Expression of Interest
 # DEFK1008

FIXED WING ARMY AVIATION TRAINING SITE APRON EXPANSION

at the West Virginia Army National Guard Fixed Wing Training Site in Bridgeport

WEST VIRGINIA ARMY NATIONAL GUARD

THE LPA GROUP
AVIATION CONSULTANTS
A Unit of Michael Baker Corporation

THE LPA GROUP
Transportation Consultants

7031 ALBERT PICK ROAD, SUITE 302 ■ GREENSBORO, NORTH CAROLINA 27409 ■ 336-393-0441 ■ FAX 336-393-0616

August 18, 2010

Mr. Chuck Bowman
Purchasing Division
2019 Washington Street, East
Charleston, West Virginia 25305-0130

RE: Expression of Interest for the Fixed Wing Army Aviation Training Site Apron Expansion at the West Virginia Army National Guard Fixed Wing Training Site in Bridgeport – #DEFK11008

Dear Sir,

Keys to project success: communication, experience and accessibility. After many years of experience in aviation consulting, we have determined that the success of a project basically depends on three factors:

1. ***Communication:*** Communication is the key to any successful relationship. The Project Team leader will be the focal point for all communication between you and the design Team. During project development, frequent Team meetings are held to ensure that all members fully understand project goals and tasks.
2. ***Experience:*** The assembled Team has numerous projects that have been successfully completed that are closely related to the planned project. The understanding of what a contractor is looking for and how to prevent issues during construction is paramount to any successful project. One of the questions that our Team members constantly ask during project development is: How will the contractor interpret what is shown on the plans and specifications? We then answer that question by adding detail to the documents to fully clarify the intent.
3. ***Accessibility:*** The assigned Project Team leader is based in Charleston, West Virginia, providing easy access for meetings and project reviews.

It is with utmost pleasure that we submit our Expression of Interest in the above referenced project. In order to exceed your expectations, we have assembled a Team that is both extremely qualified and ready to begin work. Your Project Team leader is Mr. Patrick Fogarty, P.E., P.S. who has over 24 years of aviation/military work experience. Mr. Fogarty will be supported by over 2,800 engineers, planners, architects and designers who are available to assist in successfully completing your project.

We are fully confident that we can exceed your expectations on this project. We stand ready to meet with you to present additional qualifications and more information about our Team.

Sincerely,
THE LPA GROUP INCORPORATED
A Unit of Michael Baker Corporation

Jeff Kirby, P.E.
Principal-In-Charge

RFQ No. #DEFK11008

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:
"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (***West Virginia Code*** §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: THE LPA GROUP INCPORPORATED

Authorized Signature: _____ Date: August 12, 2010

Arthur E. Parrish, President and Chief Executive Officer

State of South Carolina

County of Richland, to-wit:

Taken, subscribed, and sworn to before me this 12th day of August, 2010.

My Commission expires August 11, 2014.

AFFIX SEAL HERE

NOTARY PUBLIC _____

Patricia A. Shuler

Effective May 1st, 2010, THE LPA GROUP INCORPORATED merged with Michael Baker Corporation and now operates as a Unit of Michael Baker Corporation.

This document presents information as to LPA qualifications and experience and will be complemented by Michael Baker projects and personnel. Further combined company resources are available and can be provided, if requested. The joint capabilities of both firms significantly expands our ability to provide exceptional service on this project.

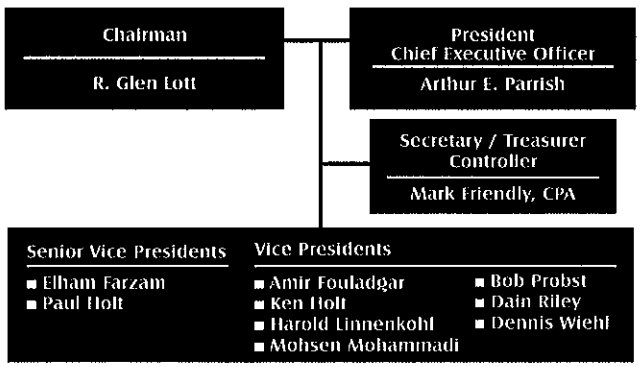
THE LPA GROUP INCORPORATED

THE LPA GROUP INCORPORATED (LPA) was founded in 1981 by R. Glen Lott and Arthur E. Parrish. Since LPA's inception, we have increased our staff and office locations to meet the needs of clients. Through our national office network, we provide complete planning, environmental, design and construction services for airport, highway, bridge and architectural development programs.

