

# **OM Power**

# Exhibit 9:Additional Information in Response to 47 CFR Ch.1 Sec.2.1033

**External Radio Frequency Power Amplifier OM2500A** 

Model OM2500A

Array Solutions
2611 North Beltline Rd
Suite 109
Sunnyvale, Texas 75182
USA
Tel: 214 954 7140
fax: 214 954 7142

E-mail: info@arraysolutions.com

Additional Information in Response to 47 CFR Ch.1 Sec. 2.1033

#### Section c.1

The OM2500A HF linear amplifier will be assembled and product testing will be performed in the Slovak Republic by the private company OM POWER LTD. OM POWER has been designing and manufacturing external radio frequency power amplifiers for amateur use since 2004. The company has designed and manufactured the following types of amplifiers:

- OM2500HF
- OM2500A
- OM3500HF
- OM3500A
- OM2000

OM POWER LTD has its seat at Bac 126, 93030 Rohovce, Slovak Republic. The owners and executives of the company are Tibor Ferenec and Jozef Lang.

Applicant for certification, Array Solutions is a distributor of OM POWER LTD products in North America. With regard to the subject, "OM2500A" HF linear amplifier equipment, Applicant is responsible for all aspects of quality assurance, marketing and service in the USA, as well as for the compliance FCC rules. Array Solution is located at 2611 North Beltline Rd, Suite 109, Sunnyvale, Texas 75182, USA.

Applicant has conducted or observed all design-proof testing and will re-test samples of production equipment on an ongoing basis to assure conformity to Applicant's quality standards, including all FCC regulatory requirements.

# Section c.2

This product designated "OM2500A HF linear amplifier", hereinafter "OM2500A", is an external radio frequency power amplifier that cover all amateur band from 1.8 through 29.7 MHz and provides 1500 W PEP output power with typically 60W exciter drive, or 500W output continuous carrier.

#### Section c.3

A copy of the Installation and Operating Instructions for the OM2500A is included in Exhibit 6.

#### Section c.4

The equipment is suitable for all types of emissions authorized for amateur HF use in 97.305 of FCC rules.

Section c.5

The equipment is designed to meet all specifications and FCC performance standards on all amateur bands from 1.8 to 29.7 MHz. When delivered to any buyer within FCC's jurisdiction, the equipment is not operable on frequencies between 24MHz and 35MHz according to FCC 97.317(b).

#### Section c.6

The equipment can be operated at any power level up to 1500W PEP. Lower power linear operation (up to 500W continuous carrier) is possible in "RTTY" mode and by reducing RF excitation proportionately.

#### Section c.7

The equipment is rated for maximum RF power output of 1500W PEP or 500W output continuous carrier, 50% duty cycle. It is limited to 800W maximum (including reflected power).

#### Section c.8

Nominal voltages and currents at rated output 1500W are:

- DC plate voltage: 2800V for SSB and 2800V for RTTY;
- DC plate current: 1,0A for SSB and 1,0A for RTTY;
- DC screen voltage: 360V
- DC screen current: 20mA >
- DC grid bias: -60-70V (adjusted individually for 400mA idling plate current

#### Section c.9

Tune-up procedure is simplified by a TUNE Indicator which helps the operator to quickly and precisely match antennas and eliminates probability of inadvertent mistune. The antenna impedance matching capability is up to VSWR 3:1 or higher. The procedure description is included in Exhibit 11, as well as in the Operating Manual – Exhibit 6, Section 4-5.

#### Section c.10

Several features of the OM2500A design are specifically intended to reduce spurious radiation to minimum.

In the input circuit, a non-inductive resistor load ensures that VSWR of 1.3:1 or less is presented to the exciter at the RF input terminal over the entire frequency range. The output circuit comprises a classic Pi-L network, which suppresses the harmonic emissions.

Results of our OM2500A performance tests are included in Exhibit 5.

### Section c.11

A photograph showing the design of the FCC identification label for OM2500A is included in Exhibit 1.

Section c.12

Photographs showing the construction and layout of OM2500A are included as Exhibits 2 and 7.

## Section c.13

Not applicable to external RF power amplifiers.

#### Section c.14

Not applicable, as provided in Section c.15.

#### Section c.15

Measurement data indicating compliance with requirements of Part 97.307 and Part 97.317 is included as Exhibits 5 and 10.

# Section c.16

Not applicable to external RF power amplifiers.

#### Section c.17

Not applicable to external RF power amplifiers. The subject equipment application is not part of a composite system.

Photo - FCC label design

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Model: OM2500 A

FCC ID: XXXX

AC Mains: 240V

Ser. No.: XXXX

10/3/2012