## The Yaesu FT-1000MP MARK-V 'Field'

## A user review by Don Beattie, G3BJ\*

HEN Yaesu introduced the FT-1000MP in the mid-1990s, it was as a lower cost, but high-performance, alternative to the massive FT-1000D. The FT-1000D, weighing in at nearly 26kg, was nobody's idea of a portable transceiver, but its performance was impressive, with a sturdy 200W PEP output. The FT-1000MP introduced a switch-mode power supply, offering a 100W PEP package at a weight of some 15kg. With excellent

receiver performance, it soon became the standard by which competition radios were judged, and has proved itself in many of the high-profile DXpeditions of recent years.

Some 18 months ago, the FT-1000MP MARK-V was launched, providing enhanced receiver facilities, and reverting to the 200 watt PEP output of the original FT-1000D. Unusually, the new MARK-V offered an option of running the PA in Class A for enhanced linearity, with a 75 watt PEP output power in this mode. To accommodate the increase in transmit power and the Class A operation, Yaesu removed the integral power supply and fitted a set of cooling fins on the top part of the case of the MARK-V to keep the larger PA cool. Power was supplied by a separate AC mains switch-mode power unit, providing both the 13.8 and 30 volt supply rails required. The 30-volt rail is no doubt needed to obtain optimum linearity from the 200-watt PA stage.

The MARK-V received excellent reviews (see RadCom October 2000) and as a base station it is outstanding. I use one at home, and find the 200 watt power output more than adequate for most purposes. However, for DXpedition use, and more generally for portable work, the MARK-V is seen to have a couple of minor drawbacks. Firstly, it needs the separate power supply and, secondly, it is not possible to operate the transceiver from a nominal 12-volt supply. because of the 30-volt requirement of the

No doubt responding to these concerns. Yaesu has recently introduced a derivative of the MARK-V, called, appropriately enough, the 'FT-1000MP MARK-V Field'. I have had the opportunity to use one of these units for a week or so, and have to say it is most impressive.



FIRSTLY, IT reverts to a single 'box' with 12 volts DC or AC mains. The case is also but has anything else changed?

The answer is - a little. The power output is back to the 100W PEP of the original FT-1000MP. The Class A output has been

It is interesting to consider whether the Class A option on the 'Field' is really worth the extra engineering involved. On the original MARK-V, the third-order transmit IMD products were -31dB at 200W PEP in Class AB, and -50dB at 75W PEP in Class A.

The claimed figures for the FT-1000MP MARK-V Field are -31dB at 100W PEP in class AB and -40dB at 25W PEP in Class A. The reduction in IMD improvement in Class A is no doubt a result of having to use just 13.8 volts for the PA rail voltage. It is interesting to contemplate what the IMD performance at 25W PEP would be in Class AB perhaps not a great deal worse than the Class A performance!

could determine in a side-by-side compari-

son, is virtually identical to the standard FT-1000MP MARK-V.

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FT-1000MP MARK-V 14kg + PSU 4.2kg

relaxed DX-chasing.

**200W PEP 75W PEP** 3rd order IMD in Class A: -50dB

AC mains only from

FT-1000MP MARK-V 'Field'

The original FT-1000MP

set a high standard for linearity and overall func-

tionality (see the October 2000 RadCom review).

With the IDBT (Inter-

locked Digital Bandwidth

Tracking), 'Shift' and 'Width' controls, a range

of filters (some are optional extras) and the

variable front-end tuning, the FT-1000MP MARK-V

raised the bar further.

These facilities are ex-

actly mirrored in the

MARK-V 'Field'. I have

always found the original

FT-1000MP to be easy to use, with good

ergonomics, and this remains true of

A little niggle with the 'Field' is that the

power meter on the front panel is still the

400W meter of the standard MARK-V, even

though the rated power of the 'Field' is now

a quarter of this. But unless accurate read-

ings at QRP level are needed, this should

the shacks of many serious DXers, as those

who use linear amplifiers will be happy with

a 100W PEP output (enough to drive most

linears) and the added convenience of an

integral AC mains power supply will, I am

sure, appeal to many. Rest assured, the

'Field' is a no-compromise competition-

grade HF transceiver with an exacting speci-

Overall, and setting transmit power aside,

I have been unable to detect any significant

differences in performance between the

MARK-V and its 'Field' derivative. Both are

worthy additions to any shack, and if my own

experience of the original FT-1000MP is any

guide, will provide many years of happy and

around £2300, compared with around £2900

for the standard FT-1000MP MARK-V.

loan of the 'Field' for this user review.

The FT-1000MP MARK-V Field retails at

I am grateful to Yaesu UK Limited for the

I suspect that the 'Field' will find a place in

the MARK-V range.

not be a problem.

fication.

15kg 100W PEP 25W PEP -40 dB

200 - 240V AC and matching FP-29 PSU | 13.8V DC (internal PSU)

Table 1: At-a-glance guide to the differences between the FT-1000MP MARK-V and the FT-1000MP MARK-V Field.

## **CHANGES**

integral power supply. The top cooling fins have gone, leaving the top of the case smooth. The unit will run from a nominal fitted with a side carrying handle, emphasising the relative portability of this rig. These changes largely address the concerns of the DXpeditioners and portable operators,

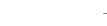
dropped even more, to 25 watts PEP.

The receiver performance, as far as I

Weight: Power output Class AB: Power output Class A:

Power requirement:

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