

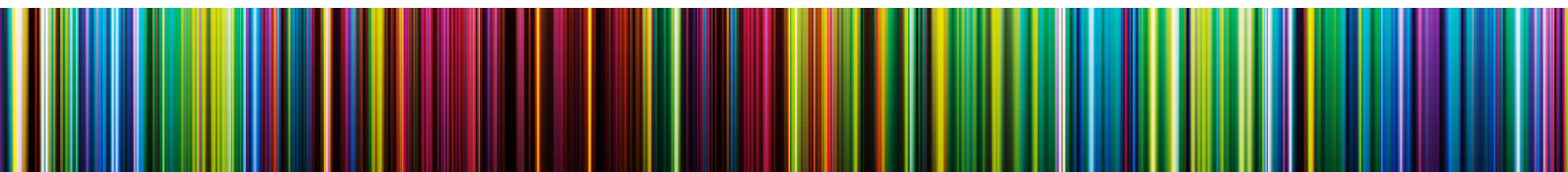


Pioneers for Progress

**EMC-Basics,  
Test & Measurement Seminar  
for MIL and Avionic Standards**

**Public Seminar in English Language  
2024-06-05 to 2024-06-07**

**TEST & CALIBRATION LABORATORY  
DIN EN ISO/IEC 17025 ACCREDITED**



# SEMINAR PROGRAM

## EMC-Basics, Test & Measurement Seminar for MIL and Avionic Standards – Three Days Seminar

### Seminar venue

The seminar takes place in the EMCC Seminar Center in Unterleinleiter. It is located at the EMCC Test Labs site, which among others provide aircraft EMC services. The broad area of activities can be viewed on [www.emcc.de](http://www.emcc.de).

The EMCC aircraft group with the associated labs are an ideal environment for the seminar. The vast experience in aircraft measurements, system and equipment testing is combined with the latest high end test infrastructure. EMCC also design and manufacture HIRF generators, NEMP generators and direct as well as indirect lightning generators. These meet and exceed maximum levels of current standards and specifications.

Focus of the seminar are basics of EMC and common EMC testing according to MIL-STD-461 and EUROCAE ED-14 / RTCA DO-160. Details of test setups are discussed, accomplished by practical examples. Discussion and questions will be part of the seminar. Seminar notes in English language are included in the fee as well as lunch and snacks during breaks.

### Contents

- ▶ EMC-Basics
- ▶ Qualification Test Procedures, Creation/Tailoring
- ▶ General Survey and Applicability of Standards
- ▶ Associated Test Methods and Procedures for Aircraft and Military Systems and Equipment
- ▶ Description and Comparison of Tests according to MIL-STD-461 and RTCA DO-160
- ▶ Visit of EMC Labs

### Who should attend?

- ▶ Beginners in EMC
- ▶ Young Professionals in EMC
- ▶ EMC Technicians and Engineers
- ▶ Equipment Designers
- ▶ System Designers and Integrators
- ▶ EMC Test Staff
- ▶ EMC Project Managers
- ▶ Certification Staff

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# SEMINAR PROGRAM

## EMC-Basics, Test & Measurement Seminar for MIL and Avionic Standards – Three Days Seminar

### Day 1: EMC-Basics

- ▶ History of EMC/EMI
- ▶ Examples of EMC/EMI
- ▶ Mathematical and Physical Basics of EMC
- ▶ Basic EMC Tests and Test Setups
- ▶ Essence of EMC/EMI
- ▶ EMC Standards
- ▶ Basics of EMI Prevention
- ▶ Basic EMC Devices

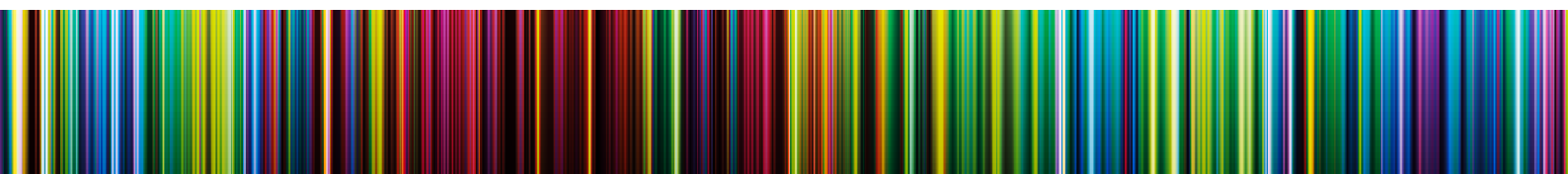
### Day 2: General View & Measurement according to RTCA DO-160

