

Issue 159

October 2007

**ISLE OF WIGHT PC USER
GROUP**



HOT KEY

AUTUMN 2007



David Groom

was talking about HTML and CSS in the design of Web Pages

Records show that there were actually 22 members in the audience, not just one

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The Isle of Wight Personal computer User Group

The Isle of Wight PC User GROUP

Welcomes all owners and users of IBM compatible Personal Computers.

It is a group which seeks to exchange ideas and new information.

Our meetings are held on the first Wednesday of each month at The Riverside Centre, Newport from 7.30 to 9.30 pm

Visitors are welcome. Membership is £6 per annum

A charge of £1 is made per meeting, which includes tea or coffee during the break.

If you would like to know more about us, you are most welcome to come along to one of our meetings, or you can contact one of our Committee Members listed on page 3.

The Club Website address is **www.iwpcug.org**

We also have an e-group discussion area

Yahoo iwpcusers: **iwpcusers@yahoo.com**

See page 10 for how to join

FORTHCOMING EVENTS

<u>Date</u>	<u>Subject</u>	<u>Speaker</u>
3 October	Genetic Programming	Richard Burkhill
7 November	PHP	David Broughton
5 December	Christmas Party	
2 January	Not Yet Arranged	
6 February	AGM and Open Street Map	David Groom

See our Website for more information as it becomes available

ISLE OF WIGHT PC USER GROUP COMMITTEE MEMBERS

Chairman: David Groom

Vice-Chairman: Cliff Maidment

Treasurer: Bob Groom

Secretary: Susanne Bone

Membership & Database Secretary: Ray Boote

Committee Member: David Broughton

Committee Member: Roger Skidmore

HotKey Editor: Bob Groom (as above)

[contact details removed prior to publishing to internet]

Suggestions for new events, topics or speakers for talks are always
welcome.

Please contact any committee member or the Editor with your ideas

If necessary we may be able to find a speaker for your subject

Chairmans Report

There isn't a great deal exciting to say this quarter I'm afraid. We have continued with of program of events, and were lucky with the weather for the summer BBQ.

As the longer nights draw in, and the opportunities for gardening, walking, etc in the evenings become fewer, it would be nice to see a few more members at our monthly meetings. We have a full program booked through to the end of the year.

Although it is not heavily used, I was surprised to see that over the past three months there had been 50 postings to the club newsgroup. It is perhaps all too easy to forget that at the other end of a quick email there are 40 or so other IWPCUG members available for help and advice. So if you have a problem, or a tip to share, then remember to post it on the egroup.

This is the last HotKey of 2007, our next edition will contain notice of the AGM, and our plans for 2008.

Peter & Dorothy Woollerton

The IWPC User Group is saying goodbye to two long-standing members, Peter and Dorothy Woollerton, who have been with us since the Group's very early days. They are leaving their house in Niton, an interesting converted pub, and are moving away from the Island to be closer to family members on the mainland. Both Peter and Dorothy attended meetings regularly and took an active part in the Group's activities until poor health made this impossible. In the days when we had coffee and biscuits at our meetings it was always Dorothy who organised and provided them. They both volunteered their services at the Computer Shows organised by the Group and Peter was an active member of the E Group. Their contribution to the Group was recognised in the fact that they were awarded Honorary Membership when they could no longer attend meetings. We wish them well in their new life.

Twelve things you didn't know a week ago about Wikipedia

1. **Name** – the name *Wikipedia* is an amalgam of the words wiki (a type of collaborative website) and the American spelling “encyclopedia”. The aim is to provide a web-based, free-content encyclopaedia. The hope is that it will constantly evolve.
2. **Origins** – *Wikipedia* was co-founded in 2001 by Jimmy Wales (sometimes referred to as the überpedian) and Larry Sanger, who is no longer associated with the project. It is written collaboratively by volunteers and the majority of articles can be edited by any user. Contributors are anonymous and do not have to produce any credentials before writing on a topic.
3. **Languages** – some *Wikipedia* content is available in over 250 languages, though only about 60 versions offer more than 10,000 articles. Some are direct translations; others start and develop on different lines in the various languages. An interesting offshoot is the Simple English version – originally intended for foreign students learning English, it would seem to have much to offer in other educational areas.
4. **Quality control** – articles are unlikely to be of encyclopaedic quality at the start; over time, inaccuracies or biased opinions should be ironed out and the content should become more balanced and neutral. Users need to weigh the advantages of constant updating against the risks of inaccuracy.
5. **Wikipedia never changes** – you see the current draft of an article but copies of older versions are kept in the database (unless they are deleted) and can be restored if required. If you wish, you can specify that you want to see an earlier version, via *Permanent Link* on the left menu.
6. **Wiki Dumper.org** – shows articles that have been deleted from *Wikipedia* and which are therefore unavailable to the lay user via *Permanent Link*.