Ed Parrish, left, and Glen Lott, right, founders of THE LPA GROUP.

Effective May 1, 2010, THE LPA GROUP INCORPORATED (LPA) merged with Michael Baker Corporation (Baker) and now operates as a Unit of Michael Baker Corporation. Since the recent merger between LPA and Baker, our Firm has grown from a privately-owned operation with approximately 475 employees in 23 offices to a large consulting Firm with over 2,800 employees located in over 70 offices. The joint capabilities of both firms significantly expands our ability to provide exceptional service on this project.

Corporate Organization



LPA LOCATIONS

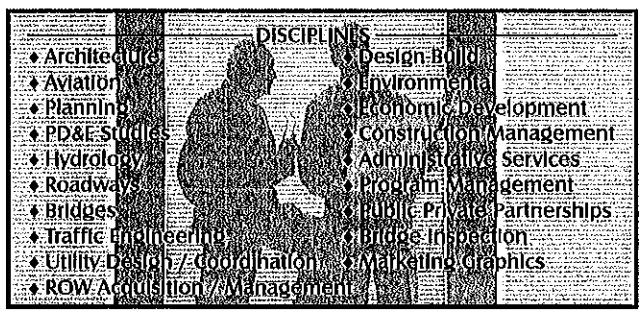
Atlanta, GA	Miramar Beach, FL
Baltimore, MD	Mobile, AL
Baton Rouge, LA	Nashville, TN
Charlotte, NC	Ocean Springs, MS
Columbia, SC	Orlando, FL
Falls Church, VA	Raleigh, NC
Greensboro, NC	Sarasota, FL
Irvine, CA	St. Louis, MO
Jacksonville, FL	Tallahassee, FL
Kennesaw, GA	Tampa, FL
Knoxville, TN	West Palm Beach, FL
Little Rock, AR	

LPA's professional staff includes engineers, architects, planners, environmental scientists, construction managers, graphic designers and computer experts complemented by management and marketing specialists. Due to their diversified experience, our employees have a high level of understanding project requirements from conception to completion.

LPA employees work efficiently on multi-disciplined teams, or independently as a one-stop shop for all of our clients' needs. LPA excels in solving issues that arise with over-crowded facilities and under-funded budgets. The size and diversity of our staff permit us to take on complex, large scale projects with limited time schedules. However, our Firm equally values smaller projects and works with low budgets on a daily basis. LPA professionals recognize that each project offers an opportunity to provide excellent client service, which is the basis of our mission statement. Our commitment to providing personal attention and responsive service sets THE LPA GROUP apart from other firms.

Full Range of Services

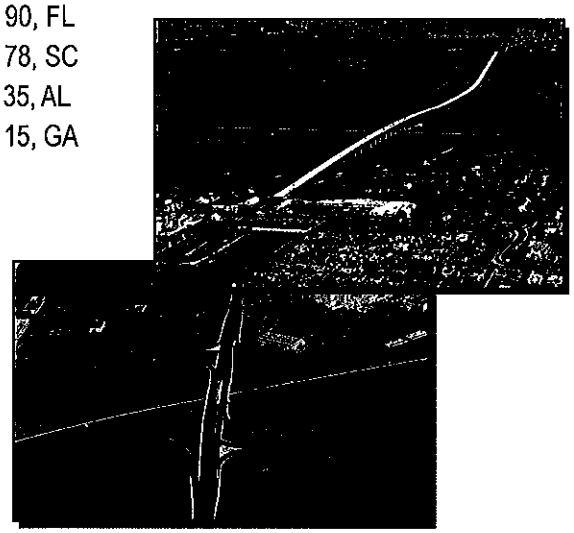
- Highway / Bridge Design
- Traffic / Transportation Planning & Design
- Site Selection Studies
- Master Planning
- Terminal Planning
- 3-D Rendering / Animation
- Environmental Compliance
- Airport Design
- Architectural Design
- Historical Renovations & Additions
- Cost Estimating
- Permitting
- Program Management
- Construction Management



Project History (Firm and Key Personnel Experience)

