6731 Whittier Ave, McLean, VA 22101

August 24, 2004

RE: Paxar Corporation

FCC ID: GU6RFIDALN1

After a review of the submitted information, I have a few comments on the above referenced Application.

1) The application appears to be for Paxar, but the FRN matches Monarch. Please explain.

<u>Response</u>: For a period of time, Paxar was doing business as (DBA) Monarch Marking Systems. The FRN has now been updated.

2) It is uncertain if the Voltage Regulator board mentioned is part of the EUT or a separate board. If it is separate, then this approval will be a "limited modular approval" specific to Paxar Corporation or their OEM integrators since the responsibility of other parties to ensure this regulation can not be guaranteed. Please confirm or explain.

<u>Response</u>: Per section 1.3 of the test report, this application is for "limited modular approval". The voltage regulator is not part of the module, and Paxar will maintain control of all host devices.

3) The antenna cable appears to contain a removable 9 dB attenuation. Given this application is for modular approval, how can integration of this attenuator into all units be assured (i.e., will the connection be made permanent, will only the applicant or their OEM integrator install this device, etc.

<u>Response</u>: Since the application is for "limited modular approval", Paxar will ensure that the 9 dB attenuation is installed in all end products.

4) If the device is for general modular approvals for other manufacturers other than Paxar, then an OEM installation manual should be provided.

Response: N/A – application is for "limited modular approval".

5) If this device is a module designed for use in a variety of devices, please provide justification of only Class A emissions for the digital device emissions. How can use in only Class A digital device be insured in all devices? Note - users manual shows Class A compliance.

Response: Please see attestation letter from Paxar uploaded with this response.

6) Even if the Digital device emissions are only subject to Class A emissions, All emissions caused by the RX (LO's, LO harmonics, etc.), must meet with limits equivalent to Class B. How was this test performed to ensure that all frequencies from the RX part of the device meet with the more stringent limits?

<u>Response</u>: Please note that this device will only be used in commercial, industrial or business environments. Receiver emissions were tested to 15.109 Class B limits; all receiver emissions complied with these limits. Upon clarification from the manufacturer, the digital emissions in question were harmonics from the microprocessor clock (40 MHz). 15.109 Class A limits were applied to these digital emissions; these digital emissions met 15.109 Class A limits.

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7) AC power line emissions must meet the limits of 15.207 (equivalent to Class B, not Class A from 15.107). Please correct. Currently peak results exceed the average limits. Please review, correct, and provide additional measurements as necessary.

<u>Response</u>: The EUT was re-tested to 15.207. Please see revised test report uploaded with this response.

8) Please explain compliance of the FCC requirement that "the system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals."

<u>Response</u>: The manufacturer states that the reader uses a CW homodyne architecture with 400KHz channel spacing. Thus the channels are +/-200KHz, and the receiver input bandwidth is greater than 7dB down at +/-200KHz from channel center--the receiver and transmitter channel have the same bandwidth. Additionally, the reader uses a single oscillator signal simultaneously for the transmit carrier and receiver local oscillator (LO) frequencies. This guarantees that the transmit and receiver frequencies are always identical and shift in a synchronized manner.

9) FYI. Section 7.3 of the test report mentions a 60 second sweep which appears to be irrelevant.

Response: Thank you for this information.

10) FYI. 6 dB bandwidth requirements are not necessary for DSSS systems. This data was not reviewed.

Response: Thank you for this information.

Timothy R. Johnson Examining Engineer Direct Phone: 404-414-8071 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.

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