

The Isles of Scilly lie 28 miles southwest of the tip of Cornwall in the Atlantic Ocean. There are over 30 islands, of which the largest five are inhabited. Total population of the islands is around 2000, though summer visitors considerably increase this number. The islands' temperature is regulated by the Gulf Stream, and the world-renowned Abbey Garden on the second largest island, Treco, grows many species of plants that cannot survive anywhere else in the British Isles.

Although part of England and therefore using the G prefix, the islands are attractive from a radio viewpoint because they comprise the EU-011 group for the RSGB IOTA award. Of special interest to contesters is the IOTA contest which takes place each year on the last full weekend of July.

In early 2003, Nobby Styles, G0VJG, conceived the idea of a DXpedition to the islands by the Cray Valley Radio Society for the 2004 IOTA contest, using the club's contest call sign M8C. His initial inquiries revealed that there is a ferry service to the islands, but I had been on a holiday to the islands in 1990 and had to warn him that this was not a roll-on roll-off car ferry. Normally the ferry takes foot passengers only, and this would limit the amount of gear that could be taken.

Cray Valley RS is located in southeast London and was responsible for organising the M2000A millennium station at Greenwich, and the GB50 Jubilee station at Windsor Castle. The club

has participated in a number of contests but this DXpedition would be the club's biggest contest effort to date. Plans for the trip started shortly after the 2003 contest, by which time the team comprised Nobby G0VJG, Ralph 2E0ATY, Simon M3CVN, Richard G7GLW, Chris G0FDZ and myself.

With help from G3RPC, one of the islands' two resident amateurs, we found a site on a farm on the eastern side of the main island, St Mary's. Holiday accommodation on the islands is often booked from one year to the next and it was not possible to stay close to the site, but the only town on St Mary's, Hugh Town, is just a mile and a half away on the other side of the island and we found bed and breakfast accommodation there. The farmer suggested we arrange to bring a car over on the ferry because of all the gear that had to be transported. Visitor's cars are not normally carried to the islands, but the ferry company was able to accommodate our request. Nobby's car was the biggest so that was the one we chose to take, but even with the back seats taken out it was filled right to the roof with gear. The accompanying picture shows the car, fully loaded, being lifted into the hold of the ferry by crane.

We planned to take everything with us apart from scaffold poles that we had arranged to hire from a builder on the island. Chris, G0FDZ took charge of the inventory and we decided to use the WPX phone contest in March for a dummy run from the home of Cray Val-

ley member G3YJW. Operating WPX was secondary: the main objectives were (1) to test the radios and computers in the configuration planned for IOTA; (2) to test that the steel scaffold masts could be erected safely; (3) to find out if all the gear could be loaded into one car. The answer to this latter point was yes, but only just! We had some fun in WPX, too, making 1323 QSOs in a little over 24 hours operation. The dummy run proved extremely useful, especially the computer setup using three laptops running *Writelog* under W98SE and networked with wireless adapters in ad-hoc mode. This is something that definitely could not be left until we were on the islands.

On Wednesday, July 21, three cars traveled the 300 miles from London to Penzance, and the team met at 5:30 in the morning outside the harbor to transfer three carloads of gear into one. Once this was done, there was no room in Nobby's car for a passenger. The three-hour boat trip to the Isles of Scilly was very smooth and we arrived at the site around 1PM. A couple of hours later the first mast was up, supporting my much-travelled TET three element tribander at about 34 feet. Above this was a 6-meter beam for operation outside the contest, and the mast also supported a 40-meter dipole. Although this was only about 32 feet high, it proved to be a killer antenna. We got a line into a tree to support the 80-meter broadband dipole at about 35 feet, and put up dipoles for 30 and 12 meters at about 25 feet.



G0VJG's car containing all the gear being lifted into the hold of the ferry.



In the foreground Simon, M3CVN, on the run station while G7GLW and G0VJG search for mults.

The second main mast, which would support the homebrew two-element 10/15-meter quad at about 35 feet, could not go up until the following day because of a problem with the rotator control line. We did a little operation on 40 meters on Wednesday evening, but concentrated on the WARC bands so as not to diminish the number of people wanting to work EU-011 in the contest.

On Thursday, we put up the mast for the quad, which also supported a dipole for 17 meters. We set up the station in the configuration planned for the contest, including Dunestar filters on both rigs and stubs on all the main feed lines. Including feeds to the VHF and WARC band antennas, we used a total of 1200 feet of coax. The tribander and 15-meter quad were fitted with 22-foot open and shorted stubs, respectively, allowing the tribander to be used on 10 and 20 meters at the same time that the quad was used on 15 meters.

The IOTA contest rules allow two transmitters, with the second one only used for multipliers, much like the CQWW multi-single rule (which is nothing of the sort). Our two stations could perform either role, but generally, the "run" station was Ralph's FT1000MP Mark V transceiver and Quadra amplifier, while the multiplier station was my FT1000MP and Dentron MLA2500 amplifier. With filters and stubs in place, we confirmed there was almost no inter-station QRM, but during the contest something changed and by the Sunday we were getting quite severe mutual interference.

