

Low Power Am for Hospital Radio's. Staff Newsletter

In the last newsletter you will I hope read the article in the middle pages about the possibility of a single transmitter system which could be available to us. I was overwhelmed with support for the idea ?.

A letter to the hospital in July was finally responded to recently when a meeting was held with the hospital and they have agreed in principle to the development of the idea and to assist where they can.

What does this mean ?

We intend to ask for a survey to be conducted to the viability of Heatherwood. becoming a user of the Low power am. A cost for the move to this system will be drafted and discussed with the various concerns over whether or not we decide to change. The nature of the costs involved means it would have to be a joint venture with the main league and any other interested fund raising groups.

What Happens to the Inductive Loop system if we change

It is more than likely this system will be decimated by the new builds and renovations so would not be supported beyond the introduction of the Low Power AM.

What Happens to the bed-head system. If we change

Like the Inductive loop it will continue to suffer but we would continue to support the opportunity of choice for patients so no change is envisaged in the level of service we give. Early next year the replacement amps will be installed.(Money in the bank to do this). We have also stressed to the hospital their need to support the service on the wards etc.

When will the Decision be Taken:-

At this stage we would not see a commitment either way until mid-late next year.

Who will make the final decision:-

When all discussions have been completed and evaluated.(your input is important)

It will be voted on by the Main League of Friends.

If you want to voice any opinions about this service I would be grateful for some written responses Please !!!!!.

The following pages carry an article from one of the trial sites at Stoke Mandeville. This answers a lot of questions to the last newsletter article.

We are waiting for a second part of this story just as soon as it becomes available watch the notice-boards.

AM Broadcasting

Stoke Mandeville Hospital Radio chairman, Chris Long explains how his station set up their AM medium wave service.

One of two hospitals (the other was Radio Tyneside in Newcastle) and two student stations chosen to take part in the Radio Authority's experiment, we started broadcasting on AM on 26 January 1998. This was a couple of months later than originally planned. We were particularly pleased to be invited to take part, because of our problems in reaching our primary audience - the hospital patients.

Our existing distribution system was the usual cabled network with acoustic, stethoscope-style headphones at the bedside. This system was old, incomplete and in a poor condition, yet the hospital authorities were reluctant to do anything to repair this because a substantial part of the hospital is scheduled for demolition and rebuilding in the next few years. For this same reason we decided that the alternative distribution systems such as induction loops were not viable.

A survey in spring 1995 had shown that only 44% of the hospital patients were able to receive SMHR at their bedside, and we were certain that this percentage can only have become worse over the past three years. AM broadcasting, therefore, presented an opportunity to reach substantially more listeners.

It's worth stating at the outset that the experiment has cost us a huge amount of money; by the time all the bills are paid, we shall have spent around £24,000. ' However, many of the areas of expenditure might be regarded as `desirable' rather than `essential'. Our guiding principle was whether the purchase would benefit the experiment and/or improve the chances of the project being declared a success. Licence fees

This is the compulsory bit! Licence fees are due to the Radio Authority, and also the Radiocommunications Agency for the Wireless Telegraphy Act licence. The former has been set at £250 a year, while the latter has yet to be fixed but is likely to be about the same amount.

Licence fees are also due to Performing Right Society (for the composers, authors and publishers), Phonographic Performance Limited (for the artists) and Mechanical Copyright Protection Society (when copyright music is rerecorded).

PRS have a scale of charges depending on whether the broadcasts are to the hospital site only or beyond, and on whether or not commercial advertising is broadcast. We broadcast to the hospital site alone, and made a policy decision not to accept advertising on air, and our fee is currently £127 per annum.

PPL waived their entire fee, on the basis that all services to the station are voluntary, all proceeds from the station accrue to a registered charity, and (strangely!) "the station is run entirely for educational purposes from an educational establishment".

MCPS waived their fee, on the basis that we do no commercial advertising.

Broadcast Contractor

We approached a number of broadcast contractors, although many were eliminated at the outset because they only supply FM systems or because they only supply systems of a much higher power. In the end, our shortlist comprised 3 companies. One of these seemed to be well resourced, but gave the most expensive quote and didn't seem particularly interested in our business (they never followed up their quote). The second firm quoted the cheapest price and had reasonable experience, but is only a 'one-man band'. The proprietor subsequently withdrew his tender because he was too busy with other projects.

We ultimately awarded our contract to Radica Broadcast Systems, who have been thoroughly professional and helpful throughout the whole project. Their equipment is also undoubtedly of the highest quality and I can strongly recommend them. In the weeks following our launch, we had a problem with our signal cutting out for a few minutes at irregular intervals, commonly in the early morning. This was eventually diagnosed as birds sitting on the aerial! The birds upset the tuned circuit of the aerial enough to cause the transmitter to switch itself off, and when they flew away it switched itself back on again. Radica had only come across this problem at one other site (Manchester United football ground). They responded very efficiently and have now modified the aerial array to prevent the birds from squatting there. We also mounted a plastic owl on the top of our aerial as a further deterrent!

Siting the aerial

The hospital authorities were concerned about possible interference to medical equipment from our transmissions, and they requested we site our aerial some distance from any hospital building.

This probably actually improves our signal, because a clear, open site for the aerial seems to be best, but it has necessitated considerable engineering work to get mains power and our audio signal to the aerial.

Our studio is, in any case, several hundred metres as the crow flies from the aerial site, and the best part of a kilometre through all the cable ducts.

We used a fibre-optic cable for our audio feed, which gives us a good quality signal free from any interference, although the 'headroom' on the signal is not as large as we would like and we have to be careful not to overload the fibre-optic transducers.

We also had to provide the concrete foundations for the aerial and somewhere to house the transmitter (we used a garden shed!).

The total cost of the engineering works and the fibre-optic link was about £3,200. The hospital contributed £400, on the basis that they had asked us to re-site the aerial.

You may find that you need planning permission for the aerial. Our local authority gave me the run-around, charged me a £35 fee, then decided not to pursue the matter.

Personal radio sets

We were keen to maximise the potential of the experiment and bring our programmes to as many patients as possible. The 1995 survey told us that only a small number of short-stay patients bring their own radios with them. With this in mind, we bought 1,000 Walkman style radio sets from The Sports Channel (Target Tuners) and distributed these to all wards of the hospital, particularly those not covered by the cabled network. These radios are pre-tuned to our AM frequency, which on the one hand means that patients do not need to tune them in (a difficult task for some patients) and on the other, reduces the likelihood of pilferage since the radios are useless outside our coverage area.

The radios cost around £4 each complete with batteries and earphones, and can be screen-printed with our logo on the radio itself and on the cardboard carton. We had hoped to find a sponsor to pay for these, in return for a promotional message as part of the design, but we haven't been able to find one yet. I have no doubt that these radios will 'walk', even though they can only receive SMHR, and the cost of replacement batteries is likely to be significant. However, we still think it's money well spent (especially if we can find a sponsor!).