

## Curriculum Vitae – J. Armand Musey, CFA

### PROFESSIONAL SUMMARY

- Expert in the telecom, media, and satellite industry finance. Expert skills include financial analysis, business strategy analysis, market analysis, and valuation. Additional expertise in equity research processes and related corporate governance issues.
- Strong holistic understanding of market growth trends and the complex relationships underlying the competitive dynamics of the communications sector.
- Unique blend of 20 years of experience in equity research (former top-ranked sell-side analyst), investment banking, and consulting.
- Experience in financing and M&A transactions, as well as dozens of financial valuations, strategy analyses, and business development projects.

### EXPERIENCE

**SUMMIT RIDGE GROUP, LLC, New York, NY** **2007 - Present**  
**Founder/President** – acquired by Goldin Associates, LLC in March 2014 and spun out in April 2015.

- Conduct valuation, strategic advisory, and custom research assignments within the satellite, media, and telecommunications industries.
- Projects include investment analysis for institutional investors, transaction support for corporate clients, and litigation support/expert witness testimony for major law firms.

**GOLDIN ASSOCIATES, LLC, New York, NY** **2014 - 2015**  
**Managing Director – Head of Communications Practice**

- Conduct valuation, strategic advisory, custom research assignments, and litigation support within the communications sector.

**NEAR EARTH LLC, New York, NY** **2003 - 2007**  
**President and Partner**

- Built Near Earth LLC (as one of two partners) into a leading boutique investment bank focused on serving companies and investors in the satellite, media, and telecommunications industries.
- Provided M&A, capital raising, and valuation-related consulting services in over a dozen assignments ranging from seed capital funding to a \$1.4B acquisition by a Fortune 50 company.

**SALOMON SMITH BARNEY (CITIGROUP SECURITIES), New York, NY** **2001 - 2003**  
**Director – Senior Satellite and Wireless Tower Industry Analyst**

- Headed a five-person equity research team covering the satellite communications and wireless tower industries.
- Provided institutional investors with research and valuation analysis.
- Institutional Investor “All American” ranking (2001 and 2002).
- Ranked at or near the top of other major surveys of equity research analysts.

**BANC OF AMERICA SECURITIES, New York, NY** **1999 - 2001**  
**Managing Director – Senior Satellite Communications Industry Analyst**

- Headed a five-person equity research team covering the satellite communication industry.
- Institutional Investor “All American” #3 Ranking (2000); #1 by Greenwich Associates survey of institutional investors (2000); Wall Street Journal “Best on the Street” ranking for stock picking.
- Supported origination of over \$3.0B of investment banking financing mandates.

**C.E. UNTERBERG, TOWBIN, New York, NY** **1998 - 1999**  
**Senior Analyst – Satellite Communications Industry**

- Headed a four-person equity research team covering the satellite communications industry.
- Conducted primary research on 11 companies.
- Published industry/company strategic outlooks, created financial models and earnings forecasts, and conducted valuations of companies.
- Supported origination and execution of over \$1.0B of financing transactions.

**MERRILL LYNCH & CO, New York, NY** **1997 - 1998**

**Industry Analyst – Satellite Communications Industry**

- Assisted a senior analyst in initiating and maintaining financial research coverage on 11 companies in the satellite communications industry.

**INVESTMENT BANKING, New York, NY** **1995 - 1997**

**Nesbitt Burns, Associate (1996 - 1997)**

**PaineWebber, Associate (1995)**

- Member of corporate finance generalist teams.
- Assisted in executing a variety of public and private market corporate finance transactions.

**EDUCATION**

**PRITZKER SCHOOL OF LAW, NORTHWESTERN UNIVERSITY, Chicago, IL** **2009 - 2011**

**Juris Doctor; Cum Laude, June 2011**

- Member of highly competitive two-year JD program.
- Internship (Summer 2011): U.S. Bankruptcy Court (S.D.N.Y.) – Hon. Robert E. Gerber.
- Semester in Paris at Sciences Po.
- Senior Research Honors.

**COLUMBIA UNIVERSITY, New York, NY** **2007 - 2009**

**Master of Arts in Modern European Studies, May 2009**

- Pursued interests in history and philosophy.

**KELLOGG SCHOOL OF MANAGEMENT, NORTHWESTERN UNIVERSITY, Evanston, IL** **1992 - 1995**

**Master of Business Administration, June 1995**

- Majored in Finance and Marketing.

**UNIVERSITY OF CHICAGO, Chicago, IL** **1985 - 1989**

**Bachelor of Arts in Sociology with honors, June 1989**

- Significant coursework in Economics and Mathematics.
- Varsity track and cross-country team (four years); elected Captain in 1987.

**OTHER PROFESSIONAL BACKGROUND**

**Credentials:** Admitted to New York State Bar; Federal Communications Bar Association; Chartered Financial Analyst (CFA); Holder (until 2009) of Series 7 (general securities agent), Series 63 (securities agent state law), and Series 24 (securities firm principal) designations. Completed business valuation and intangible asset curriculum of the American Society of Appraisers. Passed national exam on the Uniform Standards of Professional Appraisal Practice (USPAP).

**Professional activities:** The CFA Institute and New York Society of Security Analysts: Chair of Corporate Governance Committee (2007-2009), vice-chair (2005-2007). Federal Communications Bar Association: Co-chair of the New York chapter since 2016. American Society of Appraisers: Board member of New York chapter (2017-2019).