Roadways and Bridges

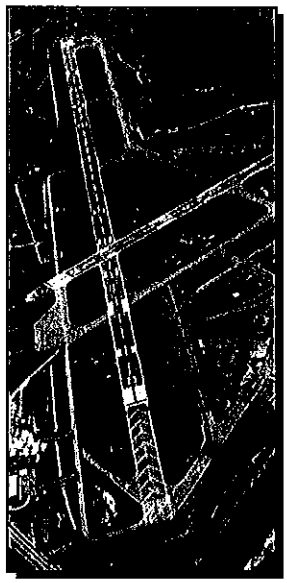
- I-64/I-895 Corridor Study, Richmond, VA
- Relocate US Route 71, AR
- Traffic Signal Design – Flat Shoals Road, GA
- Streestscape Improvements, Charlotte, NC
- Arthur J. Ravenel, Jr. (Cooper River) Bridge, SC
- I-85 Design/Build, NC
- Traffic Signal Design, Colonial Heights, VA
- Traffic Signal Design, Mooresville, NC
- Greenville Western Corridor, SC
- Multi-Laning of US Route 521, SC
- Upgrade of Interstate 385, SC
- On-Call Bridge Structural Evaluation, AHTD
- Interstate 26 and 326 Interchange, SC
- I-85 Relocation Bridges, SC
- Dave Lyle Boulevard Extension, SC
- Chattanooga Intersections, TN
- Conway By-Pass Design/Build, SC
- SC Route 6 Feasibility Study, SC
- US 123/US 25 Interchange and Bridge, SC
- US 90, FL
- US 78, SC
- SR 35, AL
- SR 15, GA



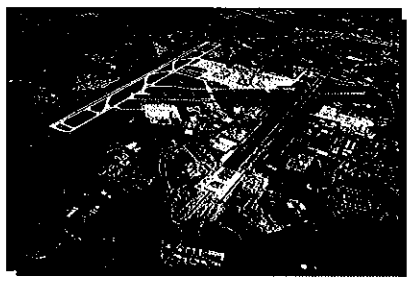
International Projects (Airports & Roads)

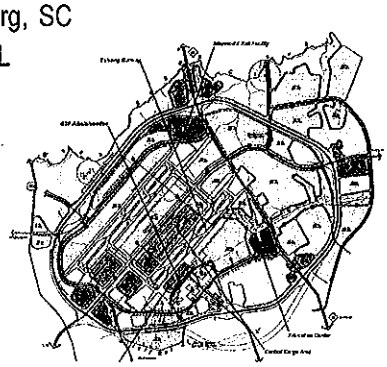
- Port of Gabon, Africa
- U.S. Virgin Islands
- Kuala Lumpur, Malaysia
- Hong Kong
- Australia
- Spain
- China
- Panama
- Quito, Ecuador
- Yaounde, Cameroon
- Kampala, Uganda
- Bangkok, Thailand
- Barcelona, Venezuela
- Brazil
- Bogota, Colombia

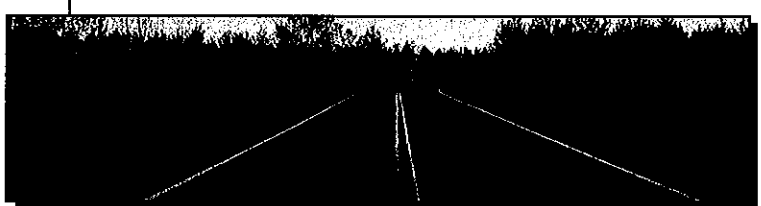
Airport Locations



- Richmond, VA
- Knoxville, TN
- Charlotte, NC
- Little Rock, AR
- Myrtle Beach, SC
- Atlanta, GA
- Camden, AR
- Sheridan, AR
- Memphis, TN
- Mobile, AL
- Miami, FL
- Sarasota, FL
- Gulfport, MS
- Baton Rouge, LA
- Charleston, SC
- Raleigh, NC
- Orlando, FL
- Mt. Ida, AR
- Tampa, FL
- Jacksonville, FL
- Boca Raton, FL
- Columbus, GA
- Springfield, MO
- Jonesboro, AR
- Greenville/Spartanburg, SC
- West Palm Beach, FL
- Philadelphia, PA
- Columbia, SC
- Chattanooga, TN
- Nashville, AR
- Tyler, TX
- Almyra, AR
- Greenville, MS





