



February 21, 2001

Federal Communications Commission  
Equipment Authorization Division  
7435 Oakland Mills Road  
Columbia, MD 21046

Dear Review Personnel:

The purpose of this letter is to comment on the attached filing, which requests a Grant of Authorization for a RF transceiver module. Since there are no officially stated rules governing the approval of a module, we are relying on the FCC's stated opinion that has been uniformly applied to products of this type. I have attached an example of that opinion, which defines six points which must be satisfied in order to receive approval as a module. The module in the attached filing meets these points as follows:

- 1) The module includes a full metal RF shield over all of the RF components. In addition, careful attention was given to the layout of the board traces and system grounding to control any unintentional emissions.
- 2) The module uses an on board buffer to prevent incorrect signals applied to the transmit data input from causing over-modulation or other unintentional emissions from the module. In addition, this buffer uses an enable line that prevents any modulation when the module is not in the transmit mode.
- 3) The module includes precision on board voltage regulators for all RF components. Supply voltage variations will not affect the modules intentional or unintentional emissions. In addition, the module incorporates a variable gain power amplifier that uses the internal regulated voltage to set the output power, and additional circuitry that shuts down the power amplifier when the module is not in the transmit mode.
- 4) The module was tested in two different configurations. The first configuration uses a permanently attached antenna. The second uses an external remote antenna. The remote antenna is connected to the module using a unique antenna connector (a special TNC connector that uses a left hand thread), which is not available to the general public.
- 5) The module was tested in a stand-alone configuration.
- 6) The module will include a label with its FCC ID number as proposed in the attached drawings. We currently plan to use this module internal to end products that we manufacture, where the label on the module is not visible. I have also enclosed drawings that depict the proposed labeling for these products that include the module identification.

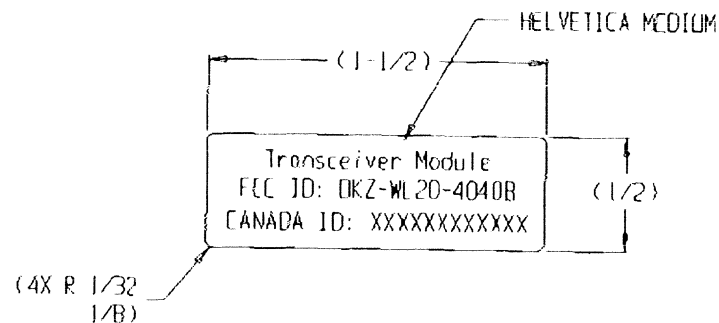
Respectfully,

Brian Dearden  
Staff Engineer - Project Manager  
Barton Instrument Systems LLC

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REVISIONS				
REV	BO/DRW	DESCRIPTION	DATE	APPROVED
0A	33111	PRELIMINARY RELEASE	03-08-01	<i>Blade</i>
0B	33196	ADDED CANADA ID NUMBER	04-27-01	<i>Blade</i>



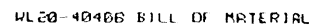
- 5 TO BE FURNISHED IN PRE-PRINTED FORM.
- 4 COLOR TO BE BLACK CHARACTERS ON WHITE BACKGROUND.
- 3 PROPORTION NOMENCLATURE APPROXIMATELY AS SHOWN

2 FURNISH IN ROLL FORM WITH PAPER BACKING

⚠ MATERIAL: MAKE FROM BARTON P/N D057-10371.

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED	DRAWN L. MENA	DATE 0-0-0	Barton INSTRUMENT SYSTEMS, LLC CITY OF INDUSTRY, CA. U.S.A. 91745-1404	
ALL DIMENSIONS ARE IN INCHES	CHECK <i>Blade</i>	0-0-0	TITLE LABEL, PCB I.D., WL20-4040B FCC	
TOLERANCES ARE: FRACY ± 1/32 .XX ± .01 .XXX ± .005 ANGLES ± 2°	DESIGN <i>Green</i>	03-08-01	SIZE B	
REMARK ALL TURNS AND STOPS SHOWN IN ACCORDANCE TO 41A REG. STANDARD SYMBOLS	APVD <i>Blade</i>	03-08-01	PSCN NO. 05991	
	MATL <i>Blade</i>	03-08-01	DRAWING NO. WL20-4043G	
	FINISH <i>Blade</i>		SCALE 2/1	
			356260	
			SHEET 1 OF 1	