- ▶ Proposals for Qualification Test Plan Preparation
- ▶ Purpose, Applicability and Structure of the Standards RTCA DO-160 and MIL-STD-461
- ▶ Details concerning Equipment under Test and Related Auxiliary Equipment and their Setup
- ▶ EMC Testing according to EUROCAE ED-14 / RTCA DO-160 including
  - ▶ Detailed Description of individual EMC Tests / Test Setups
  - ▶ Examples
- ▶ Guided Tour: EMCC Site Unterleinleiter
- ▶ Questions and Answers

### Day 3: Measurement according to MIL-STD-461 & Comparison of MIL & Avionic Standards

- ▶ EMC Testing according to MIL-STD-461 including
  - ▶ Detailed Description of individual Tests / Test Setups
  - ▶ Examples
- ▶ Comparison of selected EMC Tests described in RTCA DO-160 and MIL-STD-461
- ▶ Guided Tour: EMCC Site Moggast
- ▶ Questions and Answers

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# EMCC SEMINARS – TERMS AND CONDITIONS OF PARTICIPATION

**Registration: By Mail / E-Mail / Fax / Phone**

**EMCCons DR. RAŠEK GmbH & Co. KG**

Stoernhofer Berg 15 | 91364 Unterleinleiter | Germany

T: +49 9194 7263-0 | F: +49 9194 7262-199

E: [emc.sem@emcc.de](mailto:emc.sem@emcc.de) | [www.emcc.de](http://www.emcc.de)

## Fees

The seminar fee must be paid after receipt of the invoice and the confirmation of booking. All invoices must be paid in advance, 14 days prior to the seminar start at the latest. The costs for all documentation and seminar papers are included in the seminar fee. The seminar fee is subject to VAT if applicable.

## Cancellations

No charges will be considered for cancellations received not later than 14 days prior to the event. Cancellations within 13 to 3 working days before the start of the seminar will be liable for 50 % of the seminar fee. After this date cancellations are liable for the full seminar fee. The same applies to non-appearance or interruption. However, we are happy to accept substitute delegates at any time.

## Change of Terms

In case of cancellation caused by EMCC DR. RAŠEK (e.g. for sick leave or insufficient number of participants), the entire fee will be refunded. A change of speakers does not legitimate a reduction of the seminar fee or withdrawal of the booking.

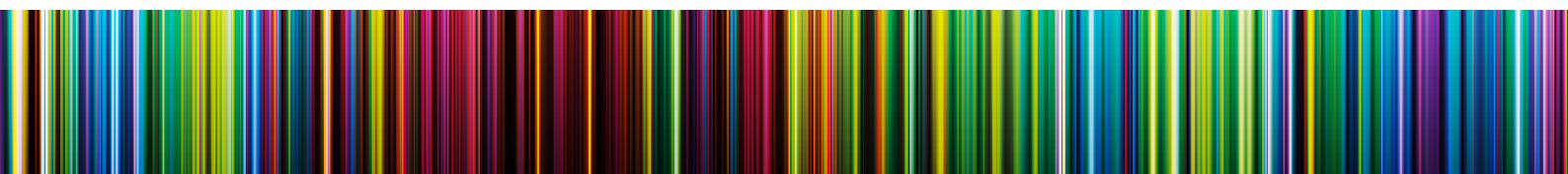
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The terms and conditions set out above are accepted with the seminar booking.

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To  
EMCC DR. RAŠEK GmbH & Co. KG  
Seminar Center  
Stoernhofer Berg 15  
91364 Unterleinleiter  
Germany

Proj. # \_\_\_\_\_  
Purchase order # \_\_\_\_\_  
Reference # \_\_\_\_\_  
Date \_\_\_\_\_

### Registration Form

for the Three Days Seminar # 11.03.02E from 2024-06-05 to 2024-06-07  
Topic: EMC-Basics, Test & Measurement Seminar for MIL and Avionic Standards in English Language  
Seminar venue: EMCC DR. RAŠEK Seminar Center, in 91364 Unterleinleiter, Stoernhofer Berg 15, Door #1,  
Germany, T: +49 9194 7263 0, F: +49 9194 7262 199, E: emc.sem@emcc.de.