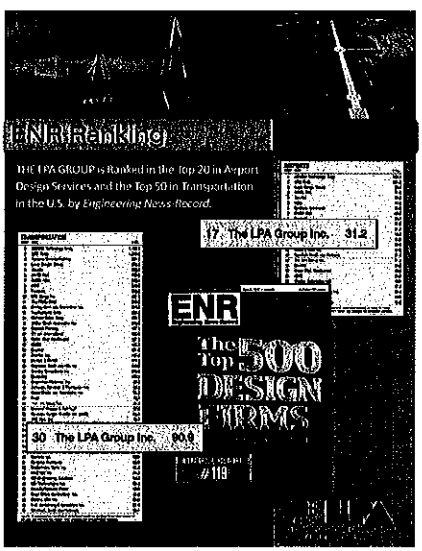


Architectural Design

THE LPA GROUP's Architectural Design Division has built a reputation for innovative and economical designs with many airport-related projects completed. Our architectural staff has extensive experience in providing planning, design and construction management of all types of buildings. Projects have included feasibility studies, new buildings, major additions, renovations, maintenance and on-call contracts. With many repeat clients, LPA's architects have served private developers, the Federal Aviation Administration, the Corps of Engineers, schools and universities, city governments and various state agencies.

Project Management

Each project is assigned a Project Manager, who is hand-picked from our staff to ensure the right kind of experience is matched with the project requirements. Our project managers fully commit the time necessary for their projects, and remain available to answer questions or discuss any aspect of the project with the client. LPA's project managers are known for their dedication to projects.



Quality Program

Quality is strongly emphasized throughout the Firm, involving every member of our staff. Ensuring a high quality product in the form of plans and specifications is the fundamental element of our quality program. Independent reviews, normally scheduled at the 35% and 95% stages, are provided by experienced senior engineers not directly associated with the project. LPA can also provide experienced construction inspectors who know how to handle the hassles and paperwork that accompany construction projects, thereby ensuring complete quality from design to completion.

THE LPA GROUP's quality program not only incorporates the review and checking of plans and specifications, but also recognizes the importance of continuous training of managerial as well as technical personnel.

COMMITMENT TO CLIENT SERVICE

It's "the LPA Way" of Doing Business

THE LPA GROUP responds to our clients' needs in the most cost effective manner possible. Our keen awareness of budget, quality, and service has helped clients reach their goals and has also resulted in cost savings and award-winning projects.

LPA delivers successful projects utilizing our service-based work ethic, innovative thinking, and experience – all combined with the latest technological tools.

With LPA, the result is always the highest quality product . . . one that is on schedule and within budget.

FIRM CAPABILITIES

Range of Services

The Firm offers a wide variety of professional services ranging from planning, pre-feasibility and preliminary design through the development of contract documents, construction management and field supervision. Management consultation services are also provided for clients' construction work performed by subcontractors and other firms.

We have structured our Firm to respond to our clients' needs in the most cost effective manner possible. The development of a keen awareness of budget, quality and service allows us to become involved in both large and small projects.

In terms of dedicated aviation personnel and available professional disciplines, THE LPA GROUP INCORPORATED has sufficient capability to provide comprehensive engineering, planning, environmental, architectural and construction services, as evidenced by the myriad of technical services that we can provide.

The Firm's Engineering, Architectural and Planning capabilities include:

- Architecture
- Electrical
- Specifications
- Environmental
- Construction Management
- Program Management
- Civil
- Design-Build
- Hydraulic
- Structural
- Systems/Security
- Costing

- Master Plan Studies/Updates
- Runways, Aprons, Taxiways
- Site Selection Studies
- Fuel Facilities
- Terminal Area Studies
- Vehicular Parking Facilities
- Drainage Improvements
- ARFF Facilities
- Terminal Design
- Airspace Analyses
- NAVAIDS
- Environmental Analyses
- Maintenance/Storage Hangars
- Land Acquisition Assistance
- Access Roadways
- Airport Layout Plans
- Airfield Lighting
- Noise/Land Use Studies
- Fencing
- Access Control Security Systems
- Parking Lot Lighting
- Approach Clearing

