RAYMOND A. SYMS
CURRICULUM VITAE

PERSONAL DATA

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Red Bank, New Jersey 07701
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Email: ray@heliexp.com Web: www.heliexpertsinternational.com

OUTLINE OF PROFESSIONAL EXPERIENCE

Raymond A. Syms provides aviation consulting and expert services based on over 40 years of aviation experience encompassing Military, Corporate, Commercial, Airline and Government operations. Management of helicopter and airplane operations, airport and heliport master planning and design, certification and construction, accident prevention, investigation and expert witness services have been performed for a large variety of organizations. Aviation qualifications include over 10,000 flying hours in both rotary and fixed-wing with multi-engine and turbine engine aircraft ratings. Those ratings are: Airline Transport Pilot (both rotary and fixed-wing); BH206 SK76; Flight Instructor in Airplanes, Helicopters and Instruments; and FAA Part 135 Chief Pilot and Instructor Pilot.

GENERAL

Raymond A. Syms has planned, developed, operated and/or evaluated numerous aeronautical facilities and operations throughout the world. They participate extensively as an industry representative and contracted consultant in many statewide aviation and helicopter system plans. Expert aviation testimony and litigation consultation services have been provided to plaintiffs and defendants on general aviation matters relating to safety, operational concerns, planning, accident prevention and investigations.

Empaneled on numerous FAA and user group committees addressing issues of aeronautical facility design, operations and safety. Contributed essential information and opinions to various federal and state regulators for the formulation and implementation of far-reaching aviation programs and regulatory reviews. Mr. Syms has been appointed Chairman of the NFPA 418 Committee which develops fire protection and life safety standards for heliports. He is also one of the most senior members of that committee having served over 33 years.

MAJOR PUBLICATIONS

- Heliport/Vertiport Development Guide – Helicopter Association International
- The “Twenty – Five Most Asked Questions and ANSWERS about Heliports/Vertiports” – Helicopter Association International

- Operational Survey – VFR Heliport Approaches & Departures – Federal Aviation Administration
- Safety Issues in Heliport/Vertiport Design – The 1990's and Beyond
- Analysis of Helicopter Mishaps at Heliports, Airports and Unimproved Sites – Federal Aviation Administration
- Composite Profiles of Helicopter Accidents at Heliports and Airports – Federal Aviation Administration
- Published or contributed to numerous articles in ERHC News, Helicopter World, Hospital Aviation, Rotor Magazine, Rotor & Wing, Vertical Magazine

AFFILIATIONS

Dowling College, Georgia Institute of Technology, HAI Professional Development Program. (Presentations on Heliport safety and design, wire strike prevention and flying safely in the wire environment, FAA regulations and guidelines.)

MEMBER

- Aircraft Owners & Pilots Association
- Air Traffic Control Association
- American Helicopter Society
- Aviation/Space Writers Association.
- Eastern Region Helicopter Council
  - Past Publisher & Editor, ERHC News
  - Past Chairman, Heliport Comm.
- Expert Resources, Inc.
- Expert Witness Network
- FAA / Industry
  - Vertiport-Heliport Design Group, Vice Chairman-Industry
- Helicopter Association International
  - Heliport Committee
  - Acoustics Committee
  - Fly Neighborly Committee
- Mid-Atlantic Helicopter Association
- National Fire Protection Association
  - Chair NFPA 418 Standard for Heliports

  - Chairman, Helicopter Refueling W.G.
- New Jersey Aviation Advisory Council
  - Licensing and Regulator Committee
- Quiet Birdmen
- Sea Plane Pilots Association
- Technical Advisory Service for Attorney
- United States Helicopter Safety Team
- Who's Who Registry of Global Business Leaders

EDUCATION

SCHOOL AND LOCATION	Curriculum
• United States Armed Forces Institute, Hunter AAF, GA	BA Liberal Arts
• Savannah State College, Savannah, GA	BA Liberal Arts
• Union County College, Union, NJ	BS Management
• Rider Business College, Trenton, NJ	BS Management
• Thomas Edison College, Trenton, NJ	BS Management
• Middlesex County College, Edison, NJ	BS Management

