



# Capability Briefing

San Antonio, Texas

Certified SBA 8(a) Small Disadvantaged Business (SDB)  
Certified Department of Transportation DBE  
Certified Texas Historically Underutilized Business (HUB)  
Certified South Texas ESBE HABE MBE SBE

***EXCEPTIONAL POWERS OF VISION***

# About Us



## ***Our Mission***

*"To be a one stop provider for process improvement and to provide our customers with exceptional services, quality products and unparalleled customer support."*

## ***Who We Are***

- Certified and Licensed Subject Matter Experts: Professional Engineers, Project Management Professionals, Lean-6σ Black Belts, ISO Lead Auditors, Defense Acquisition Programs
- Financially stable, continued annual growth since 2008
- Exceptional record of Program Management, Process Improvement and Strategic Business Case Analysis
- Multiple Contract Vehicles – 8a, GSA, IDIQs

## ***What We Do***

- Perform independent & unbiased assessments
- Execute continuous process improvement and organizational transformation
- Find hidden costs and increase your profits
- Increase production and/or services
- Optimize logistics, supply-chain, and space
- Right-size to your changing requirements

## ***Benefits***

- Improve Readiness & Sustainment
- Lower Operating Costs & Reduce Rework
- Provide Timely Delivery to Customers
- Increase Health & Human Performance
- Ensure Energy & Environmental Compliance

# Leadership



**Dr. John F. Ayala, PE, PMP, LBBP**  
Co- Founder, President



**Ms. Bessie M. Irizarry, PE, PMP, LBBP**  
Co-Founder, Vice-President

- Successful civilian, academic, and private industry careers
- Average over 25 years of experience in the Aviation, Defense, and Private Industry
- Strong educational and certification background in engineering and management
- Experience managing large contracts and complex weapons systems
- Proven track record in engineering, process improvement, acquisition and technical management

# Strengths



- Experienced providing depth and breadth support across the complete spectrum of Defense supported systems and equipment – **Aviation, Missiles, Tanks, Automotive and Weapon Systems.**
- Robust experience in utilizing Project Management Institute’s (PMI) methods to manage programs & project of various size and scope. ***We deliver on-time and on budget!***
- Fiscally stable and **mature company** with established methodologies, processes and tools.
- **Solid Management Team** with 25+ years of Defense and Private Industry experience.
- Established Financial and Management processes for performance reporting.
- Proven ability to **attract and retain highly qualified personnel** even on short notice.
- Management and technical approach based on experience with Defense and Private Industry. ***We apply best practice techniques resulting in consistent superior results.***



**DUNS: 828417134**  
**CAGE CODE: 58EQ2**

## **NAICS CODES:**

**541330, 541340, 541420,  
541511, 541512, 541519,  
541611, 541613, 541614,  
41620, 541690, 541712,  
611430, 924110, 237310**

# Impact



## SYSTEMS & PROCESS ENGINEERING



- Documented \$30M in cost avoidance at US Army depot utilizing Lean Six-Sigma Methodology.
- Saved \$950k/year on T700 engine production applying Design of Experiments (DoE) methods.
- Saved \$300k/year by performing warehouse space analysis & optimizing product location.
- Saved 1,500 man-hours/year by designing a mounting system for classified equipment.

## ORGANIZATIONAL ASSESSMENTS



- Laid the foundation for a Joint Base San Antonio (JBSA) Operating Instruction establishing planning and management procedures to ensure efficient use of Real Property to all JBSA customers including mission partners.
- Provided support to the JBSA and the Civil Engineering (CE) transformation efforts.
- Integrated improvement requirements with Lackland Air Force Base modernization plans.

## PROGRAM PROJECT MANAGEMENT



- Conducted/documentated broad base analyses and assessment of the US Army's Arsenal System's ability to meet its lifecycle sustainment requirements – fragility & criticality of technology and skill sets.
- Conducted/documentated logistics analysis and assessment of sustainment of USAF Forward Processing, Exploitation, and Dissemination (FPED) Program Office operations world-wide.
- Led Praxair to ISO9001 & QS9000 Certification.
- Managed the JBSA's Quality Air Program to include the renewal of the Title V permit among other permits.
- Managed the approval of Emergency Preparedness Plans (EPPs) for Texas Center for Environmental Quality (TCEQ) in accordance with SB361.

