Timothy B. Totten

Full contact details: timtotten.com

PO Box 8877
Humacao, PR 00792-8877
U.S.A.

tim@timtotten.com
Puerto Rico: +1-939-335-5383
Philippines: +63-928-296-1061

Wireless architect with Chairman-level governance experience; expert in international telecommunications regulatory affairs and aviation standards development

Career Profile

More than thirty years' experience in the management of wireless technologies, telecommunications regulatory affairs, aviation standards development and related business functions at UPS

Elected to top leadership positions in key industry organizations including the Enterprise Wireless Alliance (Chairman of the Board), Aviation Spectrum Resources (Board of Directors), Kentucky Blockchain Alliance (President) and the U.S. Aeronautical Frequency Committee (Chairman)

Expert in U.S. and international telecommunications regulatory strategy, spectrum management, and compliance matters, specializing in aeronautical communications, land mobile radio, unlicensed wireless, and private LTE/5G systems

Expert in cryptocurrencies and blockchain technologies since 2012; advisor to numerous startups in the space

Employment History

UPS - United Parcel Service (Louisville, Kentucky, U.S.A. - January, 1990 to March, 2021)
Wireless Architect (January, 2013 to March, 2021); Wireless Manager (August, 1998 to December, 2012); Radio Systems Supervisor (January, 1990 to July, 1998)
Subject matter expert responsible for architecture of numerous wireless systems across the enterprise, including the global UPS JetComm Network, CBRS, and other private LTE/5G systems; representing the regulatory and standards development interests of UPS at the FCC, FAA, U.S. Congress, ITU, EWA, IATA, A4A, ARINC, ASRI, RTCA, EUROCAE, AEEC, ICAO, Ad Hoc Telecommunications Users Committee, USCIB, ICC and other industry forums

SouthGain Enterprises, LLC (Louisville, Kentucky, U.S.A. - January, 2007 to present)
President. Manage all aspects of this startup, profitably engaged in import and online retail sales until 2015; currently pivoting toward opportunities in cryptocurrency and blockchain technologies

Speed Scientific School, University of Louisville (Louisville, Kentucky, U.S.A. - 1988-1989)
Graduate Teaching Assistant for ETEC-250 Communication Electronics and EE-551 Communication Lab; *Grader* for EE-550 Communication and Modulation

Gould Defense Systems, Ocean Systems Division (Cleveland, Ohio, U.S.A. - 1985-1986) *Engineering Intern*. Designed noise simulator for MK48 torpedo testing; developed computer-controlled system for measurement of complex modulus; designed hardware and wrote controlling software for Wave Vector Driver; Confidential security clearance

Education History

Certificate, Fintech - Future Commerce, December 2016; Massachusetts Institute of Technology

Completed coursework for Master of Engineering, Electrical Engineering, May 1989 (thesis pending); Speed Scientific School at the University of Louisville; merit scholarship: University Trustee's (full tuition)

Bachelor of Science, Electrical Engineering, December 1987; Speed Scientific School at the University of Louisville; merit scholarship: Eagle Scout (full tuition)

Other Professional Leadership Experience

Chairman of the Board, Enterprise Wireless Alliance (EWA), 2005 to 2007; responsible for overall governance of the industry-leading trade association for land mobile radio; continuously served in various roles on the Board of Directors and Executive Committee from 1992 to present

Director, Aviation Spectrum Resources, Inc. (ASRI) Board of Directors, May, 2017 to present; ASRI manages the Aeronautical Enroute Spectrum in the U.S., and is the leading U.S. advocate for aviation spectrum issues

President, Kentucky Blockchain Alliance Inc. (KBA), May, 2018 to present; KBA educates policymakers and citizens of the Commonwealth about blockchain technologies, promotes Kentucky as a place for innovation, investment and job creation through blockchain technologies, and advocates for policies that achieve these goals

Chairman, Aeronautical Frequency Committee (AFC), three terms from 1995 to 2014; Liaison from AFC to ARINC Board of Directors, 1998 to 2006

Delegate, International Air Transport Association (IATA) delegation to ITU World Radiocommunication Conference (WRC), 2000 to present

Technical Advisor, IATA delegation to ICAO Frequency Spectrum Management Panel (FSMP), 2016 to present

Key Technical Skill Areas

- Aeronautical CNS systems
- Point-to-point microwave links
- Satellite communication systems
- WiMAX/AeroMACS
- High frequency (HF) radio systems
- RFID systems (active and passive)
- Radio Over IP (ROIP), including ED-137
- WLAN/Wi-Fi 802.11 technologies
- FAA T-PED allowance process
- ICAO-standard SELCAL
- Ultra wideband (UWB)
- RF interference mitigation
- CBRS and other private LTE/5G networks
- Ionospheric radio propagation analysis
- Bluetooth (802.15), BLE, iBeacon, Eddystone
- Distributed antenna systems (DAS)
- Cryptocurrency and blockchain technologies

Additional Qualifications

Aviation Industry Standards Development Experience - Served on numerous technical standards development committees and working groups under the auspices of RTCA, EUROCAE, AEEC and ICAO

International Experience – Extensive travel throughout more than eighty countries; skilled at conducting business in a variety of cultures; basic Spanish and Tagalog language skills

Cryptocurrency and Blockchain Technologies – Certified Bitcoin Professional (CBP Certification ID 1b8fc3); organizer of Louisville Bitcoin Meetup; frequent public speaker on cryptocurrency and related topics

Publications – Published articles in *Proceedings of the 31st Midwest Symposium on Circuits and Systems*, *Proceedings of the 111th Meeting of the Acoustical Society of America*, *The DX Magazine*, *CQ Amateur Radio Magazine* and other periodicals; authored "Communications" chapter of UPS Flight Operations Manual (FOM) and sections of other FAA-approved technical publications; authored numerous FCC and FAA regulatory filings

Computer Skills – Strong skills across Windows, UNIX, Linux, Android; intermediate-level development experience in Pascal, BASIC, FORTRAN, Perl, HTML/CSS, Java, Javascript, PHP

Licenses – Commercial FCC General Radiotelephone Operator License (GROL); top-level Amateur Radio licenses in U.S. (N4GN), Europe/CEPT (OH4GN) and Philippines (4F1GN)

Volunteer Activities – Co-founder, Temotu Development Fund; Director and Advisor, Northern California DX Foundation; Radio Merit Badge Counselor, Boy Scouts of America; Finance Team Chair, Communications Team Chair and member of Church Council/Administrative Board, Fern Creek United Methodist Church