

## Ridgetop Group, Inc. Publication of Essays Honors Dr. Szidarovszky's Research

**TUSCON, Ariz. — September 7, 2017** — This publication edited by associate Akio Matsumoto, “Optimization and Dynamics with Their Applications: Essays in Honor of Ferenc Szidarovsky” is a tribute to Dr Szidarovsky’s research career and his contributions across continents and across industries. The book classifies his influence across six fields: Numerical Analysis, Optimization, Dynamics, Game Theory, and Oligopoly.

*According to Doug Goodman, CEO of Ridgetop, “We are very fortunate to have such a World-Renowned Researcher and key contributor having the background and depth of knowledge in our field of advanced diagnostics and prognostics. His technical leadership has helped Ridgetop expand its integrated vehicle health management (IVHM) tools to new government and commercial markets.” Szidar was instrumental in developing special algorithms to support detection of “No Fault Found”, or NFF conditions on critical aircraft systems.*

Dr Szidarovszky is presently working in the determination of “effective age” of electronic modules that may include a combination of new, old or aged components. Effective age plays a major role in the determination of State-of-Health (SoH) and Remaining Useful Life (RUL) that can support Condition Based Maintenance (CBM+) programs on complex systems such as aircraft, autos and industrial equipment. His paper, “A New Method to Estimate Expected Number of Failures for Allocating Spare Parts and Labor”, will be presented at IEEE Autotestcon September 14, 2017 in Schaumburg, Illinois.



At Ridgetop, Dr. Szidarovszky was instrumental in the development of the NightHawk™ algorithm library that is being applied to reducing “No Fault Found” (NFF) instances. NightHawk has been successfully applied on a variety of ATE platforms including the Air Force’s VDATS tester, and custom ATE clusters used for other purposes.

Lately, Szidar has been focusing on developing new advanced algorithms and mathematically rigorous methods of handling subsystem assets with different aging or degradation profiles. This is a common situation found in aircraft, where subsystems are removed and replaced as wear and aging affect their performance.

Ridgetop Group develops advanced system level solutions for critical applications operating in harsh environments. Ridgetop’s Sentinel Prognostic tools have been adopted by large aerospace, oil/gas and



industrial organization to enable Condition-Based Maintenance (CBM+) . With its unique portfolio combination of IoT-enabled CBM+ and advanced diagnostic software, engineering services and products, Ridgetop is recognized as the technology leader in advanced prognostics and diagnostics for complex, on demand solutions.

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