I realised the skip had dramatically shifted, and most of the UK was inaudible.

I purposely didn't publicise AFS on the CDXC Reflector, as I'm wary of participation by national teams, especially the likes of CDXC who have a large pool of top-class operators that could form a 'super-team'. That said, there has been some criticism of the 'team contest' format, whereby it's been felt that contest groups field teams to compete alongside local clubs. On the other hand many contest groups have as limited resources as other clubs and still hold meetings etc. Is any differentiation required, and if so, what criteria would be used?

I was again the adjudicator for the AFS SSB contest. Last year all of the e-mail entries that arrived had to be individually checked and replied to. Some of the logs would be missing needed information, or perhaps be for the wrong contest. With the introduction of the contest log robot and web submission system, this time-consuming part of the adjudication process disappeared completely for 2010. More of the time could be spent on the adjudication process itself. The improved turnaround time for the results seems to be appreciated by the entrants. Thanks to the Pete, G4CLA, and Mike, GØGJV, for their combined work with the log robot and adjudication software respectively. The 2010 AFS CW results show most high scorers this year in the South East, and the SSB results an even greater spread of the South East, South West and a great showing by Clive, GM3POI, who managed 4th place. In some years most of the top placings went to Midlands stations, but it was a good deal more spread out this year.

The Sunspots are back!

I've been waiting to write those words for a very long time. There has been sunspot

activity reported on most days this year, which has started to have a positive impact on the upper HF bands.

I managed to find enough time to be fairly serious about two RTTY events in the last couple of months, those being the ARRL RTTY Round-up at the start of January, and the CQ WPX RTTY in the middle of February. In the ARRL contest I had barely a handful of contacts on 21 MHz. But in the WPX contest barely a month later many stations were making hundreds of QSOs on the band. Some of the Worldwide Young Contesters I spoke to during the event said they'd never heard anything like it. (Indeed, several of them moved up to 12m to start collecting all-time new band points for DXCC) I'd forgotten that there will be many newly licensed amateurs who won't have seen high bands open like this - such has been the extended sunspot minimum. 15m offered sustained propagation to Japan and all parts of the USA. 10m was still quiet, although I did work a lone VU there. Come next year hopefully the excitement will spread upwards to 10m.

The rise in sunspots will ultimately have a negative impact on the low bands, especially 160m. The CQ WW 160m CW contest at the end of January didn't see a repeat of the previous year's incredible conditions, but still provided a weekend full of activity for those burning the midnight oil. It was great to work and/or hear a number of UK stations doing well.

CQ WW Committee decide

As I wrote about in the last *Digest*, my trip to K3LR last year showed the real possibilities of CW Skimmer. In January the CQ WW Committee confirmed that there would be no change to the Single Operator categories for the CQ WW contests, and they would not combine the Single Operator and Single Operator Assisted categories. There had been some consideration that a number, perhaps a high number of 'unassisted' Single Operator entries were in

fact using some form of DXCluster assistance. As it is difficult to determine which of the entrants may be using assistance, the suggestion was to do away with the unassisted category completely. This brought about a number of vocal responses from the contesting community at large. The decision by the CQ WW CC seems to have been met with approval overall.

Tip of the Month

When both low-band and high-band propagation can be so variable, don't forget to check propagation for a few days prior to a contest you're going to be taking part in. It'll help give you more confidence when to change bands and when to take a break. I was reminded of this tip when getting caught out with some of my all-band activity recently.

Endpiece

That's all for this time. The next *Digest* should be awash with reports from the forthcoming Commonwealth Contest, so good luck and safe travels to all of our CDXC DXpeditioners.

73 Lee, GØMTN

CDXC
CHILTERN DX CLUB
The UK DX Foundation

Not the GB2RS News

- Illegal French 'radio amateurs' en route to Lundy
- Six metre operation increasingly popular at Hogwarts
- New Committee at CDXC

Not many people know that Lundy Island in the Bristol Channel, 12 miles off the North Devon coast, is so called because it was first discovered by a group of French pirates on a Monday. To celebrate this, a group of illegal French 'radio amateurs' plan to be on the air from Lundy next Monday. Lundy is also a famous puffin sanctuary. In the olden days a railway engine was even named after one of these birds, name of Billy. Yes, Puffin Billy.

Six metre operation is becoming increasingly popular at Hogwarts School of Witchcraft and Wizardry. Indeed ever since Harry Potter and his friends discovered that 6m is also called the Magic Band there's been no stopping them. Beams have also been constructed very simply using only their wands.

There have been some radical changes at the Chiltern DX Club (CDXC) with a view to making the Club even more international. The old Committee has now been replaced by the following: President, N3GGU; Chairman, SV3LG; Secretary, UR3GS; Treasurer, TF3GX; Digest Editor, F3GXR; Awards Manager, KØAMZ; CDXC Yahoo! Group Moderator, XX4AG; Caribbean Representative, J7VGR.

