



# EMC PERSONALITY PROFILE

*Frank Sabath, Associate Editor*

## Introducing Robert Kebel

As I thought about a candidate for the current EMC profile, the idea of introducing a younger but active member of our community crossed my mind. Considering that a large number of active and valuable EMC engineers are in their late thirties, I decided to introduce Dr. Robert Kebel.

The German as well as the international EMC community knows him very well due to his activities in the field of EMC of aviation systems. Particularly, he contributes significantly to the RTCA special committee 202 and EUROCAE working group 58, the standardization bodies on the EMC of portable electronic devices in aircraft.

Personally, I met Robert the first time during an ERASMUS summer course on EMC in Oostende, Belgium, in 1995. Our tour through local bars resulted in a reasonable knowledge about Belgium beers as well as in a growing friendship. Since then we have cooperated on several projects, contributed to working groups on EMC topics, and served as officers of the EMC-Society, e.g. the German EMC Chapter.

After receiving his diploma in electrical engineering from Hanover University in 1995, Robert joined the research group of Professor Heyno Garbe at the University's Institute for Basic Electromagnetics and Measurement Technology. Soon, his main subjects became testing and qualification of electronics according to civil standards and EMC consulting for industrial partners starting at the PCB level and ending at electronic control systems for wind energy plants. During this period he developed measurement procedures for the shielding effectiveness of very small enclosures and supervised the University's training courses on EMC.

In 1996, still working on short term contracts and with no degree but his master thesis, Robert started lecturing on transmission line theory at the Hanover University of Applied Sciences and joined the German IEEE EMC Chapter's working group on numerical methods in EMC, which was aiming at the identification of inherent limits of several numerical simulation tools. He proposed a benchmark that caused discussions and headaches for some users of computational electromagnetic modelling tools.

In 1996, finally, Robert became research assistant and was employed by the German Armed Forces University in Hamburg, now Helmut-Schmidt University Hamburg, while his workplace



*Robert Kebel*

stayed at Hanover University. In parallel to his duties of lecturing during the EMC training classes, EMC consulting, professional EMC training for industrial partners and some minor contributions to the European ERASMUS student exchange program, Robert conducted the research program "absorption of electromagnetic energy" within a 27-month time frame. Within this research, he investigated the interaction of temperature fields and electromagnetic fields with temperature variable material properties with numerical and analytical methods and by measurement. In addition to his duties as research assistant, he prepared an EMC test laboratory for accreditation according to the quality standard EN 45001, in 1997 and 1998.

In 1999, he finished his PhD thesis and for a small period of not exactly three years,

Robert tried to leave the EMC business. He joined the EADS military aircraft section in Bremen and worked on the field of signature technology. But soon, after some expertise on the use and usability of air traffic control and navigation systems in areas with high building density, and after some exercises in signature technology, Robert returned to EMC issues. In August 2001, he joined Airbus in Hamburg, where his duties and responsibilities were within the EMC of aircraft electronics, including Hamburg-engineered systems integrated into the Airbus fleet. Soon he became the focal point for the EMC assessment of wireless cabin services.

Today, Robert is heading the Airbus Lightning Protection and EMC team in Hamburg. He was involved in the first certification of Wi-Fi systems on Airbus aircraft and he contributes significantly to the international EMC community, especially in aeronautic standardization. His business usually takes place in Hamburg, Paris, Washington, and Toulouse.

Robert has been an active member of the IEEE EMC Society for years. Currently he serves as treasurer of the German EMC Chapter and leader of the working group on EMC in complex systems.

On the personal side, Robert enjoys music, in particular mainstream jazz, photography and, of course, his family. He lives with his family in a small countryside village close to Hamburg. Robert is married to Irene who is a teacher and they have two daughters. Their eldest daughter, Swantje, is just beginning her primary school, their youngest daughter Finja, born in 2004, is starting with some basics in talking, laughing, and walking. EMC