

**Engineering Exhibit in Support of  
Change of FCC ID Request  
FCC Form 731**

**for the**

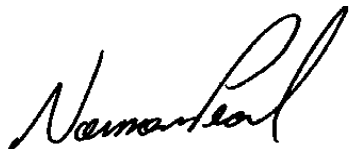
**T881 Exciter module of Tait's T88x 800 MHz base station**

**Original FCC ID:CASTEL0043  
Changed FCC ID:EOTBDD4T881S2**

February 16, 2001

**AFFIDAVIT**

This report was prepared by engineers under my direction. To the best of my knowledge, all of the data is true and correct.

A handwritten signature in black ink, appearing to read "Norman Pearl". The signature is fluid and cursive, with the first name "Norman" and last name "Pearl" clearly distinguishable.

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Norman D. Pearl  
Vice-president Engineering, Dataradio Inc.

Dataradio Inc., Montreal, Canada

**ENGINEERING STATEMENT  
OF CONSTANTIN PINTILEI**

The application consisting of the present engineering exhibit associated with the FCC form 731 has been prepared in support of a request for a Change in the FC ID as per Section 2.933. Dataradio Inc requires a new FCC ID: EOT BDD4 T881 for the Exciter module T881, already approved under the ID CASTEL0043.

The certificate CASTEL0043 has been granted to Tait Electronics Ltd. for its T881 Exciter module on 01/11/2001. It belongs to the T88M-XY (see page 5 for part# description) 800 MHz base station. Dataradio Inc. buys this base station and uses it to build Paragon/PD, a wireless data base station. Dataradio Inc does the final assembly and markets the Paragon/PD unit.

For marketing purposes a Dataradio sticker with the logo has been affixed to the front panel and the new FCC ID label has been affixed to the rear side to cover the original FCC ID. Only the FCC information has been covered, all other identifications carried on the label (serial number, other certifications, manufacturer, etc) remain unchanged and available on the rear label.

This exhibit provides all the data required by the form 731 that is related to the FCC ID change request as per 2.933 (b). There are no changes in design, schematics, components, specifications or operating characteristics of the equipment involved with the current submission.

**EXISTING CONDITIONS**

The base station that supplied the exciter T881 is regular production unit. The exciter T881 operates on frequencies ranging from 800.000 MHz to 960.000 MHz as granted in CASTEL0043. The frequency tolerance of the exciter is .0001% or 1 parts per million and the output power is 5W as granted in CASTEL0043.

**PROPOSED CONDITIONS**

It is proposed to accept the new FCC ID EOTBDD4T881S2 for the module T881 when used within Paragon/PD data base station, for operation in the band of frequencies previously outlined. The applicant anticipates marketing the device for use in wireless transmission of data.

**EXHIBIT DATA**

All data as per 2.933 (b) and 2.1033 (c) is provided in accordance with the Rules and Regulations Part 2 of Rules Service Co rev.154, Mar 15,2000. External Pictures of the equipment were made in the engineering laboratory located at 5500 Royalmount ave, Montreal, Canada on Sep 21,2000. All other data has been recorded by myself on Oct 17,2000.

**CONCLUSION**

Given the data contained herein, the applicant requests that the certificate for the new FCC ID: EOTBDD4T881S2 be granted.



02/15/2001

Constantin Pintilei  
R&D Test Engineer, Dataradio Inc.

**Qualifications of Engineering Personnel**

NAME: **Norman Pearl**

TITLE: Vice-president Engineering

TECHNICAL EDUCATION: Bachelor of Engineering (Electrical)  
(1979) McGill University, Montreal, Canada

TECHNICAL EXPERIENCE: Professional engineer since 1979  
24 Years experience in radio communications

NAME: **Constantin Pintilei**

TITLE: R&D Test Engineer

TECHNICAL EDUCATION: Bachelor of Science Degree in Radiotechnique Electronic Engineering  
(1993) Technical University of Iasi, Romania

TECHNICAL EXPERIENCE: 7 Years experience in radio frequency measurements.

