MPE
Quality, Reliability, Performance

Company Bulletin

for EMC, EMP & TEMPEST Protection

Issue 7

Will Turner

Spotlight on Will Turner

Will Turner joined MPE in March 2010 as a Design Engineer, designing and developing bespoke EMC and EMP filtering solutions for a wide range of industries and applications. He interfaced with customers and suppliers on new products, legacy component support and quality matters. He also instigated a cross-departmental project which spearheaded enhancements to the company's MRP system.

Then, from December 2012 as the Senior Design Engineer at the company, he now provides a focal point for all technical enquiries, new product design, third-line support and engineering-related processes.

Among his accomplishments in introducing a number of new and innovative MPE filters, he led a team of engineers in the design and development of the ground-breaking 1200A HEMP filter.

Since December 2012 he has been working alongside the Technical Director of MPE, Jan Nalborczyk. Like Jan, Will Turner is now a Committee Member of the BSI (British Standards Institution), representing the UK on international standards committees. This involves in particular the IEC (International Electrotechnical Commission) SC77C Committee concerned with standardisation in the field of EMC to protect civilian equipment, systems and installations from threats by man-made, high-power transient phenomena, including the electromagnetic fields produced by nuclear detonations at high altitude.

Accordingly, on the SC77C Committee Will is working on the new IEC/EN 61000-5-10 ("Guide to the Application of HEMP and IEMI Publications"), and updates to IEC/EN 61000-4-24 ("Test Methods for Protective Devices for HEMP Conducted Disturbance").

Then, at the 2015 EMC UK Conference, 6th to 7th October at Newbury Racecourse, he presented a technical paper on Intentional EMI "The IEMI Threat and a Practical Response", reproduced in the article below. This followed a paper on the long-term reliability of powerline filters in EMP protection systems, which he delivered at the 2012 EMC UK Conference at the same venue. Later on, his presentation to the 2014 American Electromagnetics Conference (AMEREM) in Albuquerque, New Mexico, was on "The Design of High-Current HEMP Filters for Reliability".

After graduating from the University of Birmingham in 2003 with an MEng Honours degree in Electronic and Electrical Engineering, Will Turner was employed installing radiocommunications systems for remote CCTV on the London Docklands Light Railway. His responsibilities centered on the practicalities of installing and commissioning new wifi antenna, communications and power equipment, integrated into existing trackside systems.

From 2004 to 2010, Will was Hardware Design Engineer at Fujitsu Telecommunications Europe in Birmingham. He began there as a

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Digital designer – focused on access nodes for BT's 21CN (21st Century Network) project – before moving on to Fujitsu's Physical design team. In that period he was engaged on street cabinet space and thermal planning and cable schemes for Saudi Arabia and BT's Fibre To The Curb (FTTC) – the products that enabled the roll-out of BT Infinity high-speed broadband – as well as the latest exchange-based, high-density copper/fibre cross-connect cabinets.

An active member of the Institution of Engineering and Technology, Will was originally from County Durham, where he went to school and was a keen rugby union player for 11 years. He now lives at St Helens, Merseyside, with his partner and young son. His outside interests currently include the challenge of restoring classic cars – he is working lovingly on an MG Midget which he plans to take on track days and charity rallies next year.