- All courses were non-matriculated-GPA of 4.0-

AERONAUTICAL TRAINING

SCHOOL AND LOCATION	Type of Training
• Delta Airlines, Newark, NJ	Ground Service
• Basking Ridge Flight School, Basking Ridge, NJ	Aviator
• US Army Airplane and Helicopter Mechanic Qualification, Ft. Rucker, AL	Mechanic
• United States Army Flight Training School, Ft. Wolters, TX	Aviator

• United States Army Flight Training School, Ft. Rucker, AL • United States Army Flight Training School, Hunter AAF, GA	Aviator Flight Instructor
• US Army Accident Investigation Board, Hunter AAF, GA	Investigator
• Savannah Flight Service, Savannah, GA	Aviator
• Allison Turbine Engine Service Training, Indianapolis, IN	Operations
• Flight Safety, Republic, NY	ATP-MEL
• Bell Helicopter Training School, Ft. Worth, TX	Aviator
• Linden Flight School, Linden, NJ	Aviator
• Aerospatiale Helicopter, Grand Prairie, TX	Aviator
• American Airlines, West Palm Beach, FL	Aviator

CLIENT LIST

The following partial list of clients represents the broad cross-section of aviation and non-aviation clients that have used the services of HeliExperts International LLC and Raymond A. Syms and Associations.

(30+ clients have requested complete confidentiality and are not listed here to respect their wishes).

- Affinity Marketing
- Ahern Fire Protection
- Air Charter Evaluations Inc.
- A.H. Butz Inc.
- Air Pegasus Corp.
- Akin Gump Strauss Hauer & Feld, LLP
- Alexandria, NJ Private Estate
- Alticor Corporation (Amway)
- Alvin Trenk
- Amar Estate
- Analar Corporation
- Andrews Kurth, LLP
- Anne Arundel Medical Center
- Anthony Blanchette
- Anthony Ferguson
- ARCO
- ARC Wheeler Corporation
- ASP Development Corporation
- Arizona State University Research Park
- Arthur Schneider
- Array Healthcare Facilities
- Atlanta Heliport
- Atlantic City Medical Center
- Atlantic Foundation
- Atlantic Aviation 34th Street Heliport
- Avco Lycoming

- Austin Company
- Airbus
- Aircraft Services Group, Inc.
- Airlift Northwest
- Air Methods Corporation
- Alvin S. Trenk (7)
- Arnold Chase Estate
- Avco Lycoming
- Bailey & Partners (3)
- Bald Eagle Commons Inc.
- Ball, Ball, Matthews & Novak, P.A
- Baltimore Gas and Electric
- Balzarini, Carey & Watson, P.A
- Bamundo, Zwal & Schermerhorn, LLP
- Barbara Albom, Esq.
- Barnabas Health System
- Barnett Finance Corporation
- Bayley Seton Hospital
- Bay Area Regional Medical Center
- Baylor Health Systems
- Baylor Grapevine Hospital
- Baylor McKinney Hospital
- Bayview Hospital
- BDG Robbins Lane
- Beecher, Field, Walker, Morris,
- Beggs & Lane RLLP
- Belfonti Associates
- Belvedere Property Management LLC
- The Bellevue
- Gordon Belfort
- Bexar Metro 9-1-1 Network District
- BHBG Law Firm
- Blair & Sons
- Blue Hawaiian Helicopters
- Blumenfeld Development Corporation
- Boardwalk Helicopters
- Boeing Helicopter Corporation
- Borrus, Golden & Foley
- Borough of Seaside Heights
- Boston MedFlight
- Bowers, Shuman & Welch
- BP Refinery
- Bradley Knoefler
- Brian Hart
- Brand & Brand, PA.
- Brandywine Aircraft Services
- Broadcast Helicopters Inc.
- Bristol-Meyers Corporation
- Bruce Farlow
- Byrn Mawr Hospital
- Byrne, Cardenas & Smitherman
- Buffalo Woman's & Children's Hospital
- Cablevision Systems Corporation
- Cablevision Systems Woodbury
- Cameron Memorial Community Hospital
- Cannon Design, Nassau Medical Center
- Captain Steven Albers
- Carolina Health Systems
- Carolina Healthcare- Anson
- Carolina Healthcare - Charlotte
- Carolina Healthcare – Cureton
- Carolina Healthcare - Harrisburg
- Carolina Healthcare - Kannapolis
- Carolina Healthcare - Lincolnton
- Carolina Healthcare - Pineville
- Carolina Healthcare – Probst
- Carolina Healthcare – Union (2)
- Carolina Healthcare - Steele Creek
- Carolina Healthcare - Waxhaw
- Carolina MedCenter Air
- Cascainni LLC
- Casey, Gentz & Magness, L.L.P.
- Catawba Valley Medical Center
- C.S.C Holdings
- Central Helicopters Inc.
- Center Island Heliports (4)
- Chamlin, Rosen, Cavanagh & Uliano, P.C.
- Channel 12 News, NY
- Channel 12 News, NJ
- Charles M. Young Esq.