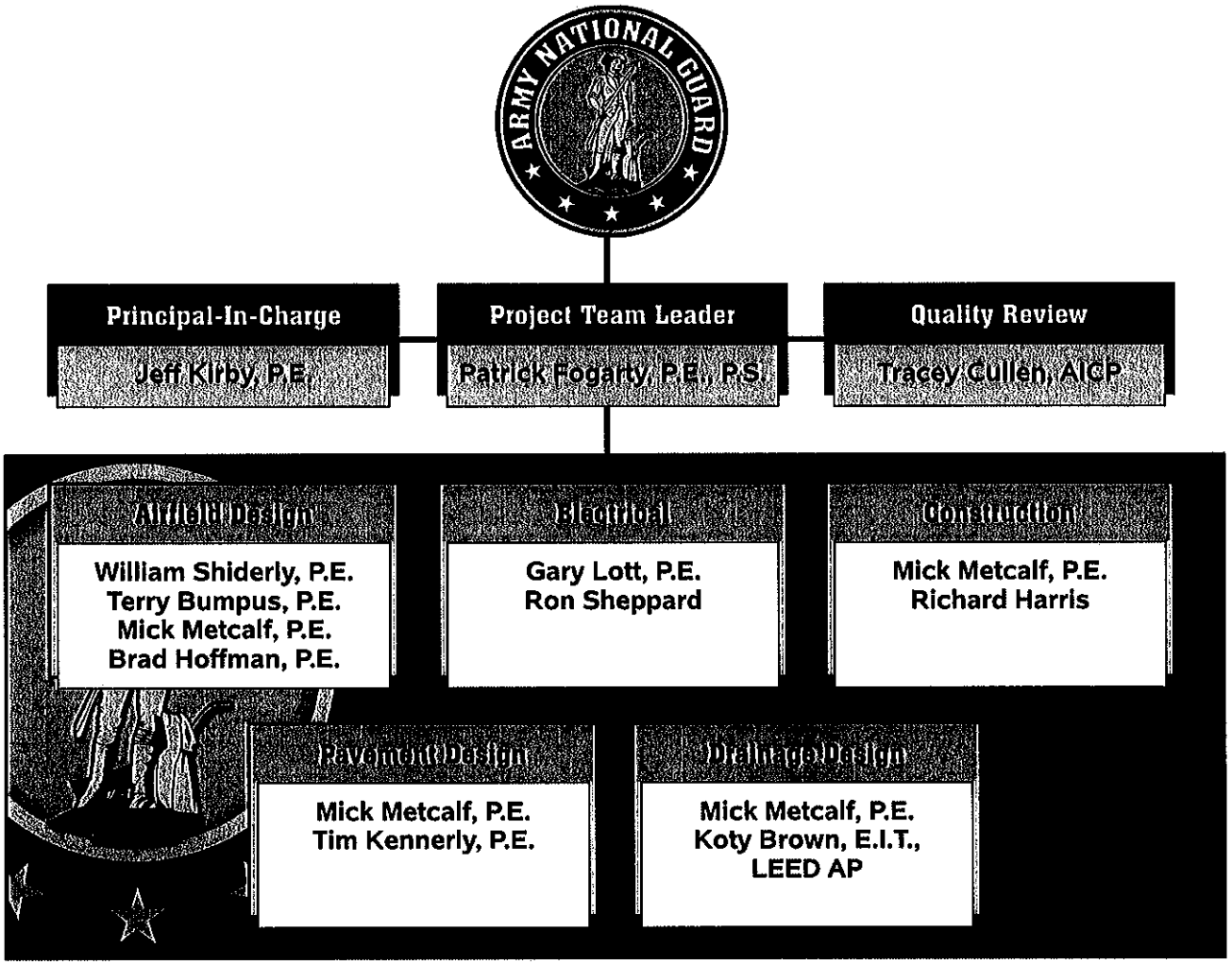
- Preparation of Procurement Documents
- Bid Analyses
- Change Orders
- Schedule and Control
- Maintenance and Operations
- Contract Execution
- Resident Inspection
- Bid Documents
- Construction Administration and Control
- Close-Out Documents
- Preparation and Review of "As Built" Drawings, Shop Drawings, Guarantees

- Planning
- Structure Design
- Bridge Widening and Rehab. Design
- Foundation Design
- Traffic Study and Analysis
- Roadway Lighting Plans
- Route/Corridor Studies
- Bridge Inspection
- Signing/Signalization Plans
- Feasibility Study
- Traffic Control Plans
- Master Planning/Land Use
- Location/Hydrographic Surveys
- Roadway Design
- Pavement Design
- Hydraulic Design
- Utility Relocation Plans
- Urban and Regional Planning

