

I. INTRODUCTION

This application is submitted in support of an FCC ID Number Change (Change of ID - §9.333) of a product previously Certified in accordance with Part 2, Subpart J, and Part 15, Subpart C (effective 6/23/89) of the Federal Communications Commission's Rules and Regulations. The previously certified transmitter was identified as FCC ID:AQC2101-49TX. ***A copy of the original Grant of Certification is included in this application.***

The equipment under test (EUT) is a low power R/C pulsed RF transmitter. This transmitter operates at a fixed frequency within the band from 49.82 MHz to 49.9 MHz.

II. INFORMATION REQUIRED FOR CERTIFICATION

Paragraph(s)

2.908 ***A statement by the manufacturer is included that declares the the product is identical to the originally Certified Product, FCC ID:AQC2101-49TX.***

2.1033(a) This Application for Certification is filed on FCC Form 731 with all questions answered. An application fee of \$895 is attached.

2.1033(b)(1) The full name and mailing address of the manufacturer of the device and applicant for certification is:

Asahi Corporation.
3-1-8, Sakae-cho, Kawaguchi
Saitama 332, Japan

- (2) The FCC Identifier of the device is AQC604212-TX49.
- (3) A copy of the installation and operating instructions to be furnished to the user is included in the exhibits section of this application.
- (4) The transmitter is a hand-held unit and is powered by a 9 Volt transistor battery. It is designed to operate on one of the following fixed frequencies in the band of 49.82 to 49.9 MHz. Complete circuit schematics are provided in the exhibits section.

- (5) A block diagram of the device is included in Exhibits.
- (6) A report of measurements is not included in this report.
- (7) Photographs of this device showing the FCC label placement (label drawing sample included), are included as Exhibits in this application.
- (8) This equipment is a stand-alone unit. No peripherals or accessories are involved.
- (9) Certification under the transition provisions of Paragraph 15.37 is not being requested for this device.
- (10) N/A.

III. GENERAL TEST CONDITIONS AND PROCEDURES

Measurement procedures on the original application (FCC ID:AEQ2101-49TX) were used as outlined in MP-1 as specified in Part 15.31, *except as noted herein*. The open-field tests were performed on a three-meter range maintained by Carl T. Jones Corporation at the Springfield facility. Complete description and measurement data for the site have been placed on file with the Commission. Carl T. Jones Corporation is listed by the FCC as a facility available to do measurement work for others on a contract basis. Prior to open-field testing, the equipment was placed in a shielded enclosure and scanned at a close distance to determine its emission characteristics.

IV. RADIATED EMISSION MEASUREMENTS

The transmitter originally tested (AQC2101-49TX) was assembled on a rotatable wooden test stand 0.8 meters in height. The transmitter's antenna was fully extended. The emission spectrum was examined up to 1000 MHz using a Hewlett-Packard 8568B spectrum analyzer and Compliance Design "Roberts" tuned dipole antennas.

At each emission frequency, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to determine the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarizations. The spectrum analyzer's 6 dB bandwidth was set to 100 kHz. The analyzer was operated using its *peak detection* mode for measurements of emissions less than 1000 MHz. No post-detector video filters were used. The EUT was investigated in three orthogonal planes. The highest emission amplitudes relative to the appropriate limit were measured and were recorded in Table 1 of the original application for Certification.

V. OCCUPIED BANDWIDTH MEASUREMENTS

In order to demonstrate that the EUT's fundamental frequency is within the 49.82 to 49.9 MHz frequency band an occupied bandwidth spectral plots of the EUT's fundamental frequency were included in the original equipment's (FCC ID:AQC2101-49TX) Certification application. Paragraph 15.227(b) specifies that all emissions which fall outside the frequency range of 49.82 to 49.9 MHz must be under the general radiation limitations of Paragraph 15.209.

VI. POWER LINE CONDUCTED EMISSIONS MEASUREMENTS

Measurements of the power line conducted emissions were not performed since the EUT has no means for connection to the public power utility grid.