

Research Scientist

MIODRAG M. ĆURČIN

BSc Eng, MSc Aeronautics, PhD Missile G&C

Retired Colonel of Serbian Army



CURRICULUM VITAE

- Born** May 15th 1951. in Zrenjanin, Serbia.
- Nationality** Serbian.
- Education**
1. 1976. Bachelor of Science in Engineering, Faculty of Mechanical Engineering – Department for Ballistics, Belgrade University (Thesis: Analysis and Performance Calculation of the HOT Anti Tank Missile).
 2. 1977. Military School for Technical Officers
 3. 1984. Master of Science, College of Aeronautics - Department of Aerodynamics, Cranfield Institute of Technology, England (Thesis: Influence of Turbulent Wind on the Dispersion of Unguided Missile).
 4. 2006. Doctor of Technical Science, Faculty of Mechanical Engineering on Belgrade University (Thesis: Guidance Law Synthesis for a Missile with Variable Dynamic Parameters and Stochastic Disturbances in Flight).
- Professional experience in field of armament**
- I have been working in Military Technical Institute Belgrade for more then 30 years in the Rocket Division as:
- Chief of the Section for Rocket Aerodynamics and Flight Dynamics
 - Head of the Department for Missile Guidance and Control
 - Head of the Rocket Division
- At the moment of my retirement I was Assistant Managing Director of the Military Technical Institute in colonel rank.
- The field of my work is research, development and testing of rocket and missile systems. I was involved in the design and development of four missile systems and one rocket system which are, or were, in service.
- During my work I gained experience in the following fields:
- Design of anti tank missiles
 - Design of AGM missiles and bombs
 - Design of SAM missiles
 - Design of field artillery rockets and ant hail rockets
 - Design of fire control system for artillery self propelled launcher system

- ❑ Aerodynamics of projectiles, rockets guided weapons
- ❑ Trajectory calculation
- ❑ Servo system design and testing
- ❑ Integrated INS/GPS system design and testing
- ❑ Vibration measurement and testing
- ❑ Field flight testing of projectiles, rockets and missiles
- ❑ Wind tunnel testing.

So far I have published myself or as a co-author more than hundred articles, technical reports and studies. I am author or co-author of several software for aerodynamic calculation, which are in used and several other software concerning flight dynamic, guidance and control and fire control system.

During the work I was involved in more than hundreds of measurement (setting the requirements, planning, making data acquisition, data reduction and analyzing).

I am familiar with many different kinds of rocket and missile systems in service, and I have some experience in working on international contracts.

Others professional experience

I have been engaged part time as scientific adviser in “Institute for environmental and health protection” where I have been working in the next fields:

- ❑ Sound & Vibration measurement and testing
- ❑ Building acoustic
- ❑ Vibration Measurements in Predictive Maintenance (Machine-Health Monitoring)
- ❑ Development and production of instrumentation for air sampling for determination of air pollution in work and human environment.
- ❑ Measurement error analysis, data reduction and measurement uncertainty estimation.

Educational experience

I taught **Projectile and Missile aerodynamics, Flight dynamics and External Ballistics** several years on Military academy and School of Mechanical Engineering on Belgrade University. I also taught special subjects: **Ballistic computer in fire control system, Measurement in armament, Navigation computer in Inertial navigation Systems** in few universities abroad.

Languages

English (reading, writing, speaking), Russian (reading).

Computer skills

Languages: FORTRAN, Matlab, Object Pascal, C, C#
 Developer systems: Delphi, MS Developer Studio
 Program Packages (CAD): AutoCad, SolidWorks, Origin, ...
 Others: MS Office, Internet ...

Contact

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