

CGISS EME Response to FCC Correspondence Reference Number 26781
Date 5/25/04

Q1.) Form 731 shows Rule Part 90 and 90.210. The cover letter exhibit shows a cover letter dated March 29, 2004 states the intended use of this transceiver includes applications covered in the Code of Federal Regulations Title 47, Part 22, 74 and 90. Please clarify.

R1.) At the time the application was submitted, multiple entries of FCC Rules parts for an otherwise identical model entry were not accepted, and only the first entry was displayed on the final form. However, we request that the intended use for this equipment include not only parts 90 and 90.210, but also Parts 22 and 74, as requested in the cover letter and in Exhibit 1A, paragraph 2

Q2) Please confirm frequency and antenna for all tables from Tables 1 thru 48 and the associated table of contents entry.

R2) The frequency and antenna for tables 1 through 48 and their associated table of content references are accurate. Note that for table 20 the top row which shows the test frequency and test location of the submitted report was inadvertently omitted in the submitted report. The reference in the table of content for table 20 is accurate.

Q3) Please provide a summary table with the highest value from each table. For E field please include a percentage relative to the uncontrolled limit.

R3) Table 1 below is a summary of the reported highest maximum calculated power densities for all E and H fields MPE assessments along with the percent delta of limit for all E field assessments.

Table 1

Summary of MPE Max calc results		
	Max Calc Pwr. Density	E Field % of Uncontrolled limit (0.2mW/c^2)
Table 1	0.142	71.00
Table 2	0.503	> limit - SAR assessment
Table 3	0.152	H field assessment
Table 4	0.183	H field assessment
Table 5	0.117	H field assessment
Table 6	0.08	H field assessment
Table 7	0.049	24.50
Table 8	0.089	44.50
Table 9	0.160	80.00
Table 10	0.209	> limit - SAR assessment

Table 11	0.166	H field assessment
Table 12	0.110	H field assessment
Table 13	0.115	H field assessment
Table 14	0.072	H field assessment
Table 15	0.051	25.50
Table 16	0.063	31.50
Table 17	0.127	63.50
Table 18	0.301	> limit - SAR assessment
Table 19	0.173	H field assessment
Table 20	0.220	H field; > limit - SAR assessment
Table 21	0.127	H field assessment
Table 22	0.125	H field
Table 23	0.043	21.50
Table 24	0.084	42.00
Table 25	0.111	55.50
Table 26	0.039	19.50
Table 27	0.161	H field assessment
Table 28	0.071	H field assessment
Table 29	0.093	H field assessment
Table 30	0.001	H field assessment
Table 31	0.029	14.50
Table 32	0.008	4.00
Table 33	0.092	46.00
Table 34	0.036	18.00
Table 35	0.143	H field assessment
Table 36	0.083	H field assessment
Table 37	0.075	H field assessment
Table 38	0.000	H field assessment
Table 39	0.025	12.50
Table 40	0.011	5.50
Table 41	0.124	62.00
Table 42	0.089	H field assessment
Table 43	0.045	22.50
Table 44	0.025	H field assessment
Table 45	0.101	50.50
Table 46	0.089	H field assessment
Table 47	0.05	25.00
Table 48	0.022	H field assessment

Q4) Please explain the criteria used to select which configurations would be tested at the corner and side.

R4) The criteria for selecting the configuration used for the 45 and 90 degree assessments was based on the test configuration that produced the highest MPE results external to the vehicle with the MPE vertical line directly at the rear (Table 19). The assessment also included testing the offered antenna with the highest gain.

Q5) The radio appears to have a VOX mode. Please explain how a 50 % usage duty will be assured under VOX operation. Please update the user instruction to provide information on VOX usage as appropriate.

R5) With VOX operation, the manual function of pressing the PTT button to speak is done automatically when the presence of voice is detected. When voice is not detected, the radio reverts to the receive mode. In a normal conversation consisting of alternate transmission and reception by two or more parties, the use of VOX or PTT does not have an impact on the 50% duty cycle of transmission. Circuitry and software algorithms, part of the VOX implementation, adjusts VOX sensitivity dynamically to ensure that the transmitter does not unintentionally transmit due to the presence of noise within the vehicle.

Q6) Please revise wording on page 5 of the user manual. The statement "lateral distance for bystanders..." could easily be misunderstood to only mean nonworkers. The operator should be trained that fellow workers falling under uncontrolled exposure conditions should also be included in this instruction.

R6) The manual has been revised and a new file has been submitted of the type "Users Manual" and having the description "Amended Exhibit 08d RF Safety Booklet."