## PERSONAL INTERESTS

**Sports/Hobbies:** Enjoy rock and ice climbing, running, and philosophy. Avid mountain climber – completed the “7 Summits” (climbing the highest peak on each continent) with a summit of Mt. Everest in May 2008. Completed Chicago Marathon (2003, 2005) and New York City Marathon (2004, 2006). Co-director of the Atelier86 salon series and member of the National Arts Club.

**Board Memberships:** Riverside Symphony (2008-2011); The Foucault Society (2004-2009; board treasurer); Atelier86 (2015 – present).

## ACADEMIC PUBLICATIONS/BOOKS/WHITE PAPERS

*The Spectrum Handbook 2018*, Summit Ridge Group, LLC, October 2018 (392 pages).  
Co-authored with E. Barlow Keener.

*The Spectrum Handbook 2013*, Summit Ridge Group, LLC, August 2013 (182 pages).

*Broadcasting Licenses: Ownership Rights and the Spectrum Rationalization Challenge*, 13 COLUM. SCI. & TECH. L. REV. 307 (2012).

*How the Traditional Property Rights Model Informs the Television Broadcasting Spectrum Rationalization Challenge*, 34 HASTINGS COMM. & ENT. L.J. 145 (2012).

*A Public Interest Perspective on Local Number Portability: Consumer, Competition and Other Risks*, New America Foundation (2015). Co-authored with Michael Calabrese.

*Right-Sizing Spectrum Auction Licenses: The Case for Smaller Geographic License Areas in the TV Broadcast Incentive Auction*, 37 HASTINGS COMM. & ENT. L.J. 231 (2015). Co-authored with William Lehr and sponsored by the Competitive Carriers Association.

*Overestimating Wireless Demand: Policy and Investment Implications of Upward Bias in Mobile Data Forecasts*, 23 CommLaw Conspectus 300 (2015). Co-authored with Aalok Mehta and presented at the Telecom Policy Research Conference (TPRC) in September 2014.

## PERIODICAL CONTRIBUTIONS

*Executive Spotlight: J. Armand Musey – State of the Industry*, SatMagazine (December 2021).

*Op-Ed | Satellite Bankruptcies circa 2000 vs. 2020: We’ve Come a Long Way!*, SpaceNews Magazine (April 15, 2021).

*Op-Ed | Orbital Debris and the Threat to Industry Investment*, SpaceNews Magazine (October 23, 2020).

*The FSS Sector and the LEO-GEO Stalemate*, SpaceNews Magazine (September 10, 2018).

*Should High-Throughput Satellites Really Last 15 Years?* SpaceNews Magazine (August 29, 2016).

*From the Ground Up*, Near Earth LLC (monthly Newsletter from November 2005 until April 2007).

*Heard From the Street*, Via Satellite Magazine (monthly column from late 1999 until early 2003).

*The Satellite Model Book*, Salomon Smith Barney (Second Quarter 2001 until Third Quarter 2002).

*Payload Monthly*, Banc of America Securities (October 1999 until February 2001).

*The Bus Tour; A Quantitative Overview of the Satellite Industry*, Banc of America Securities (Third Quarter 1999 until First Quarter 2000).

*Hotbird Monthly; Monthly Satellite Industry Update*, C.E. Unterberg, Towbin (December 1999 until April 2000).

**INDUSTRY SPEAKING ENGAGEMENTS (SINCE FOUNDING SUMMIT RIDGE GROUP IN 2008)**

October 11, 2022. *Satellite Innovation 2022*, Mountainview, CA. Spoke on a panel titled “Considerations in Predicting Financial Returns on Space Businesses.” Other panelists included James Bruegger, CIO and Managing Partner at Seraphim Capital; Mike Collett, Founder and Managing Partner of Pomum Ventures; Karl Schmidt, Managing Director at KippsDeSanto &Co; Dr. Sven Strohband, Partner and Managing Director at Khosla Ventures; and Alexis Sáinz, Partner at Hogan Lovells (moderator).

June 24, 2022. *Connectivity Business Summit Webinar*. Spoke on a virtual panel titled “Capital Investment: Sources, Trends and Opportunities.” Other panelists included Ram Viswanathan, CEO of Omnispace, LLC, and Alex Goldman, Editor of Connectivity Business News (Moderator).

March 21, 2022. *Satellite 2022*, Washington, D.C. Spoke on a panel titled, “Government as a Bank, Customer, or Partner – Finding the Right Balance.” Other panelists included Mike Gold, EVP of Civil Space at Redwire; Dr. Frank Turner, Technical Director at SDA; David Meyers, President of Ultisat; and Brad Grady, Principal Analyst at NSR (Moderator).

December 14, 2021. *Oppenheimer Securities 5G Summit: Wireless and Cloud Convergence Begins*. Spoke on a virtual panel with Andy Lipman, Partner at Morgan Lewis, moderated by Timothy Horan, Managing Director at Oppenheimer Securities.

October 13, 2021. *Spectrum Americas (held virtually)*. Moderated a panel titled “Regulator’s corner – Future plans and expectations for mmWave 5G.” Panelists included Javier Juárez, Commissioner at IFT Mexico; Joel Taubenblatt, Acting Chief of Wireless Telecommunications Bureau at the FCC; Philip Marnick, Head of Spectrum at Ofcom.