7. **Wikipedia is copyright-free** – Wiki has adopted a “free content license” which means users are free to copy, modify or redistribute the written content of *Wikipedia*. However, Wiki insists that you credit the contributors and do not impose new restrictions on the work.
8. **Searching** – after typing in the Search Bar, you can either choose *Go* or *Search*. *Go* produces a list of definitions (handy for cryptic cross-words!) with links. *Search* may reveal that there is a page on your chosen topic. If not, it gives a list of articles ranked by relevance.
9. **Accuracy** – The Journal Nature has stated that *Wikipedia* “is close to Britannica in terms of the accuracy of its scientific entries”. This may reflect the fact that the scientific community is using *Wikipedia* as the organ for informing fellow experts. Users should be aware that articles on other subjects can be littered with dubious facts. Indeed, Wikipedia itself has referred to some content as “a horrific embarrassment”.
10. **Editing** – to edit you simply need to click on the *edit this page* link. The software (MediaWiki) is designed to allow easy correction of mistakes and the removal of vandalism. Would-be editors are encouraged to create an account before starting, as this conceals your IP address, which could be used to identify you. Messages sent to your IP can be seen anyway on your talkpage. Wikipedia Scanner (www.Wikiscanner.virgil.gr) and similar downloadable software claim to enable you to find the identity of whoever is editing your article.
11. **Stubs** – these are short articles in need of expansion. In accordance with the Wiki philosophy, articles are not commissioned so the optimistic hope is that an expert will come along and finish the article. If you wish to complete an article, there is a list of Main Stubs available.
12. **Other Wiki works** – these include *Wikinews* (free-content news), *Wikispecies* (a directory of species), *Commons* (shared media resources), *Wiktionary* (a dictionary and thesaurus), *Wikibooks* (free textbooks and manuals), *Wikiversity* (free learning materials) and *Wikiquote* (collected quotations)

Susanne Bone.

OpenStreetMap-one year on

In May 2006 you may remember that the Isle of Wight became the focus of a mapping party for the OpenStreetMap ("OSM") project, and I wrote about the project in the July and October 2006 editions of Hotkey. One year on a lot has progressed, and I thought it worth updating you again.

Firstly a recap. The OSM project was started to enable people to use maps in creative, productive or unexpected ways. The use of traditional maps (particularly in the UK) is hampered by legal and technical restrictions that severely curtail their use. For instance, you can not copy an Ordnance Survey map to show friends how to get to your house. The aim of the OSM project is to create free geographic data, like street maps, that can be used by anyone, anywhere.

OSM contributors, drive, cycle, and walk around recording the routes of as many of the roads and footpaths as possible. The tracks recorded are put online in the OpenStreetMap.org database where anyone in the world with access to the internet can browse, name, edit and use the data in any way they want.

Since last year the pace of change has been quite rapid, much mapping work has been undertaken and a glance at the coverage of Europe shows it to be quite extensive, though the UK still has the best coverage. Southampton, Bath, and Cambridge have good coverage, and the main UK rail and road networks are complete. The Isle of Wight is still the only county in the UK have to have a virtually complete road network in OSM, and because of this the property website Nestoria (www.nestoria.co.uk) uses OSM maps when showing locations of houses for sale on the Island, whilst using Google maps for the remainder of the UK coverage.

The increase in all the mapping has resulted in increased data storage requirements, and servers have had to be replaced and upgraded, and the coding of the software improved to speed access to the data.