**General Information About The Grantee And Certificated Equipment -2.1033 (c) (1)(2)(5)(6)(7)**

APPLICANT FOR NEW ID                      Dataradio Inc.,  
5500 Royalmount Ave, suite 200,  
Town of Mount Royal, Quebec, Canada, H4P 1H7

ORIGINAL GRANTEE                          Tait Electronics Ltd.,  
Burnside Christchurch 5, New Zealand

MANUFACTURER:                          Tait Electronics Ltd., Burnside Christchurch 5, New Zealand  
(T88x UHF Base station)  
DATARADIO Inc., Town of Mount Royal, Quebec, Canada, H4P 1H7  
(D212 BDLC and Paragon/PD- final assembly)

MODEL NUMBER:                          Paragon/PD  
PART NUMBER:                          BDD4-88XY PPS

SERIAL NUMBER ( S ):  
(for Tait's T88M-XY base)              T881-10 s.n 13012176 Exciter module  
T889-10 s.n 998940 PA module  
T885-10 s.n 424624 and 424625 Receiver Modules

FCC ID NUMBER:                          CASTEL0043  
FCC RULES AND REGS:                  FCC Part (s) 90

FREQUENCY RANGE:                      800 MHz -870 MHz as per CASTEL0043 certificate

MAXIMUM POWER RATING:              5Watts as per CASTEL0043 certificate.

NUMBER OF CHANNELS:                  1 Channel selectable from 256 channels as per Tait's manual

OUTPUT IMPEDANCE:                    50 ohms, Nominal

VOLTAGE REQUIREMENTS:              10.9-16.3VDC (13.6 VDC Nominal) as per Tait's manual

EQUIPMENT IDENTIFICATION:

<u>TRADE NAME</u>	<u>DESCRIPTION</u>	<u>DRI PART NUMBER</u>
T88x	800 MHz Base Station	T88M-XY
D212	Base Data Link Controller (BDLC)	050-03330-00x
Paragon/PD	Assembly	BDD4-88XY PPS

Part Number of the Tait 800 MHz base station T88M-XY

<u>M</u>	<u>Module Type</u>	<u>X</u>	<u>Freq Range</u>	<u>Y</u>	<u>Channel Bandwidth</u>
1	Exciter (5W)	1	800-870 MHz	0	25 KHz
5	Receiver	2	850-960 MHz	5	12.5 KHz
9	Power Amplifier				

Part Number of the Paragon/PD 800 MHz data base station BDD4 -88XY PPS

<u>X</u>	<u>Freq Range</u>	<u>Y</u>	<u>Channel Bandwidth</u>	<u>PPP</u>	<u>Transmitted Power</u>	<u>S</u>	<u>Supply</u>
1	800-870 MHz	0	25 KHz	005	5W	0	external 12V
2	850-960 MHz	5	12.5 KHz	070	70W	2	dual 120V

**Data And Characteristics Not Affected By The Change in FCC ID -Rule Part Number: 2.933 (b), 2.1033 (c) (3), (4), (8), (9), (10), (12), (13), (14), (15), (16)**

The following data :

-instruction book	2.1033 (c) (3). The original Tait manual for this module is being used.
-type of emission:	2.1033(c)(4)
-dc voltages and currents into final amplifier (T881)	2.1033(c).(8)
-transmitter tune up procedure	2.1033 (c) (9)
-description of circuitry	2.1033 (c)(10)
-internal photographs	2.1033 (c)(12)
-external photographs	2.1033 (c) (12)
-digital modulation techniques	2.1033 (c)(13)
-test results	2.1033(c)(14), 2.1041
-data addressing rule part number	2.1033(c) (15),(16): this unit is not designed for the mentioned purposes
-MPE limits compliance	2.1091

have not been changed in any way and the original data submitted for CASTEL0043 applies.

**Data And Characteristics Affected By The Change in FCC ID -Rule Part Number: 2.933 (b), 2.1033 (c) (11),(12)**

FCC Label	2.1033 (c) (11)
External Photographs	2.1033 (c) (12)

Two External Pictures showing the changes occurred at the front view and at the rear view (which includes also the FCC ID label) have been submitted as attachment "External Pictures".

**Statement Supporting the Change in Identification of Equipment- Rule part 2.933 (b)(1) to (7) (b)(2)**

The document comprising above-mentioned statement has already been submitted as a stand-alone attachment.