

Subject: RE: Response to Inquiry to FCC (Tracking Number 184756)
From: "James Bradshaw" <James.Bradshaw@fcc.gov>
To: "Timothy R. Johnson ...snip... Dichoso" <Joe.Dichoso@fcc.gov>

Mr. Johnson,

While we believe that most issues involving Part 15 devices are squarely within the jurisdiction of the Office of Engineering and Technology, we are not aware of any rules in Part 15 that prevent this type of operation.

I hope this helps,

Jim Bradshaw
Deputy Chief
Audio Division
Media Bureau

*** Non-Public: For Internal Use Only ***

-----Original Message-----

From: Timothy R. Johnson [mailto:tjohnson@american tcb.com]
Sent: Tuesday, April 11, 2006 4:31 PM
To: James Bradshaw; Joe Dichoso; Joe Dichoso
Subject: RE: Response to Inquiry to FCC (Tracking Number 184756)

Jim,

First, this device is only rebroadcasting the SCA feed so that the SCA feed is receivable on a standard RX on an open channel selectable by the user. While we have not yet heard back from the Media Bureau in regards to your earlier comments.

Please note that some good information regarding SCA carriers may be found at:

<http://www.fcc.gov/mb/audio/subcarriers/>

near the bottom of the page.

Note that it appears that SCA transmissions as part of the FM licensing has been deregulated some years ago. However, according to this site, only fixed frequency receivers are allowed (you can not use tunable for the RX portion). We have already confirmed this device is a fixed frequency RX only at 94.9 MHz. The user may select one of 12 channels between 88.1 - 88.9 MHz & 106.7 - 107.9 MHz.

Please note that our main question below is in regards to requiring the device to demodulate and verify before retransmitting. We are still awaiting information from the applicant on this, but my first impression from my review is that the device appears to not shut off in absence of RX the 94.9 MHz signal. Therefore we are asking if this would still be allowed if it does not demodulate and verify prior to retransmitting. The FCC did allow a special case for us last year that down converted satellite radio to 902-928 MHz frequencies without demodulation and verification. The FCC allowed special permission of this under 15.249 (partially because of lower power levels) but not under 15.247. We are wondering if a similar situation exists here because of the very low power levels involved with 15.237 and the single RX frequency involved. Please comment.

Given the power levels under 15.237 and the fact that the you are allowed fixed frequency receivers, I don't believe we have a problem - but this is my analysis of the information provided.

Additionally, anything that can be done by OET to help with a response from the Media Bureau would

be helpful...I will send a copy of what was sent in the following emails.

Thank you in advance,

Tim

At 11:36 AM 4/11/2006 -0400, you wrote:

[Mr. Johnson](#),

Please expand your question for me. Are you asking if you can rebroadcast an SCA via a licensed FM translator, and if so, are you asking to rebroadcast just the SCA feed (and not the main channel)?

[Jim](#)

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-----Original Message-----

From: Timothy R. Johnson [<mailto:tjohnson@american tcb.com>]

Sent: Friday, April 07, 2006 4:34 PM

To: MBINFO

Subject: Fwd: Response to Inquiry to FCC (Tracking Number 184756)

Importance: High

To Whom It May Concern.

We are a TCB handling a review of an SCA RX to low power FM under part 15.237 operation. While our research has determined that as long as the RX is a fixed frequency SCA receiver, that this device should be ok to approve. However the FCC OET branch had the following to say (see below as well):

You are asking is you can translate a subcarrier from a licensed FM broadcast signal to another frequency in the FM band through an unlicensed Part 15 FM transmitter (Part 15.237). I am not sure if this is legal. I suggest that you contact the Media Bureau:

<http://www.fcc.gov/mb/>

While we are still working on other technical questions with the OET branch, can the Media Bureau comment on just the aspect of whether this is legal or not?

Thank You,

Timothy R. Johnson

NARTE Certified EMC Engineer

No. EMC-002205-NE

email: tjohnson@AmericanTCB.com

alternate email: TRJ@adelphia.net

USA direct number: 404-414-8071 & 678-648-3191

USA corporate phone: 703-847-4700

USA corporate fax: 703-847-6888

Taiwan phone: (02) 2658-5152 ext 306

Taiwan Cell: 0920-399-260

Date: Fri, 7 Apr 2006 15:58:15 -0400 (EDT)

From: Generic Office of Engineering Technology <oetech@fccsun27w.fcc.gov>

Subject: Response to Inquiry to FCC (Tracking Number 184756)

To: tjohnson@ATCB.com

X-OriginalArrivalTime: 07 Apr 2006 19:59:06.0593 (UTC) FILETIME=

[BA141D10:01C65A7D]

Inquiry:

In the past, we are aware that under Part 15 operations the FCC has typically required the following for a repeater or frequency translator: The repeater only transmits when it demodulates and decodes (validates) an incoming signal from the specific transmitter.

We are currently reviewing an application that takes a fixed frequency SCA FM signal (i.e. 94.4 MHz) and translate it to one of several frequencies under 15.237 (i.e. 88.1, 88.3, etc.). This is effectively an SCA FM (fixed frequency) to normal FM (user selectable frequency) frequency translator. Is this type of device required to validate the incoming SCA signal prior to retransmission? Please verify.

Response:

You are asking is you can translate a subcarrier from a licensed FM broadcast signal to another frequency in the FM band through an unlicensed Part 15 FM transmitter (Part 15.237). I am not sure if this is legal. I suggest that you contact the Media Bureau: <http://www.fcc.gov/mb/>

Do not reply to this message. Please select the [Reply to an Inquiry Response](#) link from the OET Inquiry System to add any additional information pertaining to this inquiry.