Early this year Yahoo agreed that the aerial photography and they hold could be used by the OSM project, and this has allowed for the inclusion of data which would otherwise be difficult to obtain. It is possible to trace over the Yahoo imagery, and thereby include such features as woodland, parks, rivers and other things which would otherwise be difficult to map. Using this I drew in the outline of Fawley power station, and the greenhouses at Arreton for example. Furthermore in many places the Yahoo coverage is detailed enough to map roads, and this is a useful tool both for filling in missing roads in areas already mapped, but also in starting to map cities and towns where currently no other mapping activity is occurring. For instance earlier in the year over the course of many evenings I

used Yahoo imagery to completely map Baghdad (for obvious reasons not many OSM contributors were willing to walk and drive along Baghdad roads with GPS units). Other cities added using the same technique include Darwin, Cairns, and Townsville, all in Australia.

In the USA the majority of road data is freely available from the US Census Bureau, and after some months working out the best way of incorporating this into OSM, currently the import of this data is occurring. This will massively increase the coverage, and also make the OSM project more interesting to USA developers, which will bring further benefits to the project. On similar lines the Spanish mapping agency has donated a lot of their data to OSM, and the company which owns much of the road data for the Netherlands has also donated that.

Alongside the increase in coverage, improvements have also been made in the mapping output. Visually the maps that appear on the main website are vastly improved, and with better servers, and improved coding, the speed with which these maps are delivered to a web browser is much faster than it was last year.

Programs have also been written which take OSM data and translate this to other formats. Two of the most interesting are the output into KML files - which can be overlaid on top of Google Earth, and the production of Garmin IMG files for loading into compatible GPS units. You can display the map on your GPS, and have your position constantly updated, which might be particularly useful for walkers. Furthermore due to the popularity of the IMG file format, a number of programs are available which will open these files, and display the map.

Other web sites are beginning to use OSM data. One interesting one is www.free-map.org.uk. This takes OSM data, overlays the UK contour heights, and also pulls in images from www.geograph.org.uk.

OSM data is also now beginning to be supported by other programs, and there are rudimentary route planning applications in development.

I started my article in September 2006 with the words "the Isle of Wight became the center of a global mapping revolution". I still believe those words to be true. Although there are similar mapping projects around, OSM seems to have built up the largest user base, and hence is getting the largest amount of data contributed. This in turn encourages developers to use the data, making it more attractive to contributors, and a virtuous circle develops.

David Groom



2 monitors side-by-side



3 monitors

Expanding Horizons

Windows is much more exciting when you have two separate monitors so that when you open a new window it doesn't pop in front of the one you're working on. My computer was originally supplied with a Matrox G550 dual head graphics card but I have only lately realised what it was for. When you've used dual monitors you'll never look back ; for instance you can have Microsoft Word on one monitor and File Manager on the other one. Or you can pop up Word in a window on one screen to check an address from Outlook in another. I tend to leave MS Outlook on the right hand monitor while using the left hand screen as my main one.

For graphics designers using Adobe Photoshop or Dreamweaver with its multiple operating windows dual monitors are a must. It's not until you've seen it that you realise that this is what brings Windows into its full potential. Large hi-res screens are very nice but separate monitors allow something else to happen without disturbing what you're doing. Kind of putting activities into boxes, and these activities can be "trained" to pop up on the "other" monitor, out of the way but accessible. Multiple monitors work because Windows sees each graphic card as a separate piece of hardware, and in Display-Properties Settings (right click on an empty part of the Desktop) will present a ghost image of each monitor with the opportunity to "extend my desktop" to the new monitor. Many graphics cards have dual monitor capability built in, or you can just add a Windows compatible card for each monitor you want to add. I used to

have just one dual-monitor card, but have now added a second card which has permitted a third monitor. Mostly just to prove it can be done but it is handy sometimes.

Of the two pictures here - one is a general view of how my two monitors sit on my desk (and take up very little real estate) and the other is the new arrangement with three monitors. Left hand is MS Outlook, middle is the working screen and the third one is running my file manager. The mouse slides seamlessly between all three.

Check out the following links:

http://www.evolt.org/article/A_wonderful_world_of_multiple_monitors/12/1714/

<http://www.microsoft.com/windowsxp/using/setup/learnmore/multimonitor.msp>

<http://www.realtimesoft.com/ultramon/>

<http://en.wikipedia.org/wiki/Ultramon>

<http://www.pcmec.com/article/setting-up-multiple-monitors/>

Roger Skidmore

HOW TO JOIN THE E-GROUP

Send a blank e-mail to: **iwputers-subscribe@yahoogroups.com**

All members are encouraged to join this e-group (which costs nothing and is private to all club members) in order to keep in touch with events and join in with discussions.