# Impact – cont'd



## ENERGY / ENVIRONMENTAL



- Developed comprehensive Facility Condition Checklist consolidating requirements from: Operations, Asset Management and Fire Emergency Services.
- Managed the JBSA Title V renewal process.
- Performed a solid waste stream analysis at JBSA with recommendations to divert waste from landfills reducing methane emissions.
- Developed all commodities (Electric, Natural Gas, Water and Sewer) Energy Process Playbook for the Utility Sales Computation requirement.

## TECHNOLOGY DEPLOYMENT



- Conducted/documentated damage and fatigue assessments of Tagnite™ repair on rotorcraft.
- Removed CARC paint on B52 Blower Fans without damage to substrate with Photochemical process.
- Conducted/documentated new design of USCG C-130 landing gear door, which absorbed damaging vibrations encounter during flight.
- Other products flying on aircraft today...

## CERTIFICATION TRAINING

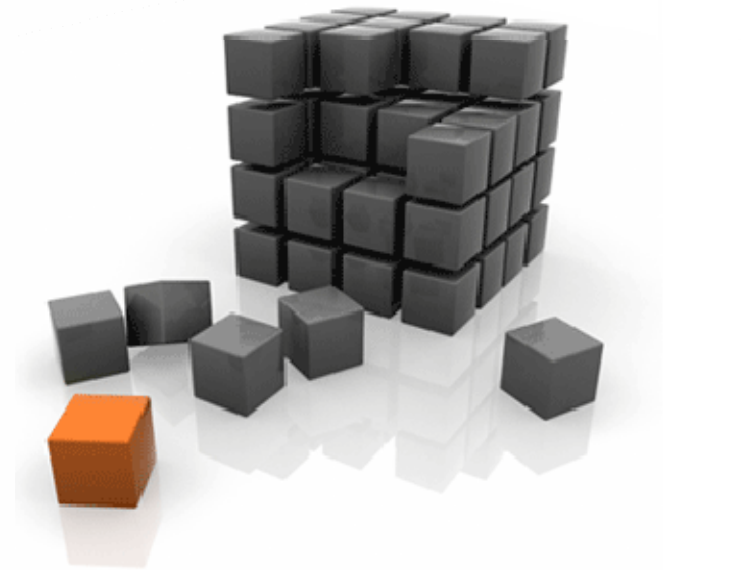


- Certified 100+ contractors in Lean Six-Sigma Yellow and Green Belts.
- Provided 10+ customized Lean Six Sigma training sessions.
- Conducted PMP boot camps leading to 45+ contractors receiving PMP certification.
- Provided CSEP boot camps leading to 15+ contractor receiving ASEP/CSEP certification.

**More detailed briefings and additional impacts can be provided on our past experiences and solutions upon request.**

# Capabilities

- Industrial and Process Engineering
- Program / Project Management
- Lean Manufacturing and Six Sigma Analysis
- Quality and Reliability Engineering
- Aviation Maintenance, Repair & Overhaul
- Database / Information Technology
- Technology Deployment
- Environmental / Energy Strategies
- Certification Training



# Industrial and Process Engineering



Falcona provides industrial and process engineering, technology integration and technology implementation support. Our subject matter experts offer in-depth knowledge of technologies, tools and processes necessary to achieve feasible solutions that meet performance, cost and schedule objectives. Our services include program plans ranging from system definition to validation.

## FALCONA's SUPPORT CAPABILITY AREAS

- Project Control Processes and Procedures
- Business Process Re-Engineering (BPR)
- Acquisition Planning and Management
- Technology Forecasting and Management
- Facility Design and Layout & Manufacturing Systems
- Producibility Analysis
- Methods and Standards Analysis
- Lean Manufacturing
- Cost and Economic Analysis
- Risk Analysis and Management
- Manufacturing Science and Technology
- Design and Analysis of Experiments
- Value Engineering
- Time and Motion Studies



# Program / Project Management



Falcona's Project Management Professionals (PMPs) deliver strategic approaches to mission critical, high visibility projects. We are experts in the Project Management Institute's Project Management Body of Knowledge (PMBOK) and also provide professional training.

Falcona's ability to predict risk and take advantage of advanced risk management techniques separates us from the rest!

