

7 November 2006

FAA Spectrum Engineering Division
800 Independence Avenue SW
Washington,
DC 20591

Dear Mr. Willis,

Please be advised that we are making an application to the Federal Communications Commission to obtain an Equipment Authorisation grant for Park Air Systems new VHF multimode transceiver type 6525 MDR.

The model covered is :

6525 MDR 25W VHF transceiver under filing C8LB6525MDR

The equipment provides up to 25W RF output power in the 118 – 136.975 MHz band with the following modulation modes:

6KA3E (AM) modulation, 13KA2D ACARS, and 14K0G1DE Mode 2 D8PSK .

The design is based on the previously certified T6 range of digital transceivers and has specifically been produced to meet the requirements for ACAR's and Mode 2 operation.

Our application to the FCC is being made via TuV Product Service in the UK, acting as our Conformity Assessment Body. Testing is scheduled to commence on the 8th November 2006.

If you could address any concerns or objections to myself or TuV I would be grateful.

Yours faithfully,



Allan Horsfield
Principal Engineer
EMC and Approvals
a.horsfield@uk.parkairsystems.com

CAB:

TUV Product Service Ltd / BABT, Octagon House, Concorde Way, Segensworth North,
Fareham, Hampshire PO15 5RL England
Attention: Maggie Whiting MWhiting@tuvps.co.uk

FAA Notification of FCC Type Acceptance Application for T6 Series.

General

Proposed FCC Number

6525 MDR	20W VHF transceiver	C8LB6525MDR
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This product will also be approved under Industry Canada ref IC: 2137A-B6525MDR

Manufacturer	Park Air Systems Ltd. England.
RF Output Power	25 Watts
Antenna port	50R N-type connector
Frequency range	118 MHz to 136.975 MHz.
Method of tuning	Frequency selected by front panel control and LCD display.
Channelling capability	25 kHz (8.33 kHz capable).
Emission bandwidth	Within FCC limits see attached report summary
Emission type	6K00A3E, 13K0A2D, 14K0G1DE
Emission/harmonics	Spurious emissions meet ETSI EN 300 676 (harmonics at less than -36 dBm, non harmonics -46d Bm up to 1 GHz)
EMC	The radio has been tested under the EMC Directive to comply with emission and immunity requirements to Class B Limits. The following standards were applied: EN55022, EN61000-3-2, EN61000-4-2,3,4,5,6 &11.
Radio Standards applied	EN300 676, EN301 841-1, ICAO Annex 10 requirements.
Safety Standards applied	EN 60950, UL60950, CSA C22.2 No 60950,

Description

Park Air Systems T6 series are VHF multi-mode air-traffic control radios compatible with analogue (AM) and digital (D8PSK) modulation modes. Current models are supplied programmed for AM voice operation in the frequency range 118 to 136.975 MHz using 25 kHz or 8.33 kHz channel spacing. The latter is disabled through front panel settings for the American market.

The radio can be programmed to operate in 2 modes, normally AM as standard plus one digital mode (ACARs or D8PSK). The appropriate "fill" is downloaded through a computer serial connection at Park Air to customers requirements but can be changed in field by authorised personnel.

The transmitter produces a 25W carrier output that can be reduced, in steps, to 5W. The output power, and the majority of operational settings, can be selected at the front panel, using the virtual front panel (VFP) on a pc, or through a compatible control and data system such as the PAE multi-access remote control (MARC) system. A multi-channel feature allows up to 100 frequency channels to be stored and recalled by channel number.

The equipment is designed to be fitted in an industrial 19 inch (483 mm) equipment rack. Operation is from a standard ac mains supply in the range 100 -240V AC $\pm 10\%$. Comprehensive continuous and interruptive Built-In Tests (BIT) provide confidence of the radios serviceability.

This model has been specifically designed to meet the current requirements of service providers using ACAR's and Mode 2 D8PSK networks. It incorporates the latest digital signal processing techniques to provide optimum performance in these applications.

Pictures:

Front



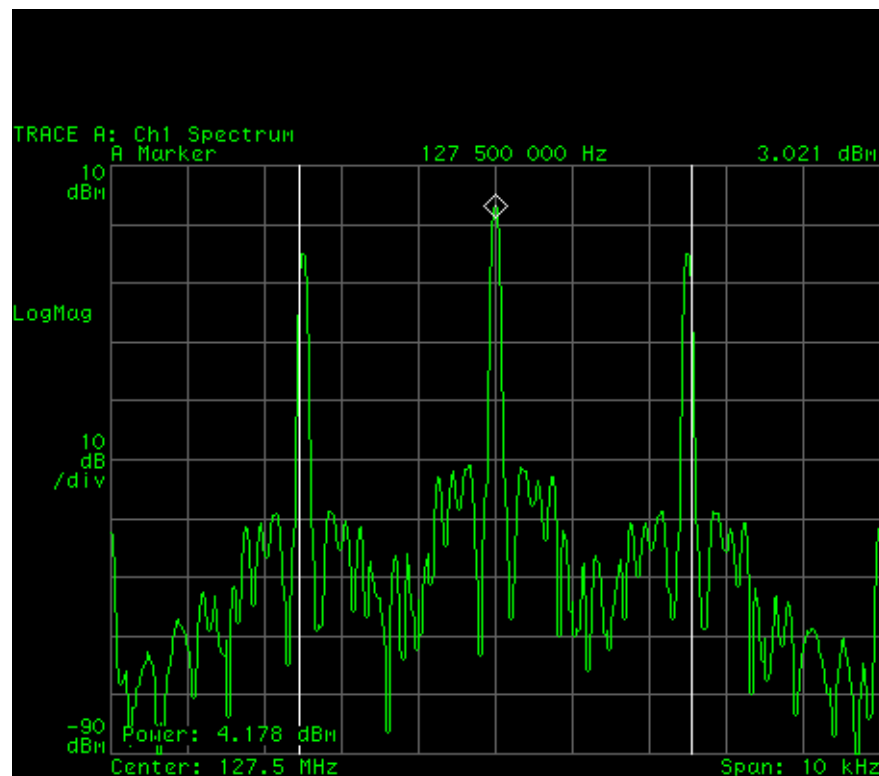
Rear



Top view:



Spectrum Plot:



99% Occupied Bandwidth 5.1kHz with M=0.8 with 2.5kHz tone