September 24, 2021. *Telecom Policy Research Conference (“TPRC”) 49 (held virtually)*. moderated a panel titled “Law & Economics-Big Questions.” Panelists included David Reed, University of Colorado Boulder; Alexandra Bruer and Doug Brake, ITIF; and Undrah Baasanjav, Southern Illinois University Edwardsville.

September 10, 2021. *Satellite 2021*, Washington, D.C. Spoke on a panel titled “M&A Roundtable: SPACs and Market Consolidation.” Other panelists included Michael Collett, Managing Partner at Promus Ventures; Nathan de Rooter, Managing Director at Canada Euroconsult; Chris Kemp, Founder and CEO at Astra; and William Markey, President of RCBG (Moderator).

December 16, 2020. *Oppenheimer Securities 5G Summit: The Revolution Begins*. Spoke on a virtual panel moderated by Timothy Horan, Managing Director at Oppenheimer Securities; Other panelists included Andy Lipman, Partner at Morgan Lewis; and David Wright, Head of Spectrum Policy and Standards at Commscope.

October 13, 2020. *Spectrum Americas (held virtually)*. Moderated a panel titled “Technology and policy tools to increase spectrum efficiency – what does the future hold?” Panelists included Chris Person – President, 5G Americas; Ira Keltz, Deputy Chief Office of Engineering and Technology at the FCC; Chris Murphy, Associate General Counsel at ViaSat; Andrew Clegg, Spectrum Engineering Lead at Google; and Priscilla Argeris, Public Policy Manager at Facebook.

May 14, 2020. *Intelsat's Bankruptcy: Why Now and What's Next*. Participated in a webinar hosted by SpaceNews Magazine. Other participants included Giles Thorne, Managing Director of TMT Equity Research at Jefferies Financial Group; Nathan de Ruyter, Managing Director at Euroconsult Canada; Samer Halawi, Chief Commercial Officer at Intelsat; Brian Berger, Editor of Space News (co-moderator); and Caleb Henry, writer at SpaceNews (co-moderator).

March 10, 2020. *CBRS PAL Auction Workshop*. Washington, DC. Presented an overview of CBRS auction dynamics and valuation issues.

March 9, 2020. *Satellite 2020*, Washington D.C. Moderated a panel titled "Global Spectrum Roundtable." Panelists included Audrey Allison, Vice President of Global Spectrum Management at Boeing Corp; Timothy L. Bransford, Partner at Morgan Lewis; Carlos M. Nalda, Managing Principal at LMI Advisors, LLC; Veena Rawat (remotely), Senior Spectrum Advisor for GSMA. Mr. Musey also spoke on the panel titled "Satellite Finance 2020: Reading the Tea Leaves." Other participants included Brad Grady, Consultant at NSR (Moderator); Justin Cadman, Partner at Quilty Analytics; and Mathieu Robilliard, Research Analyst at Barclays.

January 14, 2020. *CBRS Alliance Members Meeting*, Phoenix, AZ. Presented an overview of the upcoming CBRS auction process and valuation issues.

December 3, 2019. *FCBA's Exploring the C-band: Policy Perspectives and Predictions*, Washington, DC. Participated in a panel held at the office of Womble Bond Dickinson. Other participants included Louis Peraertz, Vice President of Policy at WISPA; Matt DelNero, Partner at Covington & Burling LLP; Patrick Welsh, AVP Regulatory Affairs at Verizon; and Angela Kung, Of Counsel at Mintz Levin.

October 23, 2019. *K&L Gates Space & Satellite Colloquium*, Washington, DC. Spoke on a panel titled "Space Finance." Other panelists included Elizabeth H. Evans, Partner, K&L Gates LLP (Moderator); Roger Cohen, Head Counsel for Structured Finance at Export Import Bank of the U.S.; Steven Insalaco, Managing Director at Calgary Capital; Richard Parker, Director at Assure Space; Noel Rimalovski, Managing Director at GH Partners LLC; and Matt Kozlov, Managing Director at Techstars.

September 25, 2019. *Spectrum Americas*, Washington, DC. Moderated a panel titled "Developing a Regulatory Framework to Encourage Sharing and Incentivize Incumbents to Release/Share Spectrum." Panelists included Tom Taylor, Senior Program Analyst at the Department of Defense; Ira Keltz, Deputy Chief, Office of Engineering and Technology at the FCC; Jayne Stancavage, Global Executive Director of Communications Policy at Intel; Raul Pineiro, Senior Business Development Manager at Spectral Solutions, L3Harris; Bruce Jacobs, Senior Advisor, Office of Spectrum Management at NTIA; and Martha Suarez, President at Dynamic Spectrum Alliance.

May 8, 2019. *Satellite 2019*, Washington, DC. Spoke on a panel titled "No Bucks, No Buck Rogers: Bottoming Out the Bottom Line From the Bottom Up." Other panelists included John Finney, CEO of Isotropic Systems; David Howgill, President of Hucksworthy; John Lyotier, CEO of RightMesh; and Dylan Brown, President of the Government Business Unit at OneWeb. The moderator was Michael Potter, Co-Founder and Director at Geeks Without Frontiers.