## FALCONA's SUPPORT CAPABILITY AREAS

- |                            |                                       |
|----------------------------|---------------------------------------|
| • Communication Management | • Program Integration                 |
| • Resource Management      | • Manufacturing & Technology Roadmaps |
| • Risk Mitigation          | • Resource Loaded Scheduling          |
| • Performance Baselines    | • Organizational Change Management    |
| • Quality Management       | • Documentation & Guidebooks          |
| • Project Monitoring       | • PMI Training                        |
| • Project Closeout         |                                       |

# Lean Manufacturing & Six Sigma



Falcona applies the LEAN SIX SIGMA philosophy of value stream analysis, continuous improvement, and how the elimination of waste plays in today's competitive environment. Our methodology focuses on overproduction, motion, inventory, waiting, transportation, defects, injuries and extra processing. Falcona also provides statistical analysis to increase profits by eliminating variability, defects, and waste that adds hidden costs and undermine customer loyalty.

## FALCONA's SUPPORT CAPABILITY AREAS

- Lean Six Sigma Certification and Training
- Kaizen Event Facilitator
- Visual Workplace (5s)
- Value Stream Mapping
- Root Cause Analysis
- Time Standards and Standard Work
- Takt Time, Cycle Time, Line Balancing
- Quick Changeover / Setup Reduction
- Kanban Systems Improvement and Implementation
- Cellular Flow Manufacturing
- Source Inspection and Validation
- Production Line and Process Validation
- SPC and Design of Experiments (DoE)
- Decision Support

# Quality and Reliability Engineering



Falcona offers expertise relating to critical problems of concern to industry, such as efficient methods to improve product quality and reliability and optimal design of testing plans for the product. We provide timely, high-quality, and cost-effective support in the quality and reliability engineering areas.

Falcona follows industry quality standards. Examples include ISO, NADCAP, AS9100, SAE, SAA, OEM, and more.

## FALCONA's SUPPORT CAPABILITY AREAS

- |  |                                  |
|--|----------------------------------|
| • Process Audits                       | • Program Audits and Evaluations |
| • ISO Certification                    | • Hardware Acceptance Reviews    |
| • Design Review                        | • Pedigree Review                |
| • Configuration Audit                  | • Calibration / Metrology        |
| • Facility Assessment                  | • ESS and ESD Systems            |
| • Performance Measures and Indicators  | • Product / Process Surveillance |
| • Defect Tracking / Monitoring Systems | • Vendor Management Audits       |

# Aviation and MRO



Falcona is led by recognized Subject Matter Experts in developing and applying technology and best business practices to improve readiness and sustainment of Government & Commercial aircraft systems regardless of age or complexity. We utilize simulation modeling methods to assist in the identification of innovative cost effective solutions.

Falcona integrates a full spectrum of research and technical expertise providing solutions to complex problems.

## FALCONA's SUPPORT CAPABILITY AREAS

- Production Scheduling / Inventory Control
- Diminishing Manufacturing Sources
- Make vs. Buy Analysis / BCA / ROI
- Facilities Design and Layout
- Quality Engineering/Technical Liaison
- Materials / Manufacturing Selection
- Supply Chain Management
- Criticality & Fragility Assessments
- Enterprise Resource Planning
- Product / Process Verifications
- Surge Mobilization Planning
- Technology Forecasting & Management
- Ergonomic & Method Analysis
- Decision Support & Cost of Aging

# Information Technology



Falcona focuses on providing, analyzing and/or developing innovative solutions that integrate Information Technology to maximize performance and minimize cost. Our customized tool/software application centers on the notion of service oriented data sources with a user-defined, user-friendly design. User-defined reports and modules are created providing customized views and/or data analysis and display.

We review your current operation and software system, determine best industry practices to utilize and provide recommendations for improvement and implementation.

## FALCONA'S SUPPORT CAPABILITY AREAS

- Infrastructure & Enterprise Management
- Business Information Systems
- Database Administration & Management
- Software Engineering
- Strategic Consulting
- Software Quality Assurance
- Communications & Internetworking
- Network Security Testing & Evaluation
- Network Administration
- Vulnerability Analysis
- Web Development
- Cyber Security
- Documentation & User Guides
- Security Training

# Technology Deployment



Falcona focuses on identifying and understanding customer needs, providing solutions to hard-to-solve problems, and deploying new and improved technologies. We provide a collaborative technology development and application capability by bringing together leading military, academia, government, and private sector organizations. We cut across multiple otherwise disconnected industries, to see how existing technologies could be used to create breakthrough innovations generating new and improved collaborations.