- Urban Design
- Land Development
- Public Works Management
- Environmental Assessment and Impact Studies
- Endangered Species Survey
- Economic Analysis
- Environmental Engineering
- Water/Sewer Systems
- Environmental Permitting and Regulatory Analyses
- Landscape Design
- Rural and Regional Development
- Wetland Delineations and Assessments
- Flora and Fauna Studies
- Biological Sampling/Monitoring

- Municipal Design (water/sewer)
- Waterways
- Railways
- Harbors
- Community Involvement
- Computer Services

PROJECT TEAM



Local subconsultants will be used for Surveying, Geotechnical and Quality Assurance Testing services.

THE LPA GROUP
TRANSPORTATION CONSULTANTS
A UNIT OF MICHAEL BAKER CORPORATION

JEFFREY M. KIRBY, P.E.
Assignment: Principal-In-Charge

QUALIFICATIONS:

B.S., Civil Engineering, 1988
Virginia Polytechnic Institute and State University

REGISTRATION:

Professional Engineer (FL, NC, VA, WV)

PROFESSIONAL EXPERIENCE:

1988 - 2010 (Career)
1991 - 2010 (LPA)

Senior Principal
THE LPA GROUP INCORPORATED

Mr. Kirby is responsible for overall project management including preparation of design plans and grant management for various projects. A brief example of typical projects while with LPA include the following:

- ❑ Greenbrier Valley Airport, West Virginia – Project Manager for rehabilitation of the airports existing drainage system. Project consisted of installing new drainage pipes and drop inlets in the grassed area between the runway and taxiway.
- ❑ Greenbrier Valley Airport, West Virginia – Project Manager for expansion to the general aviation aircraft parking apron. Approximate construction cost of expansion was $1,700,000.
- ❑ Greenbrier Valley Airport, West Virginia – Project Manager for acquisition of a new 1,500 gallon aircraft rescue and fire fighting vehicle.
- ❑ Greenbrier Valley Airport, West Virginia – Project Manager responsible for preparation of a five-year Capital Improvement Program and grant management.
- ❑ Greenbrier Valley Airport, West Virginia – Project Manager for rehabilitation of approximately 17,000 square yard concrete and asphalt parking apron. The underlying soil was in poor condition and required remediation prior to placement of the 12" concrete pavement section.
- ❑ Tri-State Airport, West Virginia – Project Manager for rehabilitation of the primary runway and parallel taxiway. Project consisted of milling the existing pavement surface and overlaying with bituminous pavement.
- ❑ Tri-State Airport, West Virginia – Project Manager for installation of a new water distribution system to serve the terminal environment. Project consisted of directional drilling under the existing runway to connect to a municipal water system.
- ❑ Tri-State Airport, West Virginia – Project Manager for rehabilitation of a 50-foot wide partial parallel taxiway, which included lowering the centerline profile approximately four feet. The existing pavement was in poor condition and the underlying concrete pavement was removed prior to constructing the new bituminous pavement section.
- ❑ Tri-State Airport, West Virginia – Project Manager for acquisition of a new aircraft fire fighting vehicle.
- ❑ Danville Regional Airport, Danville, Virginia – Project Manager responsible for a Part 77 obstruction study. Project consisted of obtaining obstruction data within the complete Part 77 surfaces and providing recommendations for removal.

AREAS OF EXPERTISE:

- *Airport Design*
- *Pavement Design*
- *Drainage*
- *Grading*

PROFESSIONAL EXPERIENCE (Continued):

