



American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

February 18, 2003

RE: FCC ID: FAZSBCN2SYS6A

Attention: Wayne Langston

I have a few comments on this Application.

1. Your report states power out was measured at 30dBm. However, the 20w limit in 80.215(n)(3) is an EIRP limit. Your report would indicate that you have measured the power using conducted antenna terminal measurement method. Also, please note that the FCC grant power is the actual measured power. Your report states the rated output and not the measured. The max measured is 25.75dBm and 26.5dBm according to Appendix E. However, this is not EIRP compared to 43dBm EIRP limit. Please provide the EIRP of the device as specified in 80.215(n)(3).
2. On page 8 of the report you state, "and the Part 15 intentional radiator limit to 15.249." To what is this statement referring?
3. Please explain why Frequency Stability in accordance with 80.210 was not done.
4. Please separate the internal photos from the report and provide them as a separate exhibit as required by the FCC electronic filing system.
5. Please provide separate external photos of the EUT as required by the FCC electronic filing system.
6. Please provide the factory tune up procedure.
7. Please note that the test report cannot be held confidential. If confidential information about the device (i.e. generation of the operating frequencies and detection of the radar signals) is in the report, you may want to remove this and place it as part of a confidential theory of operation exhibit; then only make generic statements about the device in the report.
8. While it may appear obvious (your technical description page 2 - marine fairways, on isolated buoys, platforms, lighthouses and bridges.), please note that photos of the internal device can only be held confidential under certain circumstances. Location being one, a sealed and not easily opened system is another. This device appears to meet both, but the description does not limit use to these areas. Please provide a statement that the device interior is not accessible and that the location of the EUT in use prevents access by the general public.
9. Please provide any interagency letters or notifications.
10. Racons using frequency agile transmitting techniques must include circuitry designed to reduce interference caused by triggering from radar antenna sidelobes. Please provide a description of this circuitry.
11. In the test results table of the interference emissions (page 16) you list the limits in the comment section but you do not specify what these limits are. Please clearly identify the units involved and please clarify the purpose of appendix B.
12. Please note that you do not specify if the readings in the above table are QP peak or average. While indicated as compliant, it is good to clearly identify the mode. Also, please note that you have not provided the antenna information used above 300MHz. Please clarify.

13. Please note that it appears you have incorrectly states 80.211(f)(1-3). 80.211(f) states, "The mean power when using emissions other than those in paragraphs (a), (b), (c) and (d) of this section: (1) On any frequency removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: At least 25 dB; (2) On any frequency removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: At least 35 dB; and (3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 plus $10\log_{10}$ (mean power in watts) dB." You also state at the bottom of page 6 of the report that this does not apply. Please explain and correct the report as necessary.
14. Radiated spurious emissions would fall into the radiated measurements whereby the limit is $43+10\log(P)$ -(typically -13dBm). Licensed devices are typically Conducted, ERP or EIRP limits. Please note that since the output power for this device is in EIRP the radiated spurious emissions should also be EIRP. This would also typically be an antenna substitution method. You have indicated that you have measured a conducted power of 30dBm (1Watt), however, appendix E shows 25.75 in the 3GHz band and 26.5dBm in the 9GHz band. Please provide radiated emissions in accordance with the requirements of Part 80.
15. Please separate the block diagram as a separate exhibit.



Dennis Ward
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The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. 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 sender.