

To: Howard Gianopulos, Allen Telecom, Systems Division  
From: Frank Coperich  
fcoperic@fcc.gov  
FCC Application Processing Branch

Re: FCC ID BCR-RPT-MR703  
Applicant: Allen Telecom Systems  
Correspondence Reference Number: 12934  
731 Confirmation Number: EA96783  
Date of Original E-Mail: 03/22/2000

1.) The operational / functional description of this unit is for a Repeater. However, the test data shows operation as a Bi-Directional amplifier. Please clarify this issue.

**Allen Telecom Response: This device does contain an IF path but is sometimes referred to as both a repeater (since it has an IF) and Bi-directional amplifier due to the low power.**

2.) Please clarify the issue of different gain versions (Models A, B & D) referenced in the users guide. Which version are you applying for?

**Allen Telecom Response: Only the "D Model" version of the MR703 External Antenna only.**

3.) Because of the mixer, frequency stability data for variations in temperature and primary supply voltage should be submitted.

**Allen Telecom Response: As with all of our other repeater products, both Up and down converter mixers have a common Local Oscillator which negates any temperature or voltage drifts since both conversion processes would cancel out any effect on frequency stability.**

4.) Please provide details for any antenna supplied with this unit and corresponding installation guidelines.

**Allen Telecom Response: It is up to the Carrier to determine the antenna selection since each application of the device will be unique. However, we are adding the following to the manual as suggestive guidelines for installation and a warning label for RF exposure guidelines. This was suggested by the FCC in the past on a similar product used at Cellular frequencies.**

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 days of the original e-mail date may result in application dismissal pursuant to Section 2.917 (c) and forfeiture of the filing fee pursuant to section 1.1108.

DO NOT reply to this e-mail by using the Reply button. In order for your response to be processed expeditiously, you must upload your response via the Internet at [www.fcc.gov](http://www.fcc.gov), Electronic Filing, OET Equipment Authorization Electronic Filing. If the response is submitted through Add Attachments, in order to expedite processing, a message which informs the processing staff that a new exhibit has been submitted must also be submitted via Submit Correspondence. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.

To: Howard Gianopulos, Allen Telecom, Systems Division  
From: Frank Coperich  
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Re: FCC ID BCR-RPT-MR703  
Applicant: Allen Telecom Systems  
Correspondence Reference Number: 13084  
731 Confirmation Number: EA96783  
Date of Original E-Mail: 03/29/2000

1. Filing is requesting for 1.0 W output for uplink (1850-1910 MHz) and 500 mW for downlink (1930-1990 MHz). The measured outputs, assuming conducted since no antenna info has been included, are around 18 dBm max. for uplink and 10 dBm max. for downlink. The discrepancies need clarification.

***Allen Telecom Response: The test data supplies both peak and average measurements. Some modulations are higher than others, an update to maximum power can be supplied consistent with the test data.***

2. Please address RF exposure requirements of 2.1091 and indicate if this transmitter is categorically excluded from routine MPE evaluation. Antenna installation instructions and requirements should be included in manuals for users and installers to satisfy RF exposure requirements. The instructions and statements in the manual should indicate the antenna installation requirements (20 cm or more from persons) are for FCC RF exposure requirements. Info, on antenna type, maximum antenna gain, cable loss etc. are needed to determine if this transmitter would qualify for categorical exclusion requirements of 2.1091. Please see 2.1091 of FCC rules and review relevant sections of OET bulletin 65 (available on FCC Internet website) to determine minimum separation distances for antenna installation requirements.

***Allen Telecom Response: It is up to the Carrier to determine the antenna installation since each installation of the device will be unique. However, we are adding the following to the manual as suggestive guidelines for installation and a warning label for RF exposure guidelines on each device (see Attached file). This was suggested by the FCC in past on a similar product used at Cellular frequencies. This is not a mobile device and it is fixed with cable losses, limited gain, low power, and should be categorically excluded.***

3. Relevant pages of the manual regarding antenna installation requirements should be uploaded for this filing.

***Allen Telecom Response: Refer to attached file.***

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 days of the original e-mail date may result in application dismissal pursuant to Section 2.917 (c) and forfeiture of the filing fee pursuant to section 1.1108.

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