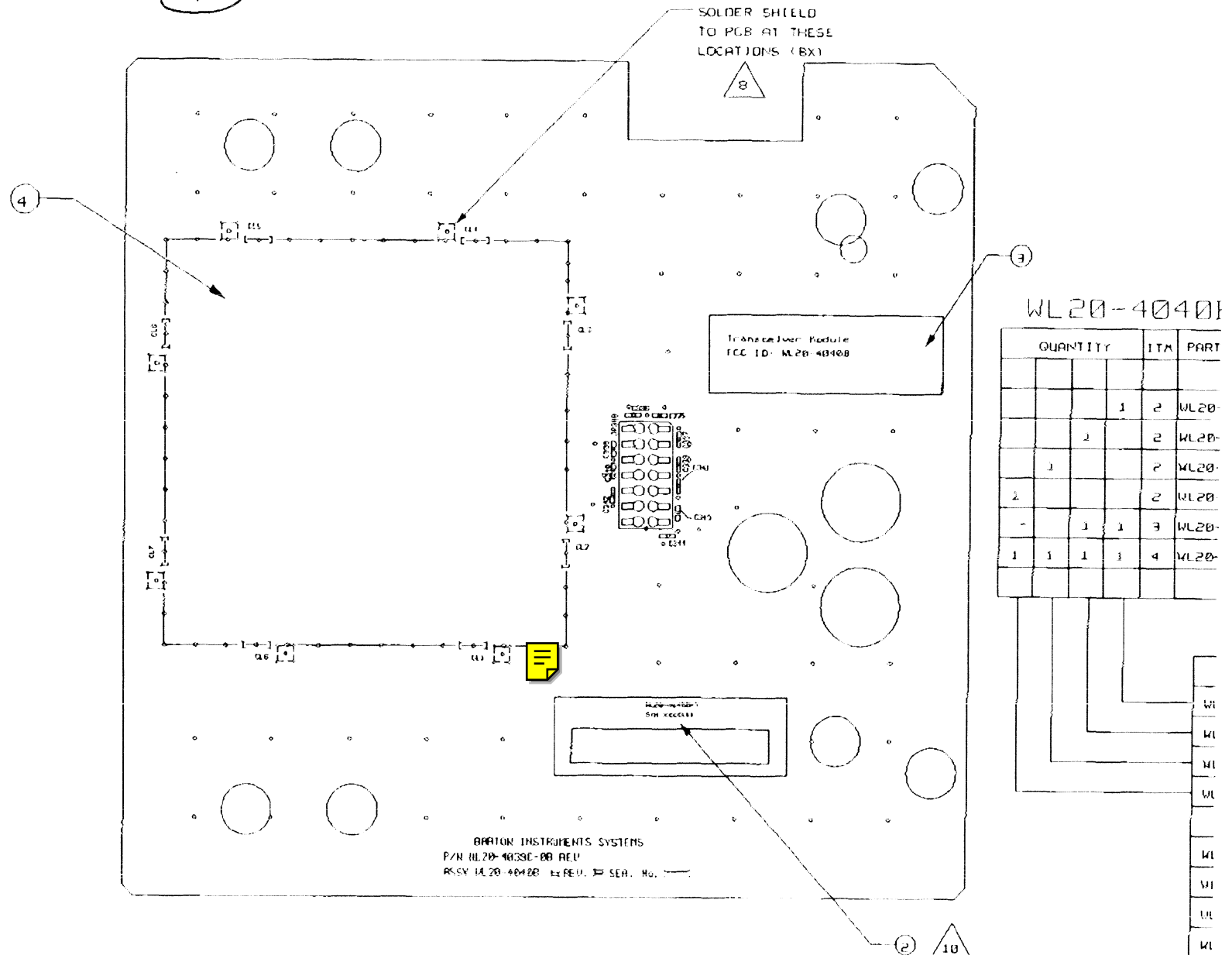


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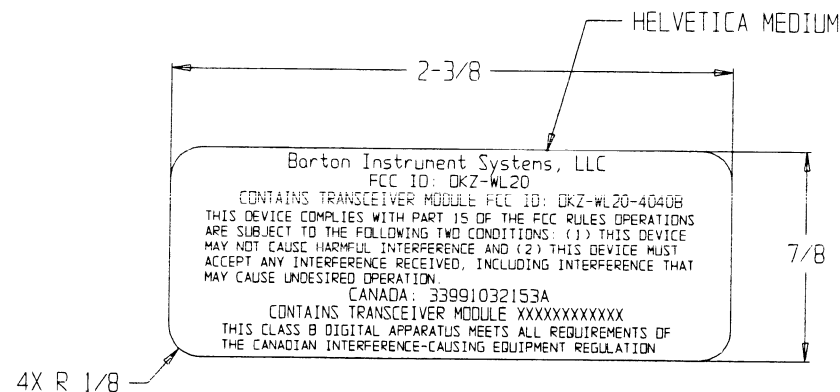
BILL OF MATERIALS FOR COMMON PARTS ML20-4042B

BUCKET RESPONSE UNIT FIELD	NAME	DATE	BARON INSTRUMENT SYSTEMS, INC. 1331 E. JUNCTIONS, CH. U.S.A. 31248-3004
ALL REPAIRS	SHIP		TITLE
REPAIRS FROM 1970-1972	SHIP		SEMI-FINISHED & RESEMBLED
REPAIRS FROM 1973-1974	SHIP		RADIO TRANSCEIVER RF
REPAIRS FROM 1975-1976	SHIP		PCB MODELS WL WU
REPAIRS FROM 1977-1978	SHIP		SIZE 150.000 100.000 100.000
REPAIRS FROM 1979-1980	SHIP		D 05991 WL20-40401
REPAIRS FROM 1981-1982	SHIP		
REPAIRS FROM 1983-1984	SHIP		
REPAIRS FROM 1985-1986	SHIP		
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REPAIRS FROM 2093-2094	SHIP		
REPAIRS FROM 2095-2096	SHIP		
REPAIRS FROM 2097-2098	SHIP		
REPAIRS FROM 2099-2100	SHIP		



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REVISIONS				
REV	EO/DRN	DESCRIPTION	DATE	APPROVED
0A	32866	PRELIMINARY RELEASE	07-27-00	<i>BRD</i>
