FccID: H9PLA24001AZL

WLAN PC Card, 1 Mbps, CR-1

Conf Num: EA97670

Class II Permissive Change

Corespondence # 17376

Date Emailed: 12/13/00

Question 1

The reply proposes to place a WARNING statement in the manual, which refers user to follow instructions in the manual. No specific operating instruction from the manual has been submitted. In order for this warning statements to be useful, it should be placed on the final product operating with this transmitter. For users who have access to the manual info, the WARNING label should direct users to specific sections of the manual. For general use, the specific separation distance should be indicated on the label. The warning label should be located on the final product so that the RF exposure info is visible to persons requiring this info to satisfy compliance, in an easily readable and understandable format. The proposed warning statement should indicate that the operating requirements are for meeting FCC RF exposure compliance; that is, "To comply with FCC ..." instead of "To confirm to ...", please revise accordingly.

Answer:

I have uploaded the appropriate pages from the users manual.

Question 2	**Answer:**
Previous info submitted for this filing indicates the antenna for this body-worn printer has less than 5 cm separation from its user's body. The most recent reply indicates 2.2 cm. There is a similar pending filings from the applicant, for another transmitter (EA 97592), using the same antenna configuration and product configuration that has indicated a separation distance of 1.5 cm. Body-worn operating configurations are required to satisfy SAR requirements. Whether SAR test data may be needed to demonstrate compliance is highly dependent on the separation distance between the antenna and its user's body. A difference of 0.5 cm could result in 50% difference in SAR. These discrepancies must be clarified in order to determine if SAR compliance could become an issue. Please provide the smallest measured distance between the antenna and the outer surface of the printer, on the side where it is carried next to the user, or its belt-clip. Please also identify the location of the WARNING label to be placed on this device. An example warning statement for general users may read - WARNING: To comply with FCC RF exposure requirements, this device must be carried at the waist, with a belt to provide a least xx cm between the antenna installed within this device and the user's body during transmission.	The printer manufacturer has changed the mounting for the printer. The correct separation distance including belt swivel mount, housing thickness and foam mounting tape for the antenna is 3.7 cm. See the users manual for a picture of the new mount system. The printer will only be used with this new swivel mount. I have uploaded the appropriate pages of an updated user manual that is supplied to all users. This printer is used by employees to print receipts. It is not sold to the general public. No warning label will be used. MPE = 1.596 cm
Question 3	**Answer:**
FYI - Please be advised that the antennas approved in the original filing are required to satisfy the RF exposure requirements stated in Public Notice DA 00-912, as indicated in the previous correspondence.	I have included an environmental assesment table for all antennas.

The O'Neil microFlash Series of Printers

By O'Neil Product Development

O'Neil Product Development, Inc.
8 Mason
Irvine, CA 92618
949.458.0500 • Fax 949.458.0708
www.oneilprinters.com

Version 8.0a, 2/22/2001

Declaration of Conformity

CE

Application of Council Directives:	89/336/EEC, 73/23/EEC
Manufacturer's Name:	O'Neil Product Development Inc.
Manufacturer's Address:	8 Mason, Irvine, CA, 92618, USA
Equipment Class:	Commercial and Light Industry

Models:	Year Mfg.:	Conforms to the following standards:
MicroFlash2	1997-	EN55022 (1987), EN50082-1 (1992), EN60950 (1992) A1,A2,A3
MicroFlash3	1997-	EN55022 (1987), EN50082-1 (1992), EN60950 (1992) A1,A2,A3
MicroFlash4t	1999-	EN55022 (1995), EN50082-1 (1997), EN60950 (1992) A1,A2,A3,A4,A5 (A11)
MicroFlash4tCR	1999-	EN55022 (1995), EN50082-1 (1997), EN60950 (1992) A1,A2,A3,A4,A5 (A11)
2t	1998-	EN55022 (1987), EN50082-1 (1992), EN60950 (1992) A1,A2,A3,A4
2tCR	1998-	EN55022 (1995), EN50082-1 (1997), EN60950 (1992) A1,A2,A3,A4
2I	1998-	EN55022 (1987), EN50082-1 (1992), EN60950 (1992) A1,A2,A3,A4
8I	1997-	EN55022 (1987), EN50082-1 (1992), EN60950 (1992) A1,A2,A3

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Notice For RF Printers

Warning: Exposure to Radio Frequency radiation. To comply with FCC RF exposure requirements this device shall be used in accordance with the operating conditions and instructions listed in RF section of this manual.

Industry Canada Requirement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

RF Printers

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RF Printers

The RF Printers have a plastic swivel mount that attaches to the operators belt. The plastic mount moves the internal antenna further away from the user to gain better reception.

Environmental Assesment

Network Systems Organization

FCC ID: **H9PLA24001AZL** WLAN PC Card, 1 Mbps, CR-1, Lo Power

Access Point Duty Cycle: 0.60

Tx Output Power: 100 mW

Remote Duty Cycle: 0.32

Grant Date	Ant #:	Model	Symbol P/N	Mfg	Mfg P/N	Type	dBi (w/cabe)	Ant Pout (mW) (at antenna)	EIRP (mW)
9/20/96									
	01	Plane	50-21900-008	Tecom	505042C(48IN)	Plane	-1.0	48	48
	02	Rubber Duck	50-21900-007	Cushcraft	RBN2400SXR	Dipole	1.0	60	76
	03	End Cap, 6 Pin	50-21900-009	Tecom	505068E		0.0	32	32
	04	Pipe Bomb 11"x4'	50-11901-048P	Cushcraft	S2403BHPS48RBN	Dipole Array	4.2	48	158
	04.1	Pipe Bomb 11"x15'	50-11901-180P	Cushcraft	S2403BHPS180RBN	Dipole Array	1.5	25	84
Applied For									
	01	Oniel BFA	50-21900-023	Tecom	703620	Slot	-0.4	29	29

Antenna Gain includes cable loss.

Duty Cycle Factors are applied to Ant Pout and EIRP