Another major DXpedition to Middle-earth has been announced, this time to Lothlórien, ME4, the realm of the Lady Galadriel. The only fear is that the expedition team will be so captivated by the charms of the lovely Galadriel herself that they'll end up not bothering to go on the air at all.

Now the contest news.

The French Wine Drinkers on the Air Contest takes place next weekend over the full 48 hours which next weekend should have to offer. The exchange is the usual cinquante neuf (59) report plus the name of your favourite vin rouge. However, points will be deducted if this vin rouge is not French. For extra points non-vegetarians may quote how they like their steak cooked. Points will be deducted if you say anything other than 'rare'. Vegetarians, on the other hand, say how they like their eggs done, eg hard-boiled, scrambled or taken illegally without the landowner's permission [*He means poached. Ed.*].

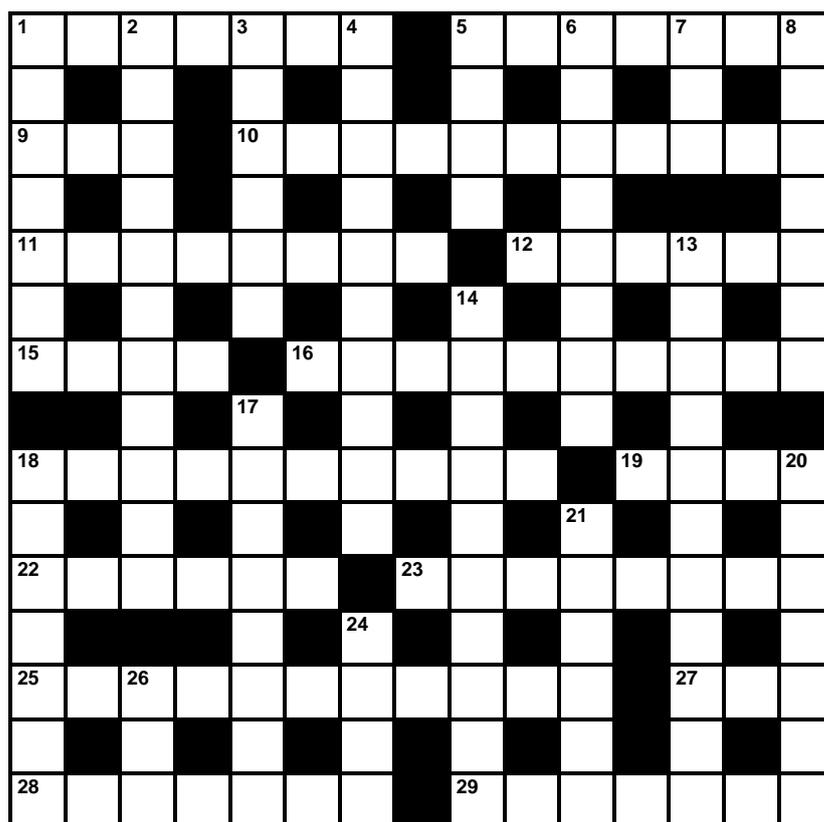
G3SXW might not have anything to do with trains and First Great Western, but he would like it to be known that he is a Devonian and hails from Torquay. Which is where that portable communications device once popular with dog owners round that way gets its name from: the Walkie Torquay.

Recently voted the radio amateur's favourite cartoon character: Yagi Bear.

Solution to Prize Crossword 38

L	O	C	O	M	O	T	I	V	E		T	A	L	C	
U	O	A		E	A	B	M	O							
L	I	N	K	S		H	U	N	G	A	R	I	A	N	
U	Q	S		E		D	Y	G	S						
	H	U	M	P	H	R	E	Y	B	O	G	A	R	T	
T		E		R	A		C							I	
H	A	R	P	O	O	N		K	E	E	N	E	S	T	
E		E		D					T	P				U	
R	E	D	O	U	B	T		L	E	F	T	I	S	T	
A				C	H			O		I		C		E	
P	U	S	H	T	H	E	B	O	A	T	O	U	T		
I		E		I		W		K		T		R		B	
S	U	B	T	O	T	A	L	S		I	D	E	A	L	
T		U		N		S		A		N		A		O	
S	U	M	O			P	H	O	T	O	G	E	N	I	C

Digest Prize Crossword 39 *by RFX*



The winner of Prize Crossword 38, January 2010: Peter Ball, EI7CC, Dun Laoghaire (via e-mail).