You can also keep in touch by regularly visiting **www.iwpcug.org**.

Understanding HTML and PHP

The talk planned for 7th November is an introduction to PHP.

What is PHP? The answer to that question refers to "HTML" which raises the question "What is HTML?". You have to understand HTML before you can go on to understand PHP.

The main piece of software used when "surfing" the Internet (i.e. exploring pages of information and following links to other pages) is called a Browser and one of the most popular is Internet Explorer which comes with all versions of Windows.

Browsers display pages of information and pictures (graphics) that it receives as input data, either from your own computer or from the remote internet site. The other most important thing that a browser does is to provide links to other pages that you click on with your mouse. The browser knows what to do when you click the link because there is a URL (often invisible) lurking inside the link that the browser uses to get the page you want. Actually, when you hover the mouse pointer over a link you can sometimes see the url in a small panel at the bottom left of your screen.

URL stands for Uniform Resource Locator but you probably know this as a web site address such as www.iwpcug.org.

HTML stands for HyperText Markup-Language. The input data to the browser is in HTML and this enables the browser to format the page in quite complicated ways even though the basic data that it receives is in plain text. All internet communications are in plain text which is a small number of about 100 characters. Yes, even graphic and binary files are sent coded in plain text.

To obtain the special instructions that the browser needs to format each page, it needs to escape from the normal character meanings of plain text. Two of the most important is the less-than symbol (<) and the greater-than symbol (>).

These are used to construct TAGS. A typical and simple tag is <P> which means "start a new paragraph here". Another is which says "make the following text bold". The browser then needs to know when to stop using the bold font and this is done with . This is a general rule: to follow the less-than symbol with forward oblique stroke to denote the end of a section of tagged text. The </P> tag is not necessary because a new paragraph implies the end of the previous paragraph.

The less-than symbol is not commonly used as itself which is why it was chosen as an escape from normal usage. Nevertheless, there are the occasions when a less-than symbol is needed within the main text and so some special provision must be made for it. Another special escape character is the ampersand (&). The syntax for special characters to follow an ampersand with either a short, previously-defined word or a cross hatch and a number and finally with a semi-colon. For example, the pound symbol is number 163 so it could be represented in HTML as "£" or alternatively with "£" (excluding the double quotes).

Some common tags are <I> for italics; <U> for underline; <TABLE> to start a table of information in rows and columns. Within the table, the tags <TR> for a new row and <TD> are used for the table data that appears in each cell of the table.

Links to other pages are represented within a tag that starts with "<A" and here the url appears plus some text that will be highlighted to show that it is a link.

There are many books on HTML. This article is simply to whet your appetite for the language. But where does PHP fit in?

So far we have described how the browser formats the data it receives from the source file (whether from your own computer or the remote site). The browser presents the data and you either say good bye or look at another page -- in other words there is not much interaction with the user. That is where PHP can come in:

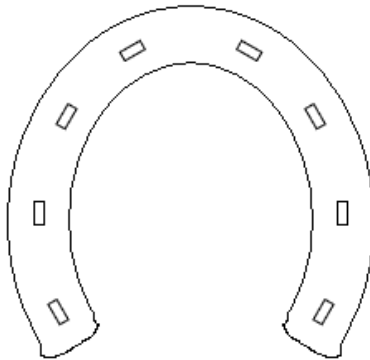
PHP is a computer language designed specifically for the Web. It can recognise input received from the Web Browser and then take some action based on that input. What that action is depends on what the Web Developer wants to happen. It might be sending specific text back to the Browser, or updating a database on the Web Server for example.

Now you have an understanding of the way HTML works, it becomes easier to describe how PHP works. Come along to my talk on 7th November.

David Broughton.

PRIZE PUZZLE FOR OCTOBER 2007

CUTTING THE HORSESHOE



Can you cut the horseshoe above into six pieces of any size with just two straight lines?

Send your diagram of cuts to me, David Broughton (see page 3 for address details). Closing date 7th November 07.

David Broughton

Something Entirely Different

A lifelong devotion to radio ,television and anything to do with electronics , and now computers, has created my interest in applications which combine these fields.