- Charles Komar
- Charles A. Gower. P.C,.
- Charles Wang Estate
- Chase Estate
- Chef's D' France
- Chesterton Health & Emergency Center
- Chevron Oil Corporation
- Christopher Rade Musulin, Esq.
- CHUBB
- Cigna Corporation
- Cirque Lodge
- City & County of Denver, CO
- City of Smyrna, TN
- City of Thomaston, GA
- Charles A. Gower, P.C.
- CJS Holdings Hurley NJ LLC
- Clark, Depew & Seiss L.L.P.
- Clive R. Holmes
- C&J Enterprises
- Craig Depew, Esq.
- Clinton Tower Service Inc.
- Cole, Scott & Kissane, P.A.
- Computer Associates, Inc.
- Continental Insurance Company
- Control Dynamics
- Cooper Hospital (3)
- Colonial Pipeline Company
- Colgate Palmolive
- Conner Strong and Bucklew (4)
- Cononco Phillips
- Cress & Associates, Inc.
- Cruz Construction Corporation
- Cushman & Wakefield
- Dantin Consulting, LLC
- Den Enterprises LLC
- David Turock
- David Blumenfeld
- Davis & Davis
- Deborah S. Baird-Diamond Esq.
- Deer Valley Resort
- Delnor Hospital
- Derek Cribbs
- Design Strategies
- Dialight Corporation
- Dick Pacific Construction Co.
- Doctor & Mrs. Szarko
- Doctor's Community Hospital
- Diplomat Trading
- Dotlich Contractors Inc.
- Dreyer Babich Buccola Wood Campora, LLP
- Driscoll Oil Corporation
- Dr. Rick DeBlasi
- Dr. Karl Johanson
- Duke Power Facilities
- Duke Power System
- Duke Flight Operations
- Dugan & Brown, LLP
- Eastcare Medical Program
- East Connecticut Health Network
- ECKO Limited
- Edwards & Kelcey, Inc.
- EMJ/McFarland-Johnson, Inc.
- Enlace de Tecnologia, Proyectos y Serv. (Mexico City)
- Ensureplan, Inc
- Enzon Corp.
- Essex Enterprises LLC
- Ewing Cole Inc.
- Excel Aviation Inc.
- Executive Air Fleet
- Expert Resources Inc.
- Exxon Chemical Company
- Exxon Corporation
- ExxonMobil Global Services Company
- Faraci, Guadagnino, Lange & Johns
- Fasken, Martineau, DuMoulin LLP
- Fairfax Hospital
- Fair Oaks Hospital
- Federal Aviation Administration
- Fightertown, U.S.A.
- Flying Tigers Inc.
- Forensic Technical Information Corp.
- Fort Saunders Medical Center