With everything ready to go, we concentrated on the WARC bands on Thursday but also worked a number of Cray Valley members back home on 80 and 40 meters. Throughout the trip, the weather was sunny and hot, and with no major hitches, we were able to take it easy on Friday; four of us went to Tresco and the others stayed to work the radio. But as conditions took a dive, they took some time off to go fishing. The worsening conditions were a portent of things to come.

In total, there were five operators available for the contest. Chris, G0FDZ is a superb technician and provided much technical support but he does not operate HF; instead he had brought 10-GHz equipment along to give the very rare IN69 square to a number of microwavers who had their own contest scheduled for Sunday. So we had five operators for the contest, of which I was the only CW operator. I was happy about this on a personal level, as I like lots of time in the chair, but it was a weakness in the makeup of the team. Three of the other four are promising to work on their CW skills for next year. Given the poor

### M8C QSO Breakdown

Band	CW QSOs	CW mults	Phone QSOs	Phone mults
80	187	38	230	34
40	217	39	613	57
20	136	36	519	75
15	25	18	338	54
10	2	2	115	9

conditions we thought we would start running on SSB on 20 or maybe 15 meters, but just before the start we found 10 meters had opened short-skip to Europe, so Ralph kicked off on 10 meter phone and put 112 QSOs into the log in the first 40 minutes, after which the band died completely. Meanwhile I picked off

as many multipliers as I could on 15-meter phone and CW.

We also had a receiving position available with a Butternut vertical antenna, so a third operator was occupied searching for mults and viewing mults coming in from a Telnet cluster connection using GPRS. Unfortunately, the GPRS connection wouldn't work with *Writelog*, which meant that we were unable to feed spots directly to the operator's packet spot window, and this had a significant effect on our multiplier performance.

The rules of the IOTA contest count 15 points per QSO with an island station (one giving an IOTA reference such as EU-011), and 3 points otherwise. Each IOTA reference worked per band per mode counts as a multiplier. So, al-



Antennas seen from the coastal path on the east of the island. 10/15-meter quad up 35 feet, TB33 tribander up 34 feet with a 6-meter Yagi above, and an 11-element 2-meter Yagi on a 29 foot pole to the right.



Takeoff to JA from the coastal path, looking across the outer uninhabited islands. Antennas are about 200 feet inland from this point.



**Team photo before the start of the contest. Left to right: Chris, GØFDZ, Dave, G4BUO, Richard, G7GLW, Nobby, GØVJG, Simon, M3CVN and Ralph, 2EØATY.**

though M8C on EU-011 is attractive for QSOs and multipliers, it's not as attractive as MD4K or GU8D, which are in more rare DXCC entities. Nevertheless, we felt we should be able to run for the entire contest period and the plan was to run mainly on phone, but to run CW for part of the time overnight on 40 and 80 meters. As conditions deteriorated, it became harder to maintain a run on SSB and I spent much of the night on the key, alternating between increasingly slow runs on 40 and 80 meters.

We had some good phone runs on 40 and 80 meters in the late afternoon and evening, and every QSO with G counted 15 points as they are located on EU-005,

a separate IOTA reference. This was repeated on Sunday morning when we made maximum use of 40 meters to work Gs, again at 15 points per QSO. We had some brief runs to the States on 20 meters, but the last W worked was at 2130Z and the band closed shortly afterwards. To show how poor HF conditions were, we only made four Stateside QSOs on 15 meters and we worked just one solitary JA during the whole contest. This was especially disappointing as we had a superb sea path to the northeast, and Japanese stations, being located on islands, are all worth 15 points.

We pushed hard in the last hour to try to reach the goal of 2400 QSOs, which

would have been an average of 100 per hour for the contest, but finished fractionally short with 2382 QSOs and just 366 mults. Multipliers are the area that will need attention next year, but in dreadful conditions we were pleased with the score of 6M points, which would have been good enough to win the contest three years before. As it is, we hope we have done enough to finish in the Top Ten. The QSO breakdown is shown in the accompanying table, from which it can be seen that I didn't spend quite enough time in the chair as the low CW totals on HF contributed to the poor multiplier performance.

Conditions turned truly auroral shortly after the end of the contest. Chris, GØFDZ, was unable to use 2 meters for microwave talkback so I spent some time working the aurora on 2 meters, with the best DX being SP2EKO at 1731km. The keener members of the team went back to the site after a celebratory meal in town to work some more pileups until the early hours of Monday morning, while I got some sleep.

The team assembled at 9AM on Monday morning at the site and, as is always the case with field day style operations, tear down took very little time. Everything was packed into the car before midday, in plenty of time for the daily ferry that departed at 4 PM. Our pre-planning, including the inventory maintained by Chris and the dummy run at G3YJW, contributed to a trouble free and very enjoyable IOTA DXpedition, and the team is planning a return trip to EU-011 for 2005. There is further information and pictures at [ourworld.compuserve.co.uk/g4buo/m8c.html](http://ourworld.compuserve.co.uk/g4buo/m8c.html) and the QSL manager for M8C and G3RCV/P is G4DFI.