Today, by far the greater proportion of radio (and TV) signals is in DATA form, and the good old analogue transmissions will soon be history, perhaps used only by a few oldie “Hams “. A computer or micro-processor is used to convert this data into intelligent form. A very large number of these data transmissions are encrypted, but some can be decoded using freely available software and a computer with its Sound-Card. Here are some examples that I have found interesting and relatively simple but, of course, it is necessary to have a suitable receiver for the particular application.

Weather Stations. A very large number of Ship and Shore Stations all over the world continuously transmit “ Local Conditions “ reports which are extensively used by meteorologists to compute weather predictions. These transmissions are encoded in an international standard form so that a few milliseconds of transmission can contain a lot of information. Here is an example of a message as transmitted:-

AAXX 12121

01400 41898 82905 10131 20101 40085 52005 70222 22200 06199 10603 70013 91109 =
NNNN (“end of message” code)

When decoded this becomes :-

Station:	01400 Ekofisk , Norway
Position:	56-32 N, 003-1 E
General	
Visibility:	20 km
Wind:	290, 5kts (measured)
Temperature:	13.1 C, dew point: 10.1 C
Pressure, tendency	+ 0.5 hPh, increasing steadily
Weather and clouds	
Present:	State of sky unchanged
Past:	cloud covering > 4/8
Total coverage:	2/8, base of lowest: 2000 to 2500 m
Sea surface observations	
Ship speed:	not moving
Wave height:	1.5 m, period: 6 sec.
End of message	

Coastal Navigation Around the coasts world-wide there are NAVTEX stations. (There is one at NITON). These transmit regular navigational warnings and local weather forecasts and all ships, including small pleasure craft, will now carry a NAVTEX receiver.

A typical (short) message is :-

ZCZC GA06 (This is the message start code, Station Ident and message number)
SHETLAND ISLANDS. FAIR ISLE. SKR00 LIGHT 59-33 N 001-37 W RANGE TEMPORARILY REDUCED TO 10 MILES
NNNN (“end of message” code)

One of my favourite time-wasters is a program called **ShipPlotter**.