- Frank Lazzarini
- Franzblau Dratch, PC
- Frederick Memorial Hospital
- Freedman Cohen Development LLC
- Freedom Mortgage Corporation
- Freiden & Dobrinsky, PA
- Fuller, Johnson & Farrell
- Garden State Hi-Tech Park
- Gaston Memorial Hospital
- Gateway Center # 3
- Gateway/Pace Aviation
- GEC, LLC - Virgin Islands
- Georgia Airport Matters (2)
- Georgia Estate Homes, LLC
- Georgia Institute of Technology
- Gerold Brothers Builders
- Gerson & Schwartz PA
- Glenpointe Associates
- Goodman Associates
- Goodwyn, Mills and Cawood, Inc.
- Golden Hands Farm
- Graftwork LLC
- Greg Arnette, Esquire
- Gregory R. Brown, Esquire
- Grounds for Sculpture
- Grumman Studios LLC
- GTE
- G.T. Interactive Software
- Haiti Air Ambulance
- Hall's Warehouse Corp.
- Hardcore/Dupont Composites
- Harlan M. Gordon, Esquire
- Harrah's Atlantic City
- HDR Engineers
- Head of Harbor, NY Private Estate
- HealthEast/Nags Head N.C.
- Helene Fuld Medical Center
- Helicopter Association International
- Helicopter Development Assn.
- Helicopter Solutions Inc.
- Helix Helicopters-Canada
- Heliflite
- Helo Holdings Inc.
- Heritage Minerals, Inc.
- Hewlett-Packard
- HHI Kearny Heliport
- Hilton Hawaiian Village
- Hiscock & Barclay, LLC
- Hokie Aircraft Company
- Honeywell
- Hong Kong Aviation Club
- Hovtown Corporation
- HRS Management, LLC
- Hunter & Morton
- Illinois Department of Transportation
- Illinois Northwest Health
- International Speedway
- ISN Corporation
- Intrepid Heliport Corp.
- Jack Cayre
- Jaeckle Fleischmann & Mugal, LLP
- Jamie R. Lebovitz, Esq.
- James R. Dugan II, Esquire
- James R. Matthews
- James Gilgore
- James B Dixon
- James Sinclair
- James Schermerhorn, Esq.
- Janmar Corporation
- Jayne Valley Farm
- Jeffery L. Jacobs, Esq.
- Jenschke Lane Preservation Alliance, Inc.
- John J. Carlin Jr. Esq.
- John Hopkins, Esq.
- John Kanas Estate
- John Matthews, AIA
- John Mc Dougal, Esq.
- John Payton, Esq.
- John Turak
- Johnson and Johnson
- Johnson Farm Estate
- Jones Day
- Jordan Cunningham, Esq.
- Joseph J. Brunetti Company
- Joseph Mianecki
- Justice Aviation

- Kaiser Permanente – Maui
- Kamal M. Benjelloun
- Katich, Werse & Petillo
- Kelly & Vistosky
- Kentucky Owensboro Medical Center
- Kessler, Digiovanni & Jesuele
- Kiely Realty Group LLC
- Keystone Helicopter Corporation
- Kimball Medical Center
- K. Hovanian Acquisitions
- K. Hovnanian Corporation
- KHOV Corporation
- Knesal Engineering Services, Inc.
- KYNETIC
- KTR-Phelps Dodge, Indonesia
- Landye, Bennett, Blumstein LLP
- Lane Powell PC
- Laughlin Helicopters
- Leesburg Regional Medical Center
- Leo Ayala Engagement
- Lermer Corporation
- Leverton Associates Inc
- Liberty Helicopters, Inc.
- Liberty Property Trust
- Lifestar Helicopter Inc.
- Linda & George Campbell
- Lockheed Martin Corporation
- Lomurro, Davison, Eastman & Munoz, P.A.
- Lowe's Home Improvement Co.
- Lowe's Wilkesboro
- Louisville Gas & Electric
- Lutheran Health Network
- Madison Square Garden
- MacCorkle Lavender PLLC
- Mack-Cali Real Estate
- Maine Medical Center
- Mark Croce
- Mark Silvestri
- Mark N. Stageberg, Esq.
- Mainstreet, Inc.
- Maricopa County, AZ Assoc. of Gov.
- Matrix Development Corporation
- Maui Memorial Medical Center
- McInerney, Tom & Paula
- Medical Center of Ocean County
- Medvin & Elberg, P.A.
- Merck & Co.
- Meridan Health System
- Metedeconk National Golf Club
- Methodist Hospital, Philadelphia
- Miami Helicopters (7)
- Michaels Organization
- Mid Jersey Helicopters Ltd., Inc.
- Michael D. Parrish, Esq.
- Michael Kierman, Esq.
- Michael Selig, MD
- Millennium Waterfront Associates, L.P.
- Miller & Gaudio, P.A.
- Mobil Oil Corporation
- Monk, Robert and Carol
- Monmouth Executive Airport
- Monmouth Medical Center
- Morristown Memorial Hospital
- Najarian Associates
- Nassau Medical Center
- National Golf Club of Kansas City
- Nationwide Children's Hospital
- Newcomb Medical Center
- New Hanover Regional Medical Ctr
- Newport City Development Corp.
- Nicholas Cardwell, Esq.
- Niagara Mohawk Power Corp.
- New Jersey Devils
- New York Shrub Oak School
- News 12 Networks
- North Arundel Medical Center
- North Hawaii Community Hospital
- North Shore LIJ
- Northwestern Memorial Health Care
- Nurenberg, Plevin, Heller P.A.
- NYONAIR (3)
- N.Y. City W. 30th Street Heliport
- N.Y.C. Economic Development Corp.
- Ocean Resort Casino