November 1, 2018. *SSPI and NY Space Alliance First Astropreneurship Day*, New York, NY. Spoke on a panel titled "The Physics of New Space Valuation." Other panelists included Hoyt Davidson, CEO of Near Earth LLC, and Noel Rimalovski, Managing Director at GH Partners LLC. The moderator was Joseph D. Fargnoli, Co-Founder of the New York Space Alliance.

October 8, 2018. *7th Annual Spectrum Management Conference*, Washington, DC. Moderated a panel titled "Plotting the Shape of the Future mmWave Spectrum Landscape – Key Bands, Use Cases and Technologies." Panelists included Donald Stockdale, Chief, Wireless Telecommunications

Bureau at the FCC; Andy Hudson, Head of Policy at GSMA; Jennifer Manner, Global Spectrum Policy at ESOA; and Sergio Bovelli, Manager, Market Access and Regulation at Airbus.

September 5, 2018. *2018 Roundtable on Value & Benefit Creation in Commercial Space*, New York, NY. Spoke on a panel titled “Communicating Value – Common Understanding and Terms.” The other panelist was Micah Walter-Range, President of Caelus Partners. The moderator was Ian Christensen, Director of Private Sector Programs at Secure World Foundation.

March 12-15, 2018. *Satellite 2018*, Washington, DC. Moderated a panel titled “Financing HTS Growth – GEOs, MEOs, LEOs.” Panelists included Chris Quilty, President of Quilty Analytics; Grant Barber, CFO of Hughes Network Systems; Joshua Marks, CEO of Global Eagle Entertainment; and Mark Rigolle, CEO of LeoSat Enterprises.

January 21-24, 2018. *Pacific Telecommunications Council (“PTC ’18)*, Honolulu, HI. Spoke on an executive roundtable titled “Why 5G Will Change Everything You Thought You Knew About Telecom.” Other panelists included Gary Kim (Moderator); Hirohisa Furuichi, Director General, Telecommunications Business Department at the Ministry of Internal Affairs and Communications (MIC); Tricia Paoletta, Partner at Harris, Wiltshire & Grannis LLP; and Jack Waters, CTO & President, Fiber Solutions of Zayo.

October 18-19, 2017. *National Association of Broadcasters Show-New York (“NAB-NY”)*, New York, NY. Co-organized the “TV on Wall Street” track at the NAB-NY conference. Moderated three panels on the “TV on Wall Street” track and moderated a panel on satellite finance on the “SatCon” track.

October 12-13, 2017. *Spectrum Americas*, Washington, DC. Moderated two panels related to spectrum policy.

March 6-9, 2017. *Satellite 2017*, Washington, DC. Co-presented, with Space Systems/Loral Senior Vice President of Business Development Rich Currier, about the “Impact of Technology Changes on the Satellite Investment Case,” with a focus on the issues satellite players will be facing in the future, including debt management, margin/revenue expectations, fleet re-balancing, and growth strategies.

January 15-18, 2017. *Pacific Telecommunications Conference (PTC’17)*, Honolulu, HI. Spoke on an executive roundtable titled “The Spectrum Revolution: Where, What, Why, How?” Other panelists included Gary Kim, Founder of Spectrum Futures (Moderator); Pierre de Vries, Senior Fellow & Co-Director of the Spectrum Policy Initiative at Silicon Flatirons Center, University of Colorado, Boulder; Kalpak Gude, President of the Dynamic Spectrum Alliance; and Tricia Paoletta, Partner at Harris, Wiltshire & Grannis LLP.

May 24, 2016. *High Throughput Satellite Roundtable*, Washington, DC. Spoke on a panel titled “Focus on Mobility – Following the Money.” Other panelists included David Helfgott, CEO of Phasor Solutions; Joe Spytek, CEO of ITC Global; Timothy Shroyer, Chief Technology Officer of General Dynamics Mission Satellites; and Sima Fishman, Managing Director at Euroconsult (Moderator).

March 7, 2016. *Satellite 2016*, Washington, DC. Spoke on a panel titled “Satellite’s Response to Evolving Media Habits: Streaming, Over-The-Top (OTT) and Bandwidth Demand.” Other panelists included Jimmy Schaeffler, Chairman & CSO of The Carmel Group (Moderator); Lisa Hobbs, VP, Commercial Portfolio Strategy, Compression at Ericsson; Mr. Gerard Faria, CTO at Teamcast; Paul Scardino, Senior Vice President at Globecom; Scot Loach, CTO at Aterlo Networks; and Thomas van den Driessche, CCO of Newtec.

February 2, 2016. *5th Annual Americas Spectrum Management Conference*, Washington, DC. Moderated a panel titled “Delivering Secure, Reliable and Efficient Public Safety Spectrum.” Panelists included TJ Kennedy, President of FirstNet; Luis Lara, Director, Government Affairs, Spectrum and Regulation LATAM at Motorola Solutions; Luis Lucatero, Independent Spectrum Expert; Steven K.

Berry, President & CEO of the Competitive Carriers Association (CCA); and Michael McMenamin, Principal of Winning Strategies Washington LLC.

January 18, 2016. *Pacific Telecommunications Conference (PTC '16)*, Honolulu, HI. Spoke on an executive insight roundtable titled "Will New Platforms for Internet Access Change Everything?" Other panelists included Gary Kim, Founder of Spectrum Futures (moderator); Reza Arefi, Director, Spectrum Strategy at Intel Corporation, USA; H Sama Nwana, Executive Director of Dynamic Spectrum Alliance, and Founder & Director, Atlantic Telecoms & Media, USA; and Peter Stanforth, CTO & Co-founder of Spectrum Bridge Inc., USA.

