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CARNARVON 6701

The Committee Secretary
House Communications Committee
Parliament House
CANBERRA ACT 2600

18th October 2000

Dear Secretary,

Rural Radio in Remote Areas

I write this on my own behalf, I am not connected to any organizations in the town of Carnarvon. I have no political affiliations and I make no claims to represent any other person or persons.

I am a retired male and a permanent resident of the town of Carnarvon.

Carnarvon is situated in the Gascoyne Region of Western Australia, 904 kilometres from Perth. It is located at the mouth of the Gascoyne River.

The region has people from many nations working together in the Primary Industries of the area. These include salt, pastoral stations, horticulture, aquaculture, extensive fishing, viticulture and many other basic industries.

There is a large indigenous population in the region.

Carnarvon is the hub of the Gascoyne region with an all weather H24 airport, excellent roads north and south and gravel roads into the Eastern parts of the region.

Although located on the coast, there is no major sea port. A small boat harbour caters primarily to fishing fleet home-based in Carnarvon. It is also extensively used by recreational boat owners.

Amplitude Modulated (AM) Radio

The town has two AM radio stations, one being ABC radio. This station operates on 846 KHz and is a relay from the Karratha studios of the ABC. It is received seven kilometres from the town via satellite receiver, demodulated and using Telstra terrestrial cable, is sent to the transmission site one kilometre east of the CBD of Carnarvon.

There is no studio, nor indeed any way of accessing the transmitter should it be required in a localised emergency.

Yamatji Media (funded by ATSIC) operates an AM station on 666 KHz. The studios are centrally situated in the town and the transmitter is approximately six kilometres south east of the town. The link from the studio to the transmitter site is a UHF link.

The studio is accessible for emergency, if required.

Both transmitters have all weather capability and also have emergency power available on-site.

Frequency Modulated (FM) Radio

The town has two FM radio stations, one being ABC radio. This station operates on 107.7 MHz and is a relay from the Perth studios of the ABC. It is received in the town via satellite and the transmission site is seven kilometres south east of the town. The program is essentially Radio National.

There is no studio or external access to the transmission from this site.

Yamatji Media (funded by ATSIC) operates an FM station on 99.7 MHz. The studios are co-located with that organizations AM studio in central Carnarvon. The FM transmitter antenna is fixed to the AM transmitter tower, previously described as being approximately six kilometres south east of the town. The FM transmitter is also linked to the studio via a UHF link.

The studio is accessible for emergency, if required.

Again, both these transmitters have all weather capability and emergency power on-site.

Useable Signal Range

AM radio has a relatively good range, often extending to about 150 kilometres from the transmitter. This range is affected by many factors such as terrain, weather, solar activity, sensitivity of the radio being used and many other factors.

At night, this range is extended. However, as the range of any station is extended, and there being other stations throughout Australia on similar frequencies, there is interference.

AM radio stations are separated within the AM band by 9 KHz spacing, however, with the proliferation of stations, interference with other stations is impossible to avoid.

The pastoralists of the region, many of whom are well outside the basic 150 kilometre radius, receive almost nothing during the day, and at night, have the interference referred to above.

This is difficult for these most important members of the community in that they need the input from radio for weather, storms and other basic necessities of remote living.

Partners of pastoralists and other personnel on the station properties would also benefit from being able to receive radio transmissions.

The effects on Tourism should be obvious. Without good radio coverage, tourists have no way of knowing of changing weather conditions. This often leads to emergency rescue situations, road closures, rising rivers and many other potential danger situations.

In the 1980's, the then Government saw fit to suspend and terminate transmission over the VLW and VLX transmitters which were located at the Wanneroo transmission facility of ABC. This site was operated by the then Post Master Generals Department.

These transmitters fed signal into the remote areas of Western Australia and gave the pioneers of this state, useable radio principally from 6WF studios in Perth.

I was in Gove in the Northern Territory when Cyclone Tracy wrecked Darwin. Because our local radio came from Darwin via a

tropospheric scatter link, we lost all radio. The PMG technicians at Gove then gave me a line from the interception point in the telephone exchange, to the local Television station, which I had been instrumental in bringing on line only a few days before, and we used those studios to keep the people of Gove informed.
Our source of information was from the VLW and VLX transmitters from Perth.