- Stanly County Airport, North Carolina – Project Engineer for construction of a new parallel runway for military training operations.
- Danville Regional Airport, Danville, Virginia – Project Manager responsible for rehabilitation of a connector taxiway to a new multi-purpose facility. Existing pavement was severely cracked and in need of a bituminous pavement overlay.
- Danville Regional Airport, Danville, Virginia – Project Manager responsible for preparation of a five-year capital improvement program and grant management.
- Danville Regional Airport, Danville, Virginia – Project Manager responsible for construction of a corporate taxiway approximately 350' of taxiway which would ease congestion in the corporate area.
- Danville Regional Airport, Danville, Virginia – Project Manager responsible for construction of a of a corporate hangar area consisting of a large hangar and several T-hangars.
- Piedmont Triad International Airport, North Carolina – Project Manager for rehabilitating an existing air cargo apron and widening a connector taxiway. Project consisted of replacing failed bituminous pavement with new bituminous pavement capable of withstanding heavy cargo aircraft. Aircraft parking layouts were also reviewed to determine locations for concrete parking pads to accommodate multiple types of aircraft.
- Rockingham County Airport, North Carolina – Project Manager responsible for preparation of a five year Capital Improvement Program and miscellaneous development projects such as, new 2,600 square foot terminal building, new T-Hangar development for 16 T-Hangars and 3 corporate hangars, apron rehabilitation, and lighting rehabilitation.
- Rockingham County Airport, North Carolina – Project Manager responsible for updating the airport layout plan and preparation of the Capital Improvement Plan. Capital Improvement plan was used to gain funding support from local, State and Federal agencies.
- Rockingham County Airport, North Carolina – Project Engineer responsible for the rehabilitation of Runway 13-31. Project consisted of a bituminous pavement overlay.
- Monroe Municipal Airport, North Carolina – Project Manager for construction of a 15,000 square yard aircraft parking apron and 2,000' extension of the parallel taxiway. The existing partial parallel taxiway was located at a non-standard offset distance from the runway. This project relocated the existing taxiway to meet FAA requirements and extended to the ends of the runway.
- Piedmont Triad International Airport, North Carolina – Project Manager for construction of a new 9,000-foot air carrier runway and parallel taxiway to serve Group D-IV aircraft. Project consists of approximately 5,500,000 cubic yards of earthwork, coordination with local utility companies for relocation, coordination with FAA for relocation and installation of new NAVAIDS, pavement design, erosion control design, and stormwater management design. Total estimated project cost is $55,000,000.

PROFESSIONAL EXPERIENCE (Continued):

- Piedmont Triad International Airport, North Carolina – Project Manager for extending the runway safety area to meet current FAA requirements. Approximately 1,000,000 cubic yards of fill material and a state road relocation were required to construct this project.
- Piedmont Triad International Airport, North Carolina - Project Manager/Engineer for construction of a new 2,500-foot parallel taxiway. In order to construct this concrete taxiway, approximately 300,000 cubic yards of offsite borrow material was required.
- Piedmont Triad International Airport, North Carolina – Design Engineer for rehabilitation and strengthening of 5,000-foot taxiway by construction of an asphaltic pavement overlay. Phasing considerations were critical due to aircraft using this taxiway to access the primary runway.
- Martin County Airport, North Carolina – Project Engineer for a 1,330-foot extension to Runway 3-21.
- Martin County Airport, North Carolina – Project Manager for the rehabilitation of an existing 3,670-foot general aviation runway.
- Davidson County Airport, North Carolina – Project Manager for the construction of a new airport that consists of 5,000-foot by 150-foot runway, full parallel taxiway, 32,000 square yard aircraft parking apron, 12,000 square yard corporate apron, T-Hangar taxilanes, access road, localizer installation, and vehicular parking lots.
- Davidson County Airport, North Carolina – Project Manager responsible for preparation of five year capital improvement programs and grant management.
- Davidson County Airport, North Carolina – Project Manager for construction of T-Hangar taxilanes, apron expansion, access road extension, and installation of a new Category I, ILS.
- Coastal Carolina Regional Airport, North Carolina – Project Engineer for the rehabilitation and strengthening of a 6,000' x 150' wide runway.
- Kinston Regional Jetport, North Carolina – Project Engineer for the design of a concrete aircraft parking apron and associated connector taxiways to accommodate large military aircraft.
- Kinston Regional Jetport, North Carolina – Project Engineer for a 2,400-foot runway extension to Runway 5-23. Approximately 1,000,000 cubic yards of off-site borrow material was needed to construct this project.
- Kinston Regional Jetport, North Carolina – Project Engineer for the rehabilitation of an existing 7,500-foot runway and 1,100-foot runway extension.
- Kinston Regional Jetport, North Carolina – Project Engineer for construction of new T-Hangar taxilanes.
- Kinston Regional Jetport, North Carolina – Project Engineer for the rehabilitation of aircraft apron and terminal access road.
- Pitt-Greenville Airport, North Carolina – Project Engineer for the clearing and grubbing of approximately 30 acres of airport property.

Patrick W. Fogarty, P.E., P.S.