November 11, 2015. *SatCon*, New York, NY. Moderated a panel titled "The \$100 Billion Question: Who Gets the Spectrum." Panelists included Coleman Bazelon, Principal at The Brattle Group; Winston Caldwell, Vice President, Spectrum Engineering, Advanced Engineering at Fox Networks Group; Alexander Gerdenitsch, Senior Principal Engineer, Regulatory Affairs at EchoStar; and Gerald Oberst, Senior Vice President, Global Regulatory & Governmental Strategy at SES.

June 18, 2015. *HTS & the Mega LEO Wildcard: The DC Roundtable*, Washington, DC. Spoke on a panel titled "The Gloves are Off: Let's Step Outside." Other panelists included Brendan Murray, Product Manager at Commercial SatCom, Avascent; and Veena Rawat, Senior Spectrum Advisor for GSMA.

November 13, 2014. *4th Annual Americas Spectrum Management Conference*, Washington, DC. Moderated a panel titled "Spectrum Licenses – Is There a Need to Rethink Geographical Aspects of License Awards?" Panelists included Erin Fitzgerald, Associate at Bennet & Bennet PLLC; Johanne Lemay, co-president of LYA Associates; Blaise Scinto, Chief of Broadband Division of the FCC; and Scott J. Wallsten, Senior Research Fellow at Technology Policy Institute.

October 23, 2014. *Space & Satellite Regulatory Colloquium*, Washington, DC. Spoke on a satellite finance panel. Other panelists included Elizabeth Evans, Partner at Dentons (Moderator); John Stone, Partner at Near Earth, LLC; and William Schuster, consultant.

September 13, 2014. *TPRC (Telecom Policy Research Conference)*, Washington, DC. Co-presented a paper with co-author Aalok Mehta titled "Overestimating Wireless Demand: Policy and Investment Implication of Upward Bias in Mobile Data Forecasts."

June 3, 2014. *Telecom Industry Association, Network of the Future*, Dallas, TX. Spoke on a panel titled "Uncrunching the Spectrum Crunch." The panel was moderated by Steven J. Crowley, P.E., Consulting Engineer. Other panelists included Fran O'Brien, Jr., Ph.D., Wireless Standards Mobility CTO at Cisco; Tom Stroup, CEO of Shared Spectrum Company; and Alan Jette, Head of North American Industry Environment at Nokia.

March 27, 2014. *CCA Global Expo*, San Antonio, TX. Spoke on a panel titled "Spectrum Auctions: Current Considerations and Planning Ahead." Senior C-Net writer Marguerite Reardon moderated the panel.

March 10, 2014. *Satellite 2014*, Washington, DC. Moderated a panel titled "Satellite Finance Forum: Market Disruptors: How Can They Be Managed for Maximum Return?"

January 31, 2014. *Super Wi-Fi Summit*, Miami, FL. Moderated a panel in the finance forum titled "Terrestrial Use of Satellite Spectrum: Got Some Space Share?"

October 27, 2013. *Harvard Business School: 2013 Space Conference*, Cambridge, MA. Presented on a panel titled "Financing Space: Big Works, Big Bucks."

October 24, 2013. *Space and Regulatory Colloquium*, Washington, D.C. Presented on a panel titled "Legal and Regulatory Issues Affecting SatCon Availability." The panel was moderated by John P. Janka, Partner at Latham & Watkins.

August 28, 2013. *Super Wi-Fi & Shared Spectrum Summit*, Las Vegas, NV. Presented on a panel titled "VCs and Investors Buying into White Spaces" and another panel titled "Incentive Auction Debate – Are the Stakes too High for Broadcasters?"

June 5, 2013. *Federal Communications Bar Association – New York Chapter*, New York, NY. Spoke on a panel discussing the FCC's TV Broadcast Incentive Auction. Other panelists included Christopher Wieczorek, Sr. Corporate Counsel at T-Mobile US; Charles Bell, Programs Director at Consumers Union; Jonathan Cohen, Partner at Wilkinson Barker & Knauer; and David Donovan, President and Executive Director of the New York State Broadcasters Association.

April 23-24, 2013. *Wireless Spectrum Research and Development (WSRD) Senior Steering Group of the Federal Government's Networking and Information Technology Research and Development Program (NITRD)*, Cambridge, MA. Participated in a workshop at MIT titled "Promoting Economic Efficiency in Spectrum Use: The Economic and Policy R&D Agenda."

April 3, 2013. *WISPA America*, Cincinnati, OH. Presented on a panel titled "Financial Criteria: A Discourse on Financing." Other panelists included Bill Evenson of CIT; Chuck Walters of Walters Associates; and Thomas Carroccio of the Law Offices of A. Thomas Carroccio PLLC (Moderator).

January 31, 2013. *Super Wi-Fi Summit*, Miami, FL. Presented on a panel titled "Financial Community and Shared Spectrum: Looking for Common Ground." Other panelists included Bill Evenson of CIT; Chuck Walters of Walters Associates; and Thomas Carroccio of the Law Offices of A. Thomas Carroccio PLLC (Moderator).