## FALCONA's SUPPORT CAPABILITY AREAS

- |                            |                                       |
|----------------------------|---------------------------------------|
| • Idea Generation          | • Coating Removal and Coatings        |
| • Idea Screening           | • Erosion and Corrosion Prevention    |
| • Concept Development      | • Power Grid Reliability              |
| • Business Analysis        | • Solar Sails (cars, buildings, etc.) |
| • Product Testing          | • Ballistic Fabrics                   |
| • Technical Implementation | • Materials Forensics                 |
| • Commercialization        | • Damage Assessments                  |



# Environmental / Energy Strategies



Falcona is committed to the application of the environmental science and green chemistry to conserve the natural environment and resources, and to curb the negative impacts of human involvement. Falcona is also committed to providing diagnostic capabilities to significantly enhance reliability and quality within electrical power grids while also reducing cost of maintaining electrical infrastructure.

## FALCONA's SUPPORT CAPABILITY AREAS

- |                                  |                                |
|----------------------------------|--------------------------------|
| • Program / Project Management   | • Power Grid Reliability Tools |
| • Pollution Prevention Programs  | • Energy Audits                |
| • Compliance and Safety Auditing | • Information Technology       |
| • Air & Water Quality            | • Cyber Security               |
| • Hazardous Waste & Reporting    | • Cost Benefit Analysis        |

# Certification Training



Falcona offers a wide array of certifications and training focused on increasing product and/or service throughput while reducing cost and improving safety. Courses are customized for your business and delivered at your workplace. We provide training manuals, reference books and training certificates to each participant.

Learn how to integrate principles of business, statistics and engineering to achieve tangible results by improving quality and reducing defects.

## FALCONA's TRAINING CAPABILITY AREAS

- |   |   |
|---|---|
| • Project Management Professional (PMP)     | • Certified System Engineering Professional |
| • Lean 6 $\sigma$ Yellow Belt Certification | • Lean 6 $\sigma$ Green Belt Certification  |
| • Lean 6 $\sigma$ Management Overview       | • Lean 6 $\sigma$ Tools                     |
| • 5S Workplace Organization                 | • Statistical Process Control               |
| • Root Cause Analysis                       | • ISO 9001 Requirements Workshop            |
| • Value Stream Mapping                      | • ISO 9001 QMS Lean Auditor                 |
| • Cellular Flow & Quick Changeover          | • More under development                    |



# Our Customers



## FEDERAL

- Corpus Christi Army Depot
- Joint Base San Antonio
- Letterkenny Army Depot
- Rock Island Arsenal
- USAF Cryptologic & Cyber Center
- USCG Air Logistics Center
- US Army Aviation and Missile Command
- US Army Edgewood Chemical Biological Center
- US Army Medical Department
- US Army Materiel Command
- US Army Tank and Automotive Command
- US Army TMDE Activity
- US Missile Defense Agency
- US Navy Air Systems Command
- Watervliet Arsenal
- Wright Patterson Air Force Base

## STATE

- University of Texas at San Antonio (UTSA)
- Texas A&M Engineering Experiment Station (TEES)
- Texas Center for Environmental Quality (TCEQ)
- Texas State University

## COMMERCIAL

- Bray Controls
- Crosby Lebus
- Edwards Aquifer Authority
- Intuitive Research Technology Corporation (IRTC)
- Kelly Logistics Support Services
- NCI
- Power Solution, Inc.
- Pvilion, Inc.
- Rilco Manufacturing Company, Inc.
- Tree Town USA
- URS



# Contract Vehicles



## FEDERAL

### **SBA – SOLE SOURCE AWARDS**

- Certified 8(a) Small Disadvantage Business

### **GENERAL SERVICES ADMINISTRATION (GSA)**

- Professional Services Schedule (PSS) 00CORP, GS-00F-272CA
  - Professional Engineering Services (PES)
  - Mission Oriented Business Integrated Services (MOBIS)
- Schedule 70, GS-35F-182CA
  - Information Technology Equipment, Software & Services (IT)