Company: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Address: \_\_\_\_\_  
Postcode/Town/City \_\_\_\_\_  
Telephone: \_\_\_\_\_ Telefax: \_\_\_\_\_ Mail: \_\_\_\_\_

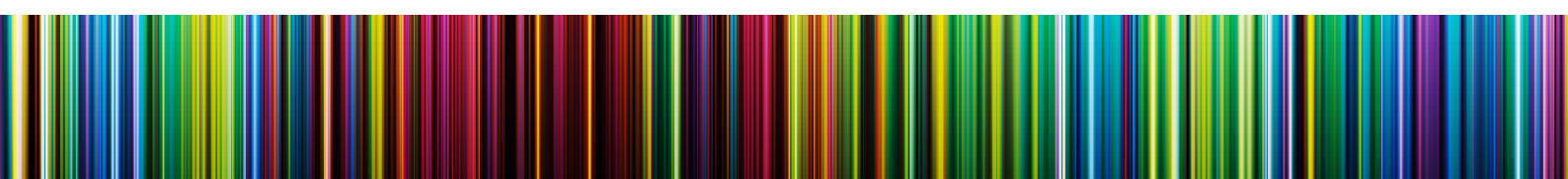
Name of participants (for more participants please use separate sheet):	Position:
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

**Seminar fees: EUR 2,120.00 per participant, VAT additionally if applicable.**

The EMCC general conditions will be accepted with the booking. Seminar fees are due on receipt of invoice, 14 days before seminar start, latest.

\_\_\_\_\_  
(Place, date) (Authorized signature)

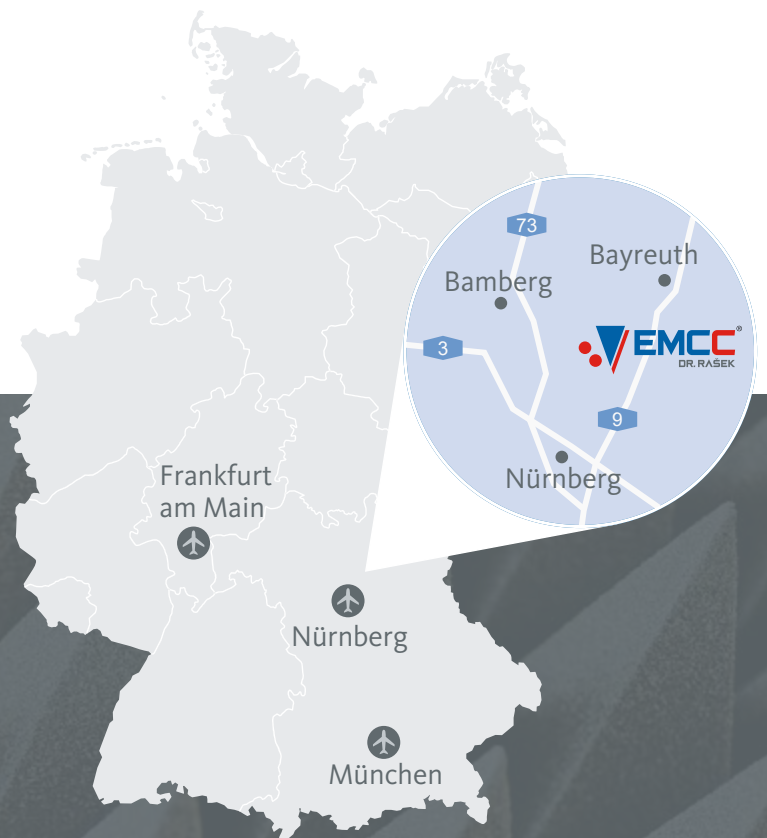
Invoicing address and VAT number:  
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# SOLUTIONS FROM A SINGLE SOURCE

We are an independent, DIN EN ISO/IEC 17025 accredited test & calibration laboratory which provides end-to-end services since 1977. Our product and service portfolio ranges from testing to consulting in the fields of EMC, calibration, environmental simulation, direct and indirect lightning, electrical safety up to seminars and R&D. We test according to national and international EMC standards and according to special customers' requirements, as well as many environmental and safety standards.

- ▶ **EMC**
- ▶ **Calibration**
- ▶ **Environmental Simulation**
  - ▶ Climatic Testing / Vibration & Shock Testing / Corrosion Testing (Salt Spray) / Pressure Testing / Fluid Susceptibility Testing / IP Testing / Icing Testing / Constant Acceleration on Centrifuge / Crash Safety Pulse and Sustained
- ▶ **Direct & Indirect Lightning**
- ▶ **EMP, HEMP, HERF, HIRF, HPM, LEMP, NEMP**
- ▶ **Electrical Safety**
- ▶ **Electromagnetic Field Simulation**
- ▶ **Consulting / Testing**
- ▶ **Impulse Test Generator Systems**
- ▶ **Seminars & Training**
- ▶ **In Our Labs, On-site Worldwide**



## CONTACT US

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