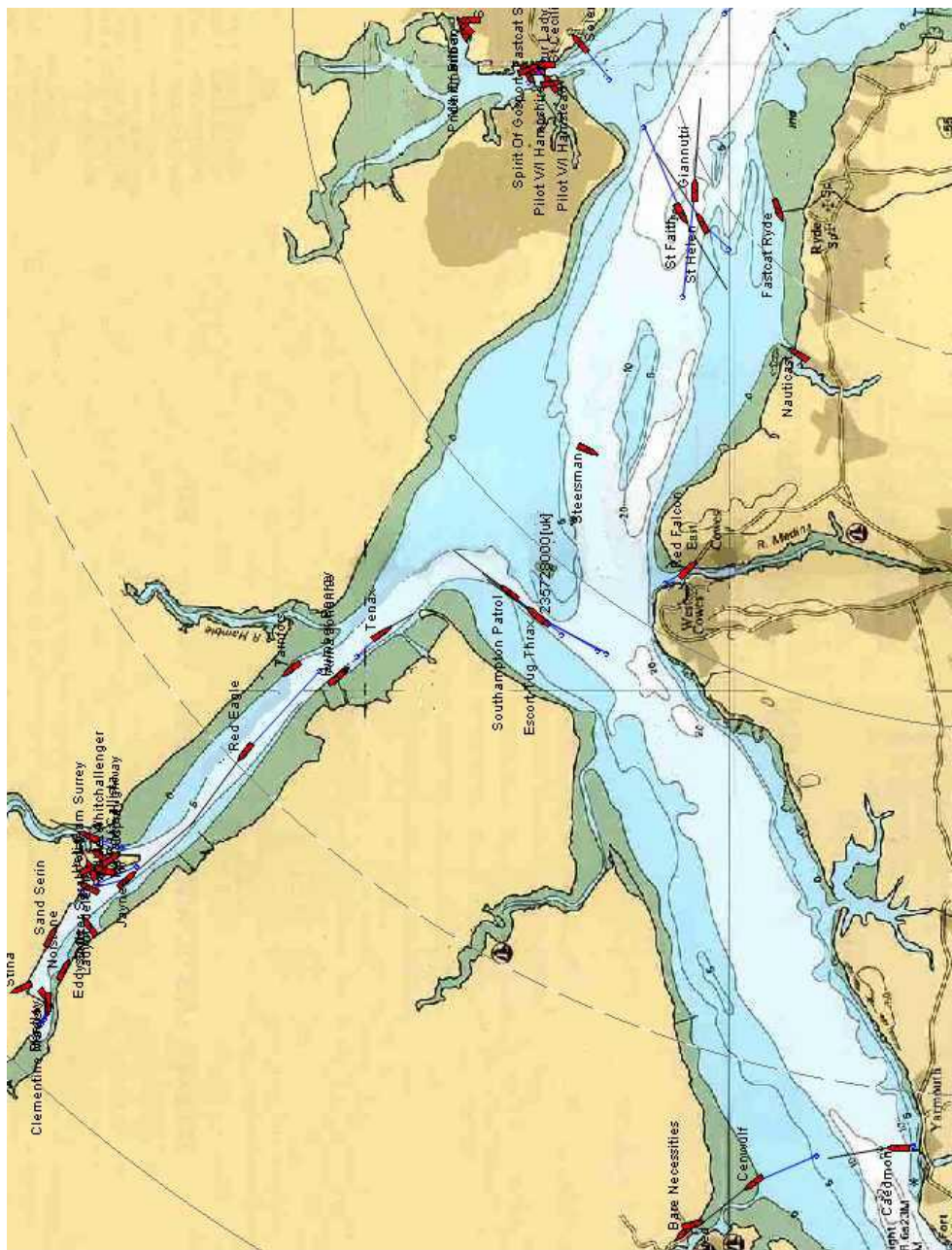
Nowadays, all ships over 300 tonnes have to be equipped with a system called **AIS**, (Automatic Identification System). Every few seconds the ship transmits a brief data stream which includes Ship Name, MMSI number, Callsign, Destination, Position, Speed, Course, Type of ship, Status (under way, moored, anchored), Tonnage, Dimensions, Draught, etc, and even the position of the GPS receiver with respect to the ship. A very complicated transmission system called Self Organising Time Division Multiplex (SOTDM) is used to eliminate interference between ships in crowded conditions. ShipPlotter takes this information, decodes it and plots the ships position on a suitably calibrated chart, giving a sort of Radar display. The ships names are included on the chart together with a line at the bow showing the next 10 minutes course and a blue line from the stern showing the last 20 or 30 minutes track. These times can be selected in the program. This is a “ real-time “ display updated every few seconds and here it shows the IOW ferries, pilot boats, cross-channel ferries, tankers , ocean-liners from Southampton and ,under good reception conditions, every vessel up to 50-60 nautical miles away. A ”log” facility gives the capability to play back, say, the last few hours of movements at high speed. This shows the Fishbourne and Cowes ferries going back and forth and the Pilot boats going out to meet ships anchored out by the Nab and off Sandown. There is a small picture on the back page and a larger higher resolution one on the CD.

My latest project has been reception of **DRM (Digital Radio Mondiale)**

You will almost certainly have noticed that FM stations are gradually being replaced by DAB (Digital Audio Broadcasting). This transmission method gives (in theory !) better sound quality in a narrower bandwidth on the VHF waveband, but was obviously never going to be of any use on Long, Medium or Short Waves.

DRM was dreamed up (actually, I think, in a nightmare !) to give the sort of reception of distant stations, especially on Short Wave, that one gets on local stations, and eliminate or greatly reduce the effects of noise and fading that always accompanies long-distance reception. It uses a incredibly complicated transmission system which is of the same type as is used for very secure communications, communicating with submerged submarines, some types of mobile phone links and even in very sophisticated radar systems. The reception of these signals needs a special type of receiver or a specially adapted one and then the decoding needs a fairly powerful computer. The few receivers that are on the market at the moment incorporate a fairly powerful microprocessor.

I was able to adapt one of my receivers to deal with DRM and I purchased a copy of what I think is the only software available at the moment and surprisingly it really works ! I have listened to Radio Canada International from New Brunswick, Vatican Radio direct from Rome, a station called MOI in Kuwait, stations in India and Persia, and all come over like local stations. There are quite a few German and French stations, and two from Luxemburg, but very little is going on at present in this country. Some short test transmissions are taking place at very low power and one town in Devon is doing some tests. I think it is a sort of “chicken and egg “ situation, manufacturers reluctant to make for the very limited market and broadcasters reluctant to invest in a new system for a very limited audience. (Sorry, not enough room for paragraphs !) Bob Groom



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