

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

for the

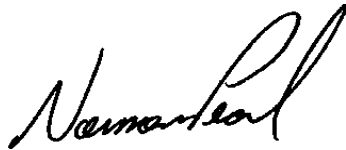
T889 PA module of Tait's T88x 800 MHz base station

**Original FCC ID:CAST889WB
Changed FCC ID:EOTBDD4T889**

October 18, 2000

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", written in a cursive style.

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: EOTBDD4 T889 for the 100 W PA module T889, already approved under the ID CAST889WB. Initially having the type acceptance grant in TNB class (Licenced Non-Broadcast Station Transmitter), Dataradio requires the new ID to be granted in AMP class (Amplifier) which is the class that denotes the proper usage of this module.

The original certificate CAST889WB has been granted to Tait Electronics Ltd., Burnside Christchurch 5, New Zealand, for its T889 PA module on 01/25/1996. 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.

Another application (nr.EA98834 for FCC ID:EOTBDD4T881) concerns the change in the FCC ID for the Exciter module of the above-mentioned base station.

EXISTING CONDITIONS

The base station that supplied the PA T889 is regular production unit. The PA operates on frequencies ranging from 800.000 MHz to 870.000 MHz and the RF output power is externally adjustable between 20-100W as per CAST889WB certificate.

PROPOSED CONDITIONS

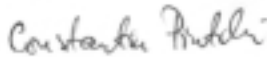
It is proposed to accept the new FCC ID EOTBDD4T889 for the module T889 when used within Paragon/PD data base station, for operation in the band of frequencies previously outlined. The applicant anticipates marketing the device for use in wireless transmission of data.

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: EOTBDD4T889 be granted.



10/18/00

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 PPPS

SERIAL NUMBER (S):
(for Tait's T88M-XY base) T889-10 s.n 998940 PA module
T881-10 s.n 422447 Exciter module
T885-10 s.n 424624 and 424625 Receiver Modules

FCC ID NUMBER: CAST889WB
FCC RULES AND REGS: FCC Part (s) 90

FREQUENCY RANGE: 800 MHz -870 MHz as per CAST889WB certificate

MAXIMUM POWER RATING: 100Watts as per CAST889WB certificate.

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 PPPS

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 PPPS

<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 (T889)	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 CAST889WB 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 attachments type "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.