December 19, 2012. *Crossfire Media: Incentive Auctions: What the Broadcasters Need to Know*, Washington, DC. Moderated a panel discussion titled "Legal Perspective: TV Incentive Auction Reverse Auction Process." Panelists included: Coleman Bazelon, Principal at The Brattle Group; Thomas Hazlett, Professor at George Mason School of Law; and Mark Fratrick, Senior Economist at BIA Kelsey.

November 8, 2012. *Columbia Law School*, New York, NY. Presented a paper titled "Broadcasting Licenses: Ownership Rights and the Spectrum Rationalization Challenge" as part of a speaker series.

October 5, 2012. *Super Wi-Fi Summit*, Austin, TX. Presented on a panel titled "Crystal Ball – White Spaces 2018." Other panelists included Gregory J. Herman, President of Spectrum Evolution; Barlow Keener (Moderator), Principal of Keener Law Group; Marty Stern (Moderator), Partner at K&L Gates LLP; and Rick Whitt, Global Head for Public Policy and Government Relations at Motorola Mobility LLC.

October 4, 2012. *Super W-Fi Summit*, Austin, TX. Presented on a panel titled "Incentive Auctions: Looming Battles, or Burgeoning Partnerships." Other panelists included Vanu Bose, CEO of Vanu, Inc.; Jim Carlson, CEO of Carlson Wireless; Rod Dir, CEO of Spectrum Bridge; Paul Garnett, Director - Technology Policy at Microsoft; and Rick Whitt, Global Head for Public Policy and Government Relations at Motorola Mobility LLC.

March 6, 2012. *Association for Law Property and Society Annual Meeting*, Georgetown Law Center – Washington, DC. Presented an academic paper at this conference titled "Broadcasting Licenses: Ownership Rights and the Spectrum Rationalization Challenge."

June 2008. *Washington Space Business Roundtable*, Washington, DC. Presented a talk titled "Trials & Pitfalls of Communicating from the Top of the World."



**Undisclosed Matter; Arbitration under the UNCITRAL Rules [1976 Version] (2022)**

- **Matter:** Satellite manufacturing contract dispute.
- **Role:** Provided expert valuation report for a satellite in storage. May provide testimony in arbitration.
- **Law Firm:** Squire Patton Boggs for defendant.
- **Disposition:** Ongoing.

**Undisclosed Matter; London Court of International Arbitration (2022)**

- **Matter:** Telecommunications bandwidth contract dispute.
- **Role:** Provided expert report related to satellite bandwidth pricing and industry factors, rebuttal report, and arbitration testimony.
- **Law Firm:** Macfarlanes LLP for plaintiff.
- **Disposition:** Decision pending.

**U.S. Securities and Exchange Commission v. Airborne Wireless Network; 21 Civ. 1772 (2022); U.S. District Court for the Southern District of New York**

- **Matter:** Dispute related to disclosures surrounding the sale of securities.
- **Role:** Provided expert valuation report and deposition testimony. May provide trial testimony.
- **Law Firm:** Reed Smith LLP for defendant.
- **Disposition:** Ongoing.

**Ramcell, Inc., v. Alltel Corporation d/b/a Verizon Wireless; Case No. 2019-0601- PAF (2022); Delaware Court of Chancery**

- **Matter:** Wireless telecom industry dispute.
- **Role:** Provided expert valuation report and rebuttal, deposition testimony, and trial testimony.
- **Law Firm:** Ajamie LLP for Plaintiff Ramcell, Inc.
- **Disposition:** Decision on favor of Plaintiff Ramcell, Inc.

**In Re: Straightpath Communications Inc. Consolidated Stockholder Litigation; C.A. No. 2017-0486-SG (2021); Delaware Court of Chancery**

- **Matter:** Wireless telecom industry dispute.
- **Role:** Provided expert valuation report, deposition testimony, and trial testimony.
- **Law Firm:** Bernstein Litowitz Berger & Grossmann LLP for plaintiffs.
- **Disposition:** Decision pending.

**Santa Fe Community College v. Ztark Broadband LLC; Case No. 1:20-cv-01151 (2021); U.S. District Court, District of New Mexico**

- **Matter:** Dispute arising from disputed renewal rights to a lease of FCC licenses.
- **Role:** Valuation report and deposition testimony related to the value of FCC licenses.
- **Law Firm:** Suttin, Thayer & Browne for Plaintiff Santa Fe Community College.
- **Disposition:** Ongoing.

**City of Hallandale Beach Police Offices' and Firefighters' Personal Retirement Trust v. Charlie Ergen, et al.; Case Number: A-19-797799B (2021). Eighth Judicial District Court of Nevada**

- **Matter:** Dispute related to the sale of satellite assets to a related party.
- **Role:** Submitted expert valuation report.
- **Law Firm:** Kessler Topaz Meltzer and Check, LLP for plaintiffs.
- **Disposition:** Settled prior to trial.

**Undisclosed Matter; Chambre patrimoniale cantonale (2020), Lausanne, Switzerland**

- **Matter:** Dispute related to the respective rights of partners in a satellite venture.
- **Role:** Provided expert reports related to the costs and value of the proposed venture.
- **Law Firm:** Quinn Emanuel Urquhart & Sullivan, LLP for plaintiff.
- **Disposition:** Settled prior to trial.

**Shenandoah Personal Communications, LLC v. Sprint Spectrum L.P.; Private Arbitration Proceeding (2020)**

- **Matter:** Dispute arising from breach of contract claim related to a roaming agreement and its renewal term.
- **Role:** Supported colleague in conducting research, drafting an expert report, and preparing for testifying in the arbitration hearing.
- **Law Firm:** Hunton Andrews Kurth LLP for Plaintiff Shenandoah.
- **Disposition:** Arbitration ruling in favor of Plaintiff Shenandoah.

**Hawaii Pacific Teleport, LP v. Peraton Government Communications, Inc.; Case No. 24178/MK (2020). International Court of Arbitration**

- **Matter:** Dispute arising from breach of contract claim related to satellite capacity distribution agreement.
- **Role:** Valuation report, deposition, and testimony for defendant in the arbitration proceeding.
- **Law Firm:** Venable LLP for Defendant Peraton Government Communications, Inc.
- **Disposition:** Arbitration ruling in favor of Defendant Peraton.

**In Re: Cellular Telephone Partnership Litigation; Case Number: C.A. N.6885 VCL (2020). Delaware Court of Chancery**

- **Matter:** Dispute arising from the buy-out of minority partners in 13 specific geographic territories.
- **Role:** Industry expert report, deposition, and trial testimony.
- **Law Firm:** Ajamie LLP; Michael A. Pullara, Esq; Prickett, Jones & Elliott P.A.; and Rosenthal Monhait & Goddess, P.A. for plaintiffs.
- **Disposition:** Partial decision in favor of plaintiffs in one territory consistent with expert testimony, disputes for four additional territories settled prior to decision, decision pending for remaining eight territories.

**T-Mobile/Sprint Merger Review (2019)**

- **Matter:** Expert industry and financial support related to an anti-trust review of the proposed T-Mobile/Sprint merger.
- **Law Firm:** U.S. Department of Justice, Antitrust Division.
- **Disposition:** Settled prior to litigation.

**Inmarsat Global Limited v. RigNet, Inc.; Case Number: 01-16-0004-5619 (2019). International Centre for Dispute Resolution**

- **Matter:** Dispute arising from breach of contract claim related to satellite capacity distribution agreement.
- **Role:** Valuation report and deposition for Defendant in the damages adjustment phase of the arbitration proceeding.
- **Law Firm:** Venable LLP for Defendant RigNet, Inc.
- **Disposition:** Settled prior to arbitration.

**ATK Space Systems, Inc., et al. v. U.S. Space LLC; Case Number: CL-101847 (2018). Circuit Court of Loudoun County, Virginia**

- **Matter:** Dispute arising from failure of a partnership seeking to pursue an in-orbit satellite servicing business.
- **Role:** Valuation report, deposition, and trial testimony for Defendant.
- **Law Firm:** Hogan Lovells for Defendant ATK Space Systems, Inc.
- **Disposition:** Jury damages award consistent with valuation testimony.

**GeoMetWatch v. Alan Hall, et al.; Case Number: 1:14-cv-00060 (2018). U.S. District Court, District of Utah**

- **Matter:** Dispute arising from failure of a partnership seeking to pursue earth observation/remote sensing satellite business.
- **Role:** Valuation expert for defendant.
- **Law Firm:** State of Utah, Office of the Attorney General for Defendant Utah State University Research Foundation.
- **Disposition:** Summary judgment granted in favor of Defendant Utah State University Research Foundation.

**In re: Paul Anthony Morabito; Case Number: BK-13-51237-GWZ (2017). U.S. Bankruptcy Court, District of Nevada**

- **Matter:** Bankruptcy-related dispute arising from prepetition asset transfer.
- **Role:** Valuation expert for shares in an entity whose primary assets are FCC spectrum licenses.
- **Law Firm:** K&L Gates; and Robison, Belaustegui, Sharp and Low for Defendant Paul Antony Morabito.
- **Disposition:** Settled prior to trial.

**Leong v. Havens, et al.; Case Number: 2002-070640 (2018). Superior Court of California, County of Alameda**

- **Matter:** Partnership dispute related to payout after the sale of partnership assets primarily consisting of FCC spectrum licenses.
- **Role:** Valuation expert in connection with the plaintiff's suit for court-appointed receivership of spectrum assets; expert support in connection with separate arbitration related to spectrum asset value and analysis of transaction records; and testified in the parallel arbitration process.
- **Law Firm:** Shopoff, Cavallo & Kirsch, LLP for Plaintiff Leong.
- **Disposition:** Arbitration award in favor of Plaintiff.

**Tinicum Capital Partners II v. Liberman Broadcasting, Inc., et al.; Case Number: 11902-VCL (2016). Delaware Court of Chancery**

- **Matter:** Shareholder dispute related to a shareholder's veto rights of management's preferred method of participating in an FCC auction.
- **Role:** Expert support related to expected receipts to certain broadcasters for tendering their spectrum in the reverse portion of the FCC broadcast incentive auction; defended written testimony in a deposition.
- **Law Firm:** Latham & Watkins LLP for Defendant Liberman Broadcasting, Inc.
- **Disposition:** Settled prior to trial.

**AMG Trading v. AstroMedia Global; Case Number: 3:12-cv-00912-SRU (2016). U.S. District Court, District of Connecticut**

- **Matter:** Partnership dispute related to a satellite project in Turkmenistan.
- **Role:** Expert valuation report and trial testimony related to the value of orbital rights.
- **Law Firms:** Pullman & Comley, LLC; and Roetzel & Andress for Plaintiff AMG Trading.
- **Disposition:** \$22 million jury verdict in favor of Plaintiff AMG Trading. The verdict was within the valuation range in my expert valuation report.

**Osier v. City of Burlington Telecom; Docket Number: S1588-09 CnC (2016). Vermont Superior Court**

- **Matter:** Dispute of fiduciary responsibility of a municipality.
- **Role:** Post-trial litigation support related to the valuation of a broadband network and other economic damages analysis.
- **Law Firm:** Gavel & Shay for Plaintiff Osier.
- **Disposition:** Decision in favor of the Defendant City of Burlington Telecom.

**Viasat, Inc., et al. v. Space Systems/Loral, Inc.; Case Number: 3:12-cv-00260-H-WVG (2013). U.S. District Court, Southern District of California**

- **Matter:** Intellectual property violation dispute.
- **Role:** Consulting expert related to the wireless broadband market and economic damages analysis.
- **Law Firm:** Susman Godfrey, LLP for Defendant Space Systems/Loral, Inc.
- **Disposition:** Post-trial settlement.

**Blasquez v. Hernandez, et al.; Case Number: HG11601017 (2012). Superior Court of California, County of Alameda**

- **Matter:** Partnership dispute related to payout after the sale of partnership assets primarily consisting of FCC spectrum licenses in the 2.5 GHz band.
- **Role:** Litigation support related to asset value and analysis of transaction records.
- **Law Firm:** Schenone and Peck LLP for Plaintiff Blasquez.
- **Disposition:** Settled prior to trial while preparing the expert report.

**U.S. v. Newman, et al.; Case Number: 12 Cr. 121 (2012). U.S. District Court, Southern District of New York**

- **Matter:** Criminal insider trading case against hedge fund investment professionals.
- **Role:** Litigation support on industry standards for investment research professionals, investment research processes, terminology, and related industry issues; retained by Sullivan & Cromwell LLP on behalf of Defendant Horvath.
- **Law Firms:** Sherman & Sterling LLP for Defendant Newman, and Steptoe & Johnson LLP and Morvillo LLP for Defendant Chaisson.
- **Disposition:** Defendant Horvath resolved the matter prior to trial.

**In re Adjustment of Rates and Terms for Preexisting Subscription and Satellite Digital Audio Radio Services; Docket 2006-1, CRB DSTRA (2007). U.S. Copyright Royalty Board, Library of Congress, Washington, D.C.**

- **Matter:** Federal arbitration over royalty rate-setting for music royalties paid by satellite radio companies (Sirius and XM Satellite Radio).
- **Role:** Expert witness for both Sirius and XM Satellite Radio (prior to their 2008 merger); prepared expert witness report analyzing the impact of various royalty rates on the business models of the two satellite radio companies and on the relative value of certain content to the companies; the project involved extensive financial modeling and detailed written testimony; defended written testimony in deposition and testified before the three-arbitrator arbitration panel.
- **Law Firms:** Weil Gotshal & Manges LLP for XM Satellite Radio; Wiley Rein LLP for Sirius Satellite Radio.
- **Disposition:** Report and testimony credited in disposition by the panel favorable to the client.

**Gross v. SES Americom; 307 F.Supp.2d 719 (2004). U.S. District Court, District of Maryland**

- **Matter:** Contract dispute arising out of SES Americom's alleged post-merger obligations to Gross.
- **Role:** Provided expert report centering on the valuation of an orbital slot and its viability for development; defended expert opinion in a deposition.
- **Law Firm:** Paul, Weiss, Rifkind, Wharton & Garrison LLP for Defendant SES Americom.
- **Disposition:** Summary judgment granted in favor of Defendant SES Americom.

**OTHER TESTIFYING EXPERIENCE**

**In re: Loral Space and Communications Inc., Consolidated Litigation. Civil Action No. 2808-VCS (2008). Delaware Court of Chancery**

- **Matter:** Shareholder derivative claim; shareholders accused management of Loral Space and Communications, Inc. of improperly favoring a major shareholder in a financing to the detriment of other shareholders.

- **Role:** Subpoenaed and deposed as a fact witness by Defendant Loral after conducting a detailed research project on the defendant company; research was conducted pursuant to a custom engagement on behalf of an investor who became one of the lead plaintiffs.
- **Law Firm:** Represented during deposition by plaintiff's counsel Paul, Weiss, Rifkind, Wharton & Garrison LLP.
- **Disposition:** Court found shareholder was improperly favored at the expense of the plaintiff shareholders and was required to make significant concessions.

**Parker Freeland v. Iridium World Communication LTD, et al. Civil Action No. 99-102 (2006).  
U.S. District Court, District of Columbia**

- **Matter:** Class action litigation filed on behalf of shareholders of failed satellite telephony company; plaintiffs alleged securities fraud by improperly misleading the investment community about the company's prospects.
- **Role:** Subpoenaed and deposed as a fact witness by the plaintiff's counsel as a result of previously following the company as a Wall Street research analyst.
- **Law Firm:** Clifford Chance US LLP (for certain defendants and witnesses); Kirkland and Ellis LP (for certain defendants).
- **Disposition:** Settled prior to trial.

Updated: January 4, 2023