FEDIA SERAFIEV

Railway Braking Systems Expert · Technical Author · Linux Administrator

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PROFILE

Railway braking systems specialist with 35+ years of experience in building, maintaining and diagnosing automatic train brakes — hundreds of repairs, tests and certifications, with specialisation in Knorr-Bremse, Oerlikon and Wabtec systems and the RIL 915 methodology. Since 2008 I have been administering Linux servers and building containerised and virtualised infrastructure (Docker, Proxmox VE) that powers a number of web projects. Author of six specialised books — four of them registered in the National Register of Published Books of Bulgaria, two published abroad. I run a personal technical website with hands-on guides for Linux, Docker, Proxmox and WSL2.

AREAS OF EXPERTISE

- Automatic train brakes — diagnostics, repair, testing and certification (Knorr-Bremse, Oerlikon EST, Wabtec).
- RIL 915 / VPI 07 methodology — in-service inspection and maintenance of braking systems.
- Team leadership and training; development of technical manuals and training materials.
- Containerisation and virtualisation — Docker/LXC environments and Proxmox VE infrastructure.
- Web infrastructure security and availability — Cloudflare: DNS, Workers, Tunnel, caching.

PROFESSIONAL EXPERIENCE

Railway Braking Systems Expert

1989 – present

- Diagnostics, repair and certification of automatic train brakes.
- Specialisation in Knorr-Bremse, Oerlikon, Wabtec systems and RIL 915.
- Team leadership and training; authoring of technical manuals.

Linux Administrator & DevOps

2008 – present

- Building and maintaining server infrastructure with Debian/Ubuntu, Docker, Proxmox VE and automated backups.
- Running multiple web projects with a focus on security and performance.

Technical Author

2025 – present

- Six specialised books on braking systems — four published in Bulgaria, two abroad.
- Free PDF editions available through my website; the goal is to pass the accumulated experience on to the next generation of specialists.

TECHNICAL SKILLS

- **Braking systems:** Knorr-Bremse, Oerlikon EST, Wabtec, RIL 915 / VPI 07 — expert level
- **Linux:** Debian/Ubuntu — server administration, system services, shell automation
- **Containers & virtualisation:** Docker (Compose), LXC, Proxmox VE, WSL2
- **Web infrastructure:** Cloudflare (Pages, Workers, Tunnel, DNS), WordPress — optimisation and security
- **Databases:** MySQL / MariaDB
- **Web development:** HTML / CSS / JavaScript; Astro — static sites
- **Operations:** automated backups (vzdump, cron), service monitoring

AUTHORED BOOKS (SELECTED EDITIONS WITH ISBN)

Правилник за проверка и обслужване на спирачките при експлоатация (RIL 915) — *Operating rules for in-service brake inspection and maintenance (RIL 915)* — ISBN 978-619-93799-2-9

Ремонт и изпитване на автоматични влакови спирачки — СИСТЕМА OERLIKON EST — *Repair and testing of automatic train brakes: OERLIKON EST system* — ISBN 978-619-93799-0-5

Ремонт и изпитване на автоматични влакови спирачки — Наръчник за KEO, KE1 и KE2 — *Repair and testing of automatic train brakes: KE0, KE1 and KE2 valves manual* — ISBN 978-619-93799-1-2

Аз ремонтирам влакови спирачки — *I Repair Train Brakes — a book on railway braking systems* — ISBN 978-619-93799-3-6

All editions are registered in the National Register of Published Books of Bulgaria and are freely available as PDF at https://serafiev.com/knigi/knigi/. Two further books have been published abroad. (Book titles in Bulgarian.)

SELECTED PROJECTS

- **Proxmox VE infrastructure** — hyper-converged environment of virtual machines and LXC containers powering all of my services and websites; planned resources and snapshot policy.
- **Docker and LXC environments** — application containerisation with Docker Compose: from dev tooling to production services, updated without site downtime.
- **Cloudflare Tunnel — multi-site** — secure publishing with no open ports: DNS, Workers, caching and traffic analytics for the whole ecosystem.
- **Automated backups and monitoring** — scheduled machine and data backups plus service monitoring with a clearly documented recovery procedure.

PUBLISHED WEBSITES

- **trainbrakes.com** — specialized portal for train brake systems, UIC standards and transport safety — 30+ expert articles, calculators and technical literature.
- **linuxdevops.dev** — technical portal for Linux, DevOps, Kubernetes, eBPF and production practices.
- **itpraktika.com** — practical handbooks for system administration, WSL2, networking and open source (in Bulgarian).
- **dev.fedia.eu** — 30+ free tools for daily work: transliteration, MD Editor, YAML Checker, passwords, SHA-256.
- **spirachki.eu** — railway technical library: brake gear, KE valves, documents, standards and calculators.
- **zdravemag.com** — online newspaper on folk medicine and healthy living.