- Ohio Health Corporation
- Ohio Southwest Hospital
- OKO Group, Miami
- Old Bahama Bay
- Omega Engineering Inc.
- ONYX Equities
- Open Wave Systems
- P.A.B. Aviation, Inc.
- Page Southerland Page, Inc.
- Palmer Industries
- Papillion Hawaiian Helicopters Inc.
- Pardoe's Perky Peanuts, Inc
- Parker Mc Kay LLC
- Parsons Infastructure and Technology Group
- Paul T. Cardillo, Esq.
- Pearl, Mississippi
- Pegasus Global Helicopters
- Pelletreau & Pelletreau, P.A.
- Perkins & Will
- Peter Kellogg
- Peter Moote, Esq.
- Philip M. Weinstein, Esq.
- Phillip Hunter, Esq.
- Phillips & Angley
- Philadelphia S-76ers (2)
- Philadelphia Enquirer
- Pineville Medical Center
- Pitt County Memorial Hospital
- Playboy Hotel & Casino
- Plano Heart Center
- Poudre Valley Hospital
- Pratt & Whitney Corporation
- Princeton Healthcare System
- Preston & Salango
- Presbyterian Medical Center
- Proctor, Davis & Ray
- Pulama Lanai Development
- Quantrum Publications, Inc.
- Queens Health Systems (4)
- Queen Anne Emergency Center
- Raj Amar Estate
- Ramesh K. Menon
- Rancocas Valley Hospital
- Rettew Inc. Water Tank
- Randal A. Wiedemann & Assoc.
- Resorts World Casino
- Richard A. Griefinger, Esq.
- Richard F. Hodgkins & Assoc.
- R.J. Air LLC
- Rockville General Hospital
- Robb & Robb LLC
- Robert Hall
- Robert E. Monk
- Robins Island Holdings L.L.C
- Ronald Istivan, Esq.
- Rocky Mountain Helicopter
- Ronson Aviation
- Ronson Corporation
- Roper Saint Francis Hospital
- Rorer Group, Inc.
- Rosenberg Martin Greenberg LLP
- Rotor & Wing
- Royal Street Corporation
- Rushmore Tramway
- RTKL Inc.
- Saint Benedicts School
- Saint Mary's Hospital
- Sam DiFeo
- Sands, Anderson, Marks & Miller
- Saint Mary's Hospital
- Saint Agnes Hospital
- Sailfish Point Homeowners Assn.
- Sandy Hook Pilots Association
- SAP America Inc.
- Scott E. Saef, Esquire
- Schmittinger and Rodriguez, P.A.
- Sloan, Hatchner, Perry, Runge,
- Robertson & Smith
- Solgar Vitamin & Herb
- St. Paul Travelers Insurance Co.
- Satellite Technology Implementation, LLC
- Siemens Airfield Solutions
- Shore Development Inc.
- Shore Healthcare System
- S.O.A.R., Inc.