Project Manager

General Qualifications

Mr. Fogarty is an asset to the Baker team with over 24 years of project design and management experience. He is responsible for technical and management aspects of civil design and surveying projects within the office. Mr. Fogarty has designed and managed projects in numerous disciplines including civil, structural and transportation engineering, site development, planning and surveying. These projects have included retail/commercial site preparation, airports, streets/highways, bridges, parking lots, buildings, retaining walls/foundations, sanitary systems and structures, as well as boundary and topographic and photogrammetric surveys. Duties included field surveying, drawings and specification preparation, design, design drafting, construction inspection, quality control testing, shop drawing review, project management, contract administration and report preparation. Management duties include financial planning, management and staff utilization for two departments, human resource planning, marketing, and strategic planning.

Experience

West Virginia Army National Guard - Tag Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Project Manager. Engineer of Record responsible for the coordination of all activities. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

On-Call Engineering/Architectural Services, Yeager Airport (CRW), Charleston, West Virginia. *Central West Virginia Regional Airport Authority.* Project Manager. Responsible for management planning and lead design for miscellaneous assignments. Additionally, provided engineering consultation on a current construction project as needed. Baker provided multi-discipline, on-call services to the Central West Virginia Regional Airport Authority (CWVRAA), which owns and operates Yeager Airport (CRW). Baker provided a full range of services to CWVRAA on an "On-Call/As-Needed" basis, including

Years with Baker: 5

Years with Other Firms: 19

Education

B.S., 1985, Civil Engineering, West Virginia University Institute of Technology

Diploma, 1993, Surveying and Mapping, International Correspondence Schools

Licenses/Certifications

Professional Engineer - Civil/Structural, West Virginia, 1990

Professional Engineer, Kentucky, 2000

Professional Engineer, Virginia, 2002

Professional Engineer, Pennsylvania, 2003

Professional Engineer, Ohio, 1996

Professional Surveyor, West Virginia, 1993

Professional Surveyor, Kentucky, 2001

Professional Surveyor, Ohio, 1996

FAA, Eastern Region Laboratory Procedures Manual Certificate (P-401), 1992

Professional Engineer, North Carolina, 2008

Asphalt Paving Technician, West Virginia, 1991

Concrete Technician, West Virginia, 1991

Soils Compaction, West Virginia, 1991

Aggregate Sampling Inspector, West Virginia, 1991

architecture, civil, structural, mechanical, electrical and environmental engineering, general engineering administration, surveying, and construction management.

Central WV Regional Airport Authority-Extend Runway 5-23, Charleston, West Virginia. *Central West Virginia Regional Airport Authority.* Project Manager. Engineer of Record responsible for the coordination of all activities. Baker performed complete planning, design, and construction management services for the 500-foot extension of Runway 5-23 for the Central West Virginia Regional Airport Authority at Yeager Airport in Charleston, West Virginia. The work was coordinated with the contractor for the grading operations for the ongoing Runway 23 Safety Area project, and FAA Airways Facilities for retrofit of the ALSF 1 approach light system. Nighttime closure of the runway was required for construction with no impacts to air service.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Project Manager. Responsible for the management and coordination of all activities. The Facilities Management Officer (FMO) for the State of West Virginia, Division of Engineering and Facilities (DEF), West Virginia Army National Guard (WVARNG) selected Baker for a lump sum/fixed fee contract for architectural and engineering services. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for the renovation of the first floor of the entire wing of the Office of the Adjutant General (TAG). The Owner requested the need for modernization of approximately 12,000 square feet of existing outdated office space - project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal.

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Project Manager. Responsible for the overall management of the project including the coordination of the subconsultant. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

Drainage Improvements and Reclamation Measure Design for Four Abandoned Mine Sites, Kanawha County, West Virginia. *WVDEP - Office of AML&R.* Project Manager. Responsible for the management and coordination of all activities. Baker is providing surveying and mapping, field investigation, subsurface investigation, water testing and sampling, and conceptual, preliminary and final design for the reclamation of four abandoned mine sites that are affected by uncontrolled drainage, debris, and hazards from open portals. Baker is also providing bid phase and construction phase support for the remedial measures.

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Project Manager. Responsibilities included project management of the planning and infrastructure analysis and the coordination of six (6) specialized subconsultants. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

Tracey S. Cullen, AICP

Assistant Vice President, Aviation Services

General Qualifications

Ms. Cullen has over