### **DEPARTMENT OF DEFENSE – COMPETED TASK ORDERS**

- US Army AMCOM Express – Technical
- US Army AMCOM Express – Programmatic
- US Army AMCOM Express – Full & Open
- US Navy SeaPort Enhanced (SeaPort-E)
- US Air Force Design Engineering Support Program III
- DoD Sole Source Contractor on Coating Removal

## STATE, REGIONAL & LOCAL

### **REGISTERED & APPROVED VENDOR**

- Texas Historically Underutilized Business (HUB)
- SCTRCA: ESBE HABE MBE SBE
- City of San Antonio
- City of Corpus Christi
- City Public Service (CPS)
- San Antonio Water System (SAWS)

### **WE ACCEPT YOUR CREDIT CARDS!**



**We will work with you to identify  
the contracting approach best suited to your needs.**

# Contract Vehicles – cont'd



## NAICS CODES

- 541330** Engineering Services
- 541340** Drafting Services
- 541420** Industrial Design Services
- 541511** Custom Computer Programming Services
- 541512** Computer Systems Design Services
- 541519** Other Computer Related Services
- 541611** Administrative Management and General Management Consulting Services
- 541613** Marketing Consulting Services
- 541614** Process, Physical Distribution, and Logistics Consulting Services
- 541620** Environmental Consulting Services
- 541690** Other Scientific and Technical Consulting
- 541712** Research and Development in the Physical, Engineering, and Life Sciences
- 611430** Professional and Management Development Training
- 237310** Highway, Street, and Bridge Construction

## **PRODUCT SERVICE CODES:**

**AC14, AC15, AC16, AJ14, AJ16, B505, B506, B507, B510, B513, B524, B529, B539, B541, B543, B544, B550, B551, B554, B599, F101, F999, H110, H115, H116, H128, H117, LO10, LO16, LO17, LO28, LO68, R415, R425, UO99**

## GENERAL SERVICES ADMINISTRATION (GSA)

### **Special Item Number(s) – SINs**

### Professional Services Schedule (PSS)

- 874-1** Integrated Consulting Services
- 874-4** Training Services: Instructor Led & Web Based Training, Education Courses, Course Development & Test Administration
- 871-1** Strategic Planning for Technology Programs

### (upcoming SINs pending GSA approval)

- 871-2** Concept Development and Requirements Analysis
- 871-5** Integrated Logistics Support Services
- 874-7** Integrated Business Program Support Services
- 874-501** Supply and Value Chain Management
- 899-1** Environmental Consulting

### Information Technology Equip., Software & Services (IT)

- 132-51** Strategic Planning for Technology Programs
  - **FDS Code D302** IT Systems Development Services
  - **FDS Code D306** IT Systems Analysis Services
  - **FDS Code D307** Automated Information Systems Design and Integration Services
  - **FDS Code D308** Programming Services
  - **FDS Code D310** IT Backup and Security Services FPDS
  - **FDS Code D311** IT Data Conversion Services FPDS
  - **FDS Code D316** IT Network Management Services
  - **FDS Code D317** Creation/Retrieval of IT Related Automated New Services, Data

# Summary



- Certified and Licensed Subject Matter Experts: *Professional Engineers, Project Management Professionals, Lean Six Sigma Black Belts, ISO Lead Auditors, Defense Acquisition Programs.*
- Solid Management Team with 25+ years of Defense and Private Industry experience.
- Experienced team capable of meeting niche requirements across multiple disciplines and industries.
- Our Capabilities: *Aviation Maintenance, Repair & Overhaul, Certification Training, Database Development / Information Technology, Environmental / Energy Strategies, Industrial & Process Engineering, Lean Six Sigma, Program/Project Management, Quality and Reliability Engineering and Technology Deployment.*
- Cost effective, agile, responsive and customized support to meet your needs (on-site, off-site, virtual).
- Multiple contracting options: SBA 8(a), GSA Schedules & Subcontractor, Partner and/or Prime Contractor on IDIQ Vehicles.

For More Information  
Please Contact:

Dr. John F. Ayala  
President

(210) 885-6552

[jayala@falcona.net](mailto:jayala@falcona.net)

or

Ms. Bessie M. Irizarry  
Vice-President

(210) 845-8840

[birizarry@falcona.net](mailto:birizarry@falcona.net)

or

Visit our website:

[www.falcona.net](http://www.falcona.net)

*Thank you!*