0B	32910	ADDED "BARTON INSTRUMENT SYSTEMS, LLC" & CANADA NO.	09-13-00	<i>BRD</i>
0C	33099	ADDED "CONTAINS TRANSCEIVER MODULE-----"	2/21/01	<i>BRD</i>



4 COLOR TO BE BLACK CHARACTERS ON WHITE BACKGROUND.

3 PROPORTION NOMENCLATURE APPROXIMATELY AS SHOWN

2 FURNISH IN ROLL FORM WITH PAPER BACKING

① MATERIAL: OVERLAMINATION: 3M 7732  
 LABEL: 3M 7816--CSA APPROVED.  
 ACCEPTED MFR LR99316

MAY BE PURCHASED FROM:  
 WATON LABEL PRODUCTS  
 3684 FOREST PARK BLVD.  
 ST. LOUIS, MO. 63108  
 (314) 652-6715

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED	DRAWN J SHADE	DATE 07-27-00	Barton INSTRUMENT SYSTEMS, LLC CITY OF INDUSTRY, CA. U.S.A. 91745-1404	
	CHECK <i>BRD</i>	07-27-00		
	DESIGN <i>J SHADE</i>	07-27-00	TITLE LABEL, FCC/CANADIAN- WL20 MONITOR, NORTH AMERICAN	
	APVD <i>BRD</i>	07-27-00		
	MATL 1		SIZE B	FSCM NO. 05991
FINISH			DRAWING NO. WL20-4036G	
			SCALE 2/1	FILE NO 351785.PRT
				SHEET 1 OF 1

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