Apart from that, we were totally isolated except for an Amateur Radio link to Darwin, Perth and Melbourne.

The value of VLW and VLX cannot be over-emphasized, but as stated earlier, they are no longer.

This seemed to be the beginning of the end for radio in Rural Australia.

FM radio is very limited in its range, in this region generally less than 20 kilometres. It should also be noted here that the antenna systems for the FM stations are both oriented toward the town. They are directional antennae and only favour the direction in which they are set.

This virtually rules out FM being of any true advantage in this discussion.

Influence of Radio on Local Residents

Almost every member of any community listens to radio. The reasons for which they listen vary, but basically for entertainment and news.

In remote Australia, this need is even greater .

The townsfolk wake up to their radio, frequently go to bed with their radio, and of course, listen as they make their way around. Barely a household anywhere does not have a radio playing at some time during the day.

The pastoralist, grazier, farmer, miner, truck driver et al use radio not only for information, but also as company. Tourists are highly dependant on radio for information especially in areas that are unknown to them.

Each of these groups needs the information they get from their radio and often their survival depends on it.

The roads in parts of rural Western Australia are a gravel and clay mix, and when wet, are treacherous. Without radio, these people have little chance of forward knowledge of changes, and may be put in danger. Not always, certainly, but rather more often than most people realise.

How Can the Situation be Changed

In simple words, Not Easily!.

However, rather than being negative there are perhaps some changes which may go part way to alleviating the position as it is today.

This of course, needs the good will of Government short on rhetoric and high on action.

I also see it as a primary responsibility of the Federal Government to provide the basic infrastructure for transmitter sites. Local Government may be called on to provide land, however, most Local Government bodies do not have the many tens of thousands of dollars required for transmitters, lines, links etc.

I suggest that more high power transmitters such as the Wagin and Dalwallinu sites, each of 50 Kw power, (both in Western Australia) be introduced. There is no obvious reason (to me) why this could not be done. Such sites would then give some signal overlap but also widen the range and thus increase the listening audience. Duplication of the frequencies for high power transmitters would, of necessity, need to be avoided.

Government could fund the re-installation of the Short Wave transmitters at a suitable site and with similar frequencies as before. These frequencies gave good daytime and night-time coverage. Short Wave has the disadvantage of being reliant upon atmospheric conditions, including solar activity for propagation. Even with these exigencies, a mostly reliable service could be assured.

Whenever a High Frequency (HF) two way radio is purchased with the ‘standard pack’ of frequencies installed in it, the radio can then receive all the HF frequencies that were transmitted for the benefit of rural and remote listeners.

Relatively inexpensive Short Wave receivers can be purchased. It is my experience that these radios are quite stable and sensitive in the bands for which they are designed.

Short wave transmitters would have the ability to service a greater number of remote listeners than would high power AM transmitters. The cost per listener would also be considerably less if viewed in purely monetary terms. The use of less of the radio spectrum than AM transmitters is an overall benefit to already crowded AM spectrum.

The suggestion of Digital Radio is also being discussed, whether or not by your Committee I am not sure.

The value of Digital Radio in rural Australia is absolutely zero.

Why?, because the average person in rural Australia has less disposable income than his city counterpart, and the range of such modes of transmission would prove to be very limited.

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Conclusion

The requirements of communities throughout the remote areas of Western Australia, and indeed the entire country, vary widely. However, with Western Australia having such a relatively small population and such a large area, it is accepted the situation is more difficult to resolve

If Government has a true desire to improve radio services in regional Australia, there needs to be a start made now.

I have been part of three previous audits along these lines here in Carnarvon, by invitation, and I am yet to see anything positive from any of them.

The city seems to be favoured above the 'bush' in most things, and it is time for some equality of service.

Without rural Australia, and in particular rural and remote Western Australia, the entire nation would not be as well off as it is. There would be little export and the input to the GDP of the nation would be cut by one-third from Western Australia, alone.

I commend my submission to your Committee

Yours faithfully,

David Priestley