From: "Carrington, James" <James_Carrington@dtccom.com>
To: "'Timothy R. Johnson'" <tjohnson@AmericanTCB.com>
Subject: RE: Review of DTC Communications, Inc., FCC ID: H25TCCM2005

Mr. Johnson,
Please refer to your email to me containing you review comments. I have posted the following response to the ATCB website. This copy is for your

1) complete, new confidentiality request uploaded

2) Contact change to Michael Murphy, in order to expedite the review. New letters uploaded. New contacts will be added to the FCC list in the near future.

3)I'm confused as to where this designation is to be placed, but the only appropriate place seems to be section 3 line 3. New 731 form uploaded.

4)Typographical error, new equipment ID exhibit uploaded.

5) MY oversight that the Emission Designators exhibit did not get uploaded. Emission Designators Exhibit has now been uploaded.

6) Requested manual changes have been made. New manual will be uploaded by the end of business today.

7)
The product is marketed with a minimum output guarantee of 2 watts. Due to the slope of the output TX filter, calibrating the amplifier to achieve this minimum results in power of more than 2 watts at the peak frequency. Generally speaking we don't see output of greater than 3 watts. Additionally, the design of the system requires that the output power of the amplifier be calibrated _before_ it is installed in the system where the output filter is connected. I have uploaded a block diagram that illustrates this configuration.
The amplifier has an output slope pass/fail specification of .5 dB. The insertion loss specification of the output filter is < 3dB. The theoretical minimum insertion loss is 1 dB. The typical insertion loss across the 150-174 MHz band 3 dB to 1.5 dB
Since we assume the worst case of 3db insertion loss through the TX filter, the output of the PA is set to 4 watts the frequency with the lowest output power. This will guarantee a minimum of 2 watts given a worst case of insertion loss of 3 dB. Conversely, given an output filter with low insertion loss and an amplifier with the maximum slope of .5db, the output _could_ reach 3.5 watts. That this particular unit reached 3.4 watts is atypical, but not rare.

I have changed the 731 form and the MPE worksheet to reflect the theoretical maximum values. I have changed the test report to include a more detailed explanation of the calibration process.

8) New MPE report uploaded, new manual will be uploaded by the end of business today.

9) New Test Setup photo exhibit will be uploaded by the end of business today

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"I reject your reality, and substitute my own." -- Adam savage

*/-----Original Message-----
*/From: Timothy R. Johnson [mailto:tjohnson@AmericanTCB.com]
*/Sent: Wednesday, June 28, 2006 1:09 AM
*/To: james_carrington@dtccom.com
*/Subject: Review of DTC Communications, Inc., FCC ID: H25TCCM2005
*/
*/
*/James,
*/
*/Attached are comments regarding review of this application.
*/
*/Thank You,
*/
*/Timothy R. Johnson, NARTE Certified EMC Engineer (No.
*/EMC-002205-NE) Examining Engineer American TCB, Inc. 6731
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*/