ACROSS

- 1 Extend TV show about Lake Ontario (7)
- 5 Decide to do the crossword again? (7)
- 9 Promise to cut the grass (3)
- 10 Unconventional moon starters? (11)
- 11 Locals university replaced by different sage - or rosemary, perhaps (3,5)
- 12 Take oneself off to get married again? (6)
- 15 French writer not happy about Byron's end (4)
- 16 Good people disguised as Martians (10)
- 18 Where many aircraft are? That's open to debate (2,2,3,3)
- 19 God who makes no noise? (4)
- 22 The witch to free Harry's friend (6)
- 23 Tree creating a blaze in chimney (8)
- 25 Made fun of somebody and extracted a urine sample? (4,3,4)
- 27 Half starving old invader (3)
- 28 Audibly funny bone (7)
- 29 Something to eat misrepresented in EMI tape (4,3)

DOWN

- 1 Helps forgetful actors in concerts without piano teachers at first glance (7)
- 2 Not paid to be brilliant (11)
- 3 Unusual orange donkey (6)
- 4 The fire brigade will be damned (2,2,6)
- 5 Cross and impolite, we hear (4)
- 6 Feels bad turning up about baker in part of Europe (8)
- 7 Shelter from slippery character going north (3)
- 8 Makes certain nurses start to empathise when ordered (7)
- 13 Go overboard - or a group on board? (7,4)
- 14 System in which everything is in upper case? (10)
- 17 Heartless seismologist after way to become more authoritarian (8)
- 18 A French problem resulting in divorce? (7)
- 20 Candidate popular in North Slovakia starts to excite electorate (7)
- 21 Old country powerless to form another one (6)
- 24 Layers found in kitchen sink (4)
- 26 Law man's expression of surprise on top of mountain (3)

Deadline for entries: 20 April

DX and Events Calendar

Compiled by G3XTT

(thanks to the 425 DX News for most of this)

till 26/03	XR9JA: South Shetlands (AN-010)
till 27/03	PJ5NA: St. Eustatius (NA-145)
till 31/03	6W2SC (Senegal) and J5UAP (Guinea-Bissau)
till 31/03	J79XBI: Dominica (NA-101)
till 31/03	VG, VX, XJ, XK: special prefixes (Canada)
till 31/03	VG7G: special callsign
till March	FG/F6AUS and TO4D: Guadeloupe (NA-102)
till March	PJ4/PE1MAE: Bonaire (SA-006)
till March	VP6AL: Pitcairn Island (OC-044)
till 30/04	C6ANM: Bahamas (NA-001)
till 30/04	PI65RTD, PA65xx, PD65xx, PH65xx: special callsigns
till April	T6AG: Afghanistan
till 11/05	5Z4/LA9PF (Kenya) and 7Q7PF (Malawi)
till May	VK9WBM: Willis Island (OC-007)
till 30/06	3Z0FCH: special event station (Poland)
till 30/06	GB50ATG: special event callsign
till 12/07	ZS10WCS: special callsign
till 31/12	3Z0RADIO: special event callsign
till 31/12	DR2010L, DR2010O, DR2010N: special callsigns
till 31/12	HA2010S: special callsign
till 31/12	LM50NRK: special event station
till 31/01/11	DT8A: King Sejong Base, South Shetlands (AN-010)
till March 2011	AT10BP: Maitri Base, Antarctica
till 20/04	H44MS: Solomon Islands
17/03-20/04	4 T32 islands by G3KHZ & co.
21/03-29/03	EJ8GQB: Bere Island (EU-121)
26/03-31/03	VY0V: East Pen Island (NA-231)
27/03-28/03	CQ WPX SSB Contest
28/03-12/04	Ogasawara by JAs and Ws
31/03-07/04	MJ/OP9X/p: Les Minquiers (EU-099)
03/04-11/04	YI9PSE: Iraq
10/04-18/04	3W6C: Con Co Island (AS-185)
April	3C0C: Annobon Island (AF-039)
01/05-28/05	PC600P: special event station
20/05-23/05	VP5/PY2WAS: Caicos Islands (NA-002)
28/05-06/06	E4X: Palestine
29/05-30/05	CQ WPX CW Contest

May	ZS8M: Marion Island (AF-021)
09/06-15/06	PW8J: Ilha dos Lençois (SA-041)
10/06-17/06	VP5/WB2REM, VP5/KD2JA, VQ5M: Caicos Isls (NA-002)
16/06-18/06	PW8L: Sao Luis Island (SA-016)
18/06-21/06	MS0INT: Flannan Isles (EU-118)
18/06-23/06	OZ/G0GRC: Fyn Island (EU-172)
23/07-25/07	F/OR9W/p: Tombelaine Island (EU-156)

GB1ØGKA

To mark the 10th anniversary of the closure of the world's largest maritime radio station, Portishead Radio/GKA, the special callsign GB1ØGKA has been granted. GB1ØGKA is being activated for a period of one month from 30 April to 27 May 2010.

