



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

June 7, 2003

RE: Akerstroms Bjorbo AB

FCC ID: OG4-MC96

I have a few comments on the above referenced Application.

- 1) The FCC Label shows "FCC-ID: OG4-MC96". Note that a dash should not be placed between the words FCC and ID. Please correct to "FCC ID: OG4-MC96".
- 2) It is not certain the actual transmit frequencies that this device will be capable of transmitting on. Additionally it appears the device may use 2 transmit frequencies simultaneously, one for each channel. Please provide further information regarding actual transmit frequencies.
- 3) If this device may be built to transmit on different sets of TX frequencies, it is not certain what type of component changes there are to the device. Note that depending on the changes used to cover the 421-512 Frequency range, an investigation may be necessary to determine how the test results vary.
- 4) Photographs must be provided showing the area underneath the RF shields.
- 5) The confidentiality letter requests confidentiality on the Technical Description. However the operational description provided appears only to be a sales brochures and therefore not considered as confidential. Please remove the technical description from the confidentiality letter.
- 6) Please confirm if this device transmits at two different frequencies or mixes information and transmits at one fundamental frequency. Note if transmits only with one fundamental, the occupied bandwidth should be provide for both one and two channel operation. If the device transmits at two fundamentals, further testing must be performed with the device transmitting with both channels operational at the same time in order to adequately review inter-modulation products.
- 7) The measured occupied bandwidth is significantly lower than the calculated bandwidth given in Section 12. Also, section 12 of the report states that modulation frequency is 5 kHz with a deviation of 2.5 kHz. From evaluating the side lobes on the occupied bandwidth provided, it appears that the modulation frequency is about 2.5 kHz. Additionally, due to the inconsistent side lobes shown on the occupied bandwidth, a Bessel analysis could not be performed to check the deviation. Please provide a better occupied bandwidth.
- 8) It is difficult to cross reference the parts list to the schematic. Please provide schematics that include the values of the components and not just the reference designators.
- 9) The table on page 23 is missing the header which explains what each column is and the units used. Please correct this table.
- 10) Please provide:
  - a) DC voltages & /currents applied into the several elements of the final radio frequency amplifying device for normal operation over the power range
  - b) Tune up procedure over power range
  - c) Description of all circuitry and devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation, and for limiting power.
- 11) FYI, even though this device meets the requirements of 90.217, it is still required for the end user to obtain a license to use it. It is recommended that the users manual contain information such as " The equipment user is required by the radio service rules to obtain a license before operating the equipment".
- 12) FYI, the test report should reference the most recent published version of Part 2/90, for example October, 2002.

--- Continued on Next Page ---

- 13) FYI, the receiver portion of this system is subject to Part 15 Certification or DoC requirements. The users manual did not appear to contain any of the appropriate information necessary for the Receiver approval.

A handwritten signature in black ink, appearing to read "Timothy R. Johnson", with a stylized flourish at the end.

Timothy R. Johnson  
Examining Engineer

[mailto: tjohnson@AmericanTCB.com](mailto:tjohnson@AmericanTCB.com)

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.