- Solitude Mountain Resort
- Somerset Air Service
- Sony Corporation
- South Jersey Hospital
- St. Agnes Hospital
- Saint Joseph's Healthcare System
- Sloan, Hatchner, Perry, Runge,
- SSFM International, Inc
- SSR Inc.
- State of New Jersey
- State of New York
- Stanko Barle Estate
- Stephen S. Weinstein, P.C.
- Stephen Mushinski, Esq.
- Stetler & Guildin Engineering Inc.
- Steven Albers
- Steven Hafif, Esq.
- Steven J. Mianecki
- Stevenson & Ammons L.L.C.
- STIDD Systems, Inc.
- Stuart Investment Inc.
- Stefankiewicz & Barnes, P.C.
- Suburban Hospital
- Summit Associates Inc.
- Summit Engineering Group, Inc
- Supersonic Aviation Corp.
- Synthesis Corporation
- Systems Control Technology, Inc.
- SUNY Health Science Center
- Tallahassee Heliport
- Techmeier Siegler
- Telluride Medical Center
- Texaco Oil Company
- Temple University Hospital
- The Michaels Organization
- The Ultimate Companies, Inc.
- Thomaston Water Tank Project
- Tigert & Ligert, P.A.
- Toll Brothers, Inc.
- Toll Brothers Headquarters
- Thomson Industries Inc.
- Thomas & Paula Mc Inerney
- Thomas Hold
- Township of Warren, NJ
- Tri-Circle Development
- Trans Continental Records
- Trinity Health Group Inc.
- TriState CareFlight
- Tropicana Hotel & Casino
- Travelers Insurance Company
- Trump Doral CC and Spa
- Trump National Golf Club
- Trump Jupiter Resort
- TSOI/Kobus & Associates
- UNISYS Corporation
- UBER
- Union Memorial Hospital
- United Health Services Hospitals, Inc.
- Universal Hel Air Inc.
- Universal Nissan
- University of Kansas Medical Center
- University of Maryland Trauma Center (7)
- University of Wisconsin
- URS Corporation
- U.S. Air Force
- U.S. Army Brook Army Medical Center
- U.S. Army Corp. of Engineers
- U.S. Department of Defense
- U.S. Department of Energy
- U.S. Department of Justice
- U.S. Navy
- U.S. Steel Corporation, Indiana
- United Health Services Hospitals, Inc.
- United States Steel, Michigan
- United States Postal Service
- Upper Marlboro Heliport
- Upstate Medical Center
- USAA Insurance
- Vail Valley Medical Center (3)
- Ventura Aviation
- Ventura & Thompson
- Viking Yachts Inc.
- Vincent Jesule, Esq.
- Vonage America Inc. (6)

- Voorhees Township, NJ
- V & S Corporation
- WA Golf Company LLC
- W.R. Berkley
- Wall Street Helicopter
- Walter Gezari Estate
- Wang Estate
- Washington Adventist Hospital
- Washington D.C. Heliport
- Warren Township Planning Board
- Warren Township Council
- Waterbury Hospital
- Wheeler, Goodman, Mazek
- WGMA Inc
- Wells, Singer Rubin & Musulin, PA
- Welch Farm Inc.
- Werner Heliport LLC
- West 30th St. Heliport, NYC
- WFAA-Dallas
- Whiteweld, Barrister & Brown Inc.
- White Hall Farm
- Wings Field
- Wilson, Kehoe & Winningham, PA
- William D. Fletcher, Jr. Esq.
- William Jones III, Esq.
- Wilmont Sanz Fairfax
- Willowbend Development Corp.
- Willowbend Towers Inc.
- Women & Children's Hospital of Buffalo
- Wright Flight Aviation
- WRAL-TV
- W.R. Berkley Corporation
- W.Z. Inc.
- Yonkers Heliport LLC
- Zemach Sternberg
- Zenflight
- Zurich Insurance Company
- 100 Sharp Road LLC
- 300 Biscayne Blvd
- 300 Aston Martin Residences
- 325 West Baltimore
- 1000 Museum