Hours of operation will be dependent on individual operators' free time. However, it is intended that the callsign will be active extensively throughout the above period. Operation will be mainly on CW.

Operations will be on all the HF bands from the following stations, each manned by an ex-GKA Radio Officer:

G3YEC, Rick, 30 April - 06 May. QTH near Colchester, Essex.

G3ZRJ, Tony, 07 May - 13 May. QTH near Hereford.

GW3UOF, Mike, 14 May - 20 May. QTH near Treorchy, Mid-Glamorgan.

G3TJE/G4HLN, Pete/Larry, 21 May - 27 May. QTH nr Burnham-on-Sea, Somerset.

Special anniversary QSL cards will be produced to mark this historic event. eQSL will also be used.

Certificates for contacting GB1ØGKA on more than four HF bands will be available via soft copy, so at no cost to the winners.

If you work us on more than four bands, please contact G3ZRJ as shown below so that your certificate can be sent to you via e-mail.

Point of contact: Tony Roskilly, G3ZRJ g3zrj.morsekey@btinternet.com.

Information about Portishead Radio can be found at www.gka.btinternet.co.uk/.

73 Tony Roskilly, G3ZRJ, licence holder for GB1ØGKA

Standing Order Request Form

To: Bank

Branch :

Please pay:

Bank: **NatWest Bank**
Branch: **Kingston-upon-Thames**
Sort Code: **60-60-02**
Account: **44532385**
Account name: **CDXC**

Reference: (Please write your **callsign** here)

The amount of **£18.00** (eighteen pounds)

1. starting with an **initial payment on 1st July 2009**
2. **annual payment on 1 July** thereafter until further notice in writing.

Please debit my/our account accordingly.

Name of account to be debited :

Account number :

THIS REPLACES ANY EXISTING STANDING ORDER PAYABLE TO
'CDXC' or 'Chiltern DX Club' (Delete if this is a new Standing Order request)

Name(s) :

BLOCK CAPITALS PLEASE

Signature :

Signature :

(For accounts where two signatures are required)

Date :

Address :

.....

Postcode :

After completion, please send the signed form to the UK bank branch looking after your account and not to CDXC. If you are using ONLINE banking, then make the Standing Order request directly ONLINE.

CDXC Clothing

We are able to offer a range of high quality CDXC clothing through suppliers Aquarian. All items are available in a choice of colours containing an embroidered CDXC logo and your callsign, also embroidered, with a red 'CDXC' and the remainder of the logo text in gold. Your callsign will be in red.

Please order direct from AQUARIAN. Prices include your callsign (except ties, which do not carry a callsign). Additional lines of text may be added at extra cost. Please note that postage charges listed are to UK addresses. Please contact Aquarian direct for postage charges to other countries.

ITEM		SIZE	PRICE
Sweatshirt	Polycotton raglan sleeve	S, M, L, XL XXL, 3XL, 4XL	£21.00 £22.00
Children's sweatshirts	Polycotton raglan sleeve	3, 5, 7, 9, 11 years	£16.00
Rugby shirts FR1	100% cotton	S, M, L XL, XXL 3XL	£25.00 £26.00 £28.00
Rugby shirts FR2	Quartered 100% cotton	S, M, L XL, XXL	£29.00 £31.00
Polo shirts	100% cotton	S, M, L, XL, XXL, 3XL	£19.00
Polo shirts	Polycotton	S, M, L, XL, XXL, 3XL, 4XL, 5XL	£18.50
Children's polo shirt		3, 5, 7, 9, 11 years	£15.00
T-shirts	Heavyweight 100% cotton	S, M, L, XL, XXL, 3XL, 4XL	£16.00
V-neck pullover	Lambswool	36" to 50"	£31.00
V-neck pullover	50% wool / 50% acrylic	36" to 48"	£28.50
Crew neck pullover	Lambswool	36" to 50"	£31.00
Fleece jacket		XS, S, M, L, XL, XXL	£28.00
Children's fleece jacket		3, 4, 6, 8, 10, 12 years	£23.00
Tie			£14.25

Colours available: navy, black, royal, bottle green. Rugby shirts FR2 in navy/sky or navy/grey.

ORDER FORM:

ITEM(S)	QUANTITY	SIZE	COLOUR	PRICE
Additional text @ £3.00 per line				
Sub-Total				
P & P: £1.75 for first^t item, £1.50 additional items to a maximum of £10, £1 children's items, £3.00 fleece jackets				
Callsign	Total			
Name/Address				
Telephone				

**AQUARIAN, Quarryhill Cottage, Justinhaugh, by Forfar, Angus, DD8 3TQ
Tel.: (01307) 860 350**

