



18 July 2008

Mr. David Archbold  
Managing Director  
Information and Communications Technology Authority  
PO Box 2502  
3<sup>rd</sup> Floor  
Alissta Towers  
Grand Cayman KY1-1104

**Re: Broadcast Signal Lab Report on the State of FM Broadcasting in Grand Cayman**

Dear Mr. Archbold

Thank you for your letter dated 11 July 2008 regarding the above issue. We trust that the move of Heaven 97 from 97.7 to 97.5 will fully resolve the issue.

In the interim we implore the ICTA to ensure and confirm to us that Paramount is broadcasting its stations Vibe and Spin in compliance with the technical requirements specified for them by the ICTA and other requirements specified in the Maxson Report.

We would also be assisted in formulating our options by seeing a copy of the actual complaint by licensee Paramount.

Our own technical appraisal is that the real issue is a 3rd order intermod product of 96.5 and 97.7. An intermod calculation using 96.5 and 97.7 does predict likelihood of a mixing product at 98.9. This is not the same as "blanketing".

If this is the true nature of Paramount's complaint then it has probably existed for as long as both 96.5 and 97.7 stations have been on the air. If it has not existed since the second station (of 96.5 and 97.7) went on the air, a change in location, orientation, or power of either station could have created or made a noticeable change in the offending signal. You will recall that Paramount's studio was formerly located on Fort Street. Paramount recently moved their studio right under Cayrock's and Heaven's towers on Godfrey Nixon Road when, of course, Cayrock's and Heaven's towers had been established at this location for several years **prior** to Paramount's move.

The mixing product could be generated in either or both transmitters. Here's an excerpt about how this happens from Procom (two-way antenna and filter manufacturer):-

**dms Broadcasting Ltd.**



"The output from one transmitter antenna may be radiated into an adjacent transmitter antenna causing unwanted frequencies to appear at the output stage of the transmitter.

The transmitter outputs often operate in "Class C" and the non-linear performance of the output transistors may mix with the unwanted input signals, thus radiating new products in addition to the required frequency."

Fixes for this kind of problem usually involve keeping signal A from getting into the transmitter of signal B and/or vice-versa using filters and/or circulators on the output of the transmitter(s).

The problem could potentially be fixed by using a high-Q 1/4wave resonator (relatively inexpensive) attached to the feedline of one or both transmitters. This kind of filter basically shorts out the offending signal while leaving the main signal alone.

We consider that ICTA's regulatory obligation in this regard is to first ensure that equipment operated by licensees is certified and utilized in accordance with operating parameters and specifications. It is possible that Paramount's equipment is not compliant. In such case Paramount may be in breach of the ICTA (Interference & Equipment Standardization) Regulations, 2004 r. 4.

Equally, Paramount's own equipment may be responsible for any interference and therefore arguably in breach of Regulation 3 thereof. In either case unless Paramount agrees to fix the problem, the ICTA's remedy is to issue a "cease and desist" order on Paramount under Reg. 6. Failure to abide by such an Order leaves Paramount exposed to Court proceedings under the ICTA Law s. 37 and our attorneys have been instructed accordingly.

We would be happy to meet with you to discuss the above issues should you consider it desirable.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Don Seymour".

Don Seymour