-----Original Message-----
From: George Tannahill [mailto:gtannahi@comcast.net]
Sent: Wednesday, February 11, 2004 3:28 PM
To: Roland Gubisch ES-Box
Cc: Rich Fabina; Stanley Lyles
Subject: TCB inquiry: Acceptable spectral mask measurement for 700 MHz
Part 90

Roland,
Your email was forward to me for response.
In general, for the modulation described, the spectral mask measurement
method is acceptable. The listed settings appear to be acceptable.
Normally the reference level for the emission mask is the level of the
unmodulated carrier so I'm assuming that there is no way to operate the
device in a mode to determine the unmodulated level, so the peak level
is used. the method to compute the total power should clearly
described when the application is submitted.

As long as the device isn't on the TCB Exclusion list it is eligible
for TCB approval.

If there are additional question related to this device, please let me
know.

Best Regards
George Tannahill

From: Roland Gubisch ES-Box [mailto:roland.gubisch@intertek.com]
Sent: Thursday, February 05, 2004 5:58 PM
To: Rich Fabina
Subject: TCB inquiry: Acceptable spectral mask measurement for Part 90

Rich,

        Sorry to bother you. Please direct this to the appropriate
engineer for assistance. (I have not been getting responses to my TCB
questions, either through the TCB website or Ray LaForge or labhelp
URLs. Perhaps I've got the addresses all wrong, and we can clear it up
week after next at the TCB Council session.)

        The modulation is four-level Gaussian shaped FSK, with BT =
0.82. Voice, data and control signals are all embedded in one composite
waveform. Is this proposed spectral mask measurement method (Peak of
Peaks) acceptable for testing and TCB certification?

Applicable to Mask G/H of CFR47-90.210:

1. Set the spectrum analyzer as follows:
        Center Frequency: as applicable
        Resolution Bandwidth: 300 Hz
        Video Bandwidth: 3 kHz
        Span: (Resolution Bandwidth) * (Sweep Samples - 1) = 120 kHz
        Detector Mode: Peak
        Trace Mode: Max Hold

2. Set the equipment under test to continuous transmission under appropriate conditions.

3. Reset trace Max Hold and collect >50 sweeps of the spectrum analyzer . 4. Capture the resulting spectrum.

5. Compute the total power in the collected spectrum and normalize the spectral mask to this power.

6. Compare the mask to the collected spectrum.

Thank you,
Roland Gubisch
Intertek