

# FCCREGAMARADAR

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## 1 Introduction

To clarify any confusion on my position on the interpretation of the FCC regulations found in Part 97 on the experimentation with radar.

## 2 Message

This was a message that stated my intentions and understanding.

### 2.1 Data

This is KM4KFL. I enjoyed the chat with you and others tonight. I do not know the gentleman who responded about the FCC rules. I am grateful that he did so I could be motivated to take another closer inspection of them. I will cover what I understand and hopefully you could give me your opinion on the matter. I think that you and I were of like mind and potentially the third guy was simply sharing his concern for the best interests of amateur radio.

I also agree that amateur radio has origins deep in scientific research and discovery. It was those guys who, without government funding or oversight, pioneered radio and paved the road to the success of this country in technology. There is also the challenge of making radio contacts; however, it directly involves experimentation of that which advanced radio technology derives.

I also saw, as I was fairly sure, that the 9-CM band allows test and pulse emissions. I had to look again as when you said 3.5-GHZ I was apprehensive if I had gone below what allowed pulse transmissions. I had specifically used the ARRL band plan. The reason I was using 3.4458GHZ as the lower bounds of my transmissions (should be correct; have to look to be certain) was because that it sits inside the experimental division of the band.

I took a closer look at SS, pulse, and the test definition. I also crawled the web looking for a more clear definition of test emission. I found this and only this explanation in the part 97.

A station may transmit a test emission on any frequency authorized to the control operator for brief periods for experimental purposes,

except that no pulse modulation emission may be transmitted on any frequency where pulse is not specifically authorized and no SS modulation emission may be transmitted on any frequency where SS is not specifically authorized.

It seems like I comply with the pulse emission regulation, spread spectrum regulation, and may even to a degree comply with the above regulation depending on what the intention was of the wording.

The next problem is that of a one-way transmission. Now, we have to keep in mind the intention of the FCC. They are there to keep operations and systems from being unable to communicate due to interference that is unintentional or intentional. Even though the rules may state something a particularly fuzzy way I believe that a mindset that focuses on these objectives will also produce a reasonable understanding. So in the case of the one-way transmission. Here is the clause:

An amateur station shall not engage in any form of broadcasting, nor may an amateur station transmit one-way communications except as specifically provided in these rules; nor shall an amateur station engage in any activity related to program production or news gathering for broadcasting purposes, except that communications directly related to the immediate safety of human life or the protection of property may be provided by amateur stations to broadcasters for dissemination to the public where no other means of communication is reasonably available before or at the time of the event.

When we understand the mission and objective of the FCC then I think we can understand the rules better. The entire idea here is to prevent commercial interests which for broadcasting is a one-way communication. When these rules were written I do believe that radar was not even thought about at that level. Now, today it may be thought about, but according to the rules, intentions of the FCC, and my own intentions I should be fully compliant.

Let me know what you opinion about this is further. I think that you and myself were both caught slightly off-guard in ability to give a reasonable explanation about the rules. It is possible that the FCC could deem me as not in compliance; however, I believe that even in such a case it would be very formal and polite since it is after all radio experimentation.