Chris Harvey

From: Claire Hoque [claire.hoque@ccsemc.com]
Sent: Monday, January 16, 2006 5:39 PM
To: Chris Harvey; Chris Harvey -TCB
Cc: Chuck Cowden
Subject: answer: Skypilot Network Inc., FCC ID: RV7-SC1050, Assessment NO.: AN05T5363, Notice#1


TuneUp Procedure.pdf (74 KB)


Theory Of Operation.pdf (162 K...


05U3795-2B FCC PT. 90Y Report ...

Hi Chris,

Here are the answers.

1. Sections 5.2 & 7.4.1 of the test report and the form 731 indicate the frequency of operation as 4894-4990MHz. The remainder of the application has the frequency of operation as 4950-4980 MHz (center of low and high channels). Please correct this discrepancy. <answer>The frequency band should be 4940-4990 MHz. pls see revised report.

2. Additionally, there is a typo of the measurement frequency in the test report section 5.5. Please correct this typo. <answer>pls see revised report.

3. The MPE calculation in the test report used a value of 16dBi for the antenna gain, where the antenna specification indicates a 16.5dBi antenna gain. Although this will not show non-compliance since the recommended separation in the manual is 40cm and the calculation showed that the safe distance is 20cm (or less), please correct this discrepancy and recalculate the MPE power density. <answer>16.5dBi is correct for FCC ID: RV7-SC1050, while 16dBi is correct for RV7-GW-SD1050,
and we did submit the correct antenna spec. with 16.5dBi for this application.

4. FCC 90.1215 indicates that "high power point-to-point or point-to-multipoint operation (both fixed and temporary-fixed rapid deployment) may employ transmitting antennas with directional gain up to 26 dBi without any corresponding reduction in the transmitter power or spectral density". The test report has indicated that there is no reduction of power using the 16.5dBi antenna (7.5dBi greater than 9dBi) but has not indicated that these devices will be operated only as Fixed or Temporary-Fixed Rapid Deployment use devices. The installation guide and design of these devices indicate indoor operation, describing a desk or window mount for the Indoor unit. Please explain how these devices fit into the category of Fixed devices (typically the FCC includes the term Fixed-mounted on Outdoor-permanent structures in their requirements). <answer>all of Skypilot's units are meant to be fixed and permanently mounted.
The protocols establish links on a point-to-point basis and there are no differences between the operation
at 5.8 GHz versus 4.9 GHz, aside from the freq change.

5. Please provide a necessary bandwidth indication and emission type in the form of an emission designator with justification (form 731 and report did not have this information). <answer>The necessary bandwidth is 18.4MHz based upon 99% BW and the emission i
designor is 18M4G1D.

6. The name of the Theory of Operation exhibit contains the term tune-up, but no tune-up procedure has been provided. Please provide a tune-up procedure exhibit. Additionally, please provide the DC voltages and currents for the final amplification stages required ffor Licensed Devices per FCC 2.1033(c). <answer>pls see revised theory of operation and tune-up procedure.

7. The Pt. 90 report and test procedure does not define the Peak Power in terms of RMS equivalent. Please confirm that the Peak Power Output measured has been measured as a conducted emission over any interval of continuous transmission calibrated in terms of an RMS-equivalent voltage in accordance with FCC 90.1215. <answer>confirmed, pls see revised report.

Thanks,

Claire

-----Original Message-----
From: Compliance Certification Services [mailto:charvey-tcb@ccsemc.com]
Sent: Wednesday, December 21, 2005 8:20 AM
To: Michael Heckrotte
Cc: Chris Harvey
Subject: Skypilot Network Inc., FCC ID: RV7-SC1050, Assessment NO.: AN05T5363, Notice# 1

Michael, you are listed as the technical contact for the above referenced TCB application. The review of this application has raised several issues that need to be addressed before the review can be completed.

1. Sections 5.2 & 7.4.1 of the test report and the form 731 indicate the frequency of operation as 4894-4990MHz. The remainder of the application has the frequency of operation as 4950-4980 MHz (center of low and high channels). Please correct this discrepancy.

2. Additionally, there is a typo of the measurement frequency in the test report section 5.5. Please correct this typo.

3. The MPE calculation in the test report used a value of 16dBi for the antenna gain, where the antenna specification indicates a 16.5dBi antenna gain. Although this will not show non-compliance since the recommended separation in the manual is 40cm and the calculation showed that the safe distance is 20cm (or less), please correct this discrepancy and recalculate the MPE power density.

4. FCC 90.1215 indicates that "high power point-to-point or point-to-multipoint operation (both fixed and temporary-fixed rapid deployment) may employ transmitting antennas with directional gain up to 26 dBi without any corresponding reduction in the transmitter power or spectral density". The test report has indicated that there is no reduction of power using the 16.5dBi antenna (7.5dBi greater than 9dBi) but has not indicated that these devices will be operated only as Fixed or Temporary-Fixed Rapid Deployment use devices. The installation guide and design of these devices indicate indoor operation, describing a desk or window mount for the Indoor unit. Please explain how these devices fit into the category of Fixed devices (typically the FCC includes the term Fixed-mounted on Outdoor-permanent structures in their requirements).

5. Please provide a necessary bandwidth indication and emission type in the form of an emission designator with justification (form 731 and report did not have this information).

6. The name of the Theory of Operation exhibit contains the term tune-up, but no tune-up procedure has been provided. Please provide a tune-up procedure exhibit. Additionally, please provide the DC voltages and currents for the final amplification stages required ffor Licensed Devices per FCC 2.1033(c).

7. The Pt. 90 report and test procedure does not define the Peak Power in terms of RMS equivalent. Please confirm that the Peak Power Output measured has been measured as a conducted emission over any interval of continuous transmission calibrated in terms of an RMS-equivalent voltage in accordance with FCC 90.1215.

The items indicated above must be submitted before processing can continue on the

above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. 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.

Best regards,
Chris Harvey
charvey-tcb@ccsemc.com