PAUL C. CARROLL Thornapple Associates, Inc. 4998 Andros Drive Naples, Florida 34113 Work: (239) 919-3419 Mobile: (732) 259-7776 pcarroll@thornapple.net

Background & Experience

2012-

Present Sententia LLC, Manalapan, NJ

President

Providing analytic and testimonial expert witness services in connection with trials, arbitrations and regulatory proceedings related to the securities and commodities industries. Broker/Dealer operations risk management consulting. Expertise extends to broker-dealer and prime broker operations and margin, security clearance, security industry practice and standards, risk based margin and haircuts, portfolio margin, options operations and clearance, TIMS/SPAN margin, trades processing, NSCC and CNS settlement processes, corporate actions, asset and fund transfers, customer reporting, account documentation and AML controls.

2011-

Present Thornapple Associates, Inc., Naples, FL

Associate (pcarroll@thornapple.net)

Providing analytic and testimonial expert witness services in connection with trials, arbitrations and regulatory proceedings related to the securities and commodities industries. Broker/Dealer operations risk management consulting. Expertise extends to broker-dealer and prime broker operations and margin, security clearance, security industry practice and standards, risk based margin and haircuts, portfolio margin, options operations and clearance, TIMS/SPAN margin, trades processing, NSCC and CNS settlement processes, corporate actions, asset and fund transfers, customer reporting, account documentation and AML controls.

2000-

2011 Goldman Sachs Execution & Clearance (GSEC), New York, NY Vice President, Global Operations

Centralized coverage for all clients encompassing SEA 15(c)3 good faith capital haircuts, Options Clearing Corp (OCC) 'TIMS' customer portfolio margins model, Chicago Mercantile Exchange (CME) 'SPAN' cross-margin model and Federal Reserve Board Regulation-T margin. Products include domestic and foreign equities, listed options & futures and convertible equities & bonds. Service Model included direct interactions with hedge fund, professional & retail clients, introducing brokers and exchange based option & equity market makers. Responsible for development of policies and procedures to mitigate operational risk; ensure margin regulatory compliance under SEC, CFTC and FRB regulations and provide high levels of customer service and transparency. Management oversight of client asset transfers involving NSCC, DTC, OCC, CME clearing facilities and domestic cash funds transfer processes. Participant in numerous cross departmental initiatives covering clearing level funding controls, security segregation, customer related focus reporting, Market Maker and proprietary BD haircut practices, daily customer reporting and annual operations personnel 'red flag' compliance training on suspicious trading or asset movement activity. Oversight of client and proprietary access to order routing systems supporting domestic and global exchanges and alternative trading facilities (ETNs/ATSs); new client on-boarding including systems interfaces & coordination between front and back office processes.

1996-

2000 Spear Leeds & Kellogg, New York,

Limited Partner: Operations Administration, Margin Services

Central operations coordination and support covering US option and equity exchanges, proprietary trade flows, trade capture practices and controls, custody services, Central Clearing Counterparty funding controls (OCC/CME/DTC), option/equity market maker support, daily client reporting, SEC & CFTC governed margin & day trading compliance, daily client reporting and listed option exercise/assignment support.

1995-

1996 Republic New York Securities Corporation, New York,

Manager, Margin & Operations Services

Clientele - high net worth, prime brokerage and institutional clientele. Regulation-T margin, IRA, Trusts and Pension Plan investment accounts. Institutional & prime broker Delivery/Receipt versus payment services New Account – control of client database and supporting documentation Accounts Transfer Department (ACAT) Securities Lending Dept.- FTD inventory management; conduit stock borrows/loans.

1993-

1994 New York Life Insurance Co/ NYLife Securities Inc., New York, General Insurance Agent

Personal insurance, mutual fund & retirement plan sales representative

1991-

1992 Metropolitan Life Insurance Company, New York,
General Insurance Agent
Personal insurance, mutual fund & retirement plan sales representative

1983-

1990 Liss, Tenner & Goldberg Securities/First Institutional Securities, Clifton, NJ, Retail Operations Manager

Regional broker dealer catering to institutional and retail investors with a core focus on securitized municipal, government and corporate fixed income instruments and discount brokerage equity products.

1978-

1981 Salomon Brothers, New York,

Assistant Manager Margin Services, Manager Records Documentation, Manager Customer Accounting Responsible for daily supervision of the margin department procedures and controls; on & off site document warehousing; management of the customer subsidiary ledger controls department.

1976-

1978 Smith Barney Harris Upham, New York,
Margin Clerk Margin Services – Regulation-T accounts; Equities, Options & Fixed Income products.

1974-

1976 Loeb Rhoades & Co., New York,

Options Clearing Clerk & Margin Specialist

US listed and over-the-counter equity option support. Institutional Margin specialist, Regulation- T margin clerk

1973-

1974 Brown Brothers Harriman & Co., New York, Supervisor Oversaw money transfer group supporting international wealth management banking clients.

Financial Services Committee Participation

Credit & Margin Section of Securities Industry & Financial Markets Association (SIFMA),

Operations & Technology Society, President (2010), Governing Committee (2011-2018)

Professional society dedicated to sharing margin and operational best practices and providing educational seminars and peer to peer network opportunities to its membership.

FINRA 431/4210 Margin Committee, Former Member (2009-2011)

Regulator sponsored securities industry committee focused on margin rule development, modernization, interpretation and implementation.

SEC Portfolio Margin Sub-Committee, Former Member (2006-2011)

Formed in 2007, this committee focused on the newly created SEC/FINRA portfolio margin rules with a remit which included review of the implementation of the rule; monitoring of its effectiveness and making recommendations for changes as market conditions warrant.

SIFMA Operations Steering Sub-Committee, Participant (2009-2010)

SIFMA Board of Governors sub-committee with a remit to examine the efficacy of the broad based and overlapping infrastructure of SIFMA related committees, sub-committees and societies to insure a consistent communication of the organization's goals, objectives and benefits of membership.

Previous FINRA Registrations

Series 7 (General Securities Representative), Series 24 (General Securities Principal), Series 27 (Financial and Operations Principal), Series 63 (Uniform Securities Agent)

Current Affiliations

Securities Expert Roundtable - Director - since June 2012, President - 2021

Global Markets Advisory Group Berkeley Heights New Jersey – July 2015

Bates Group LLC, Lake Oswego, Oregon – October 2017

Education

Pace University, New York (1979-1981) Non-graduate courses concentrating on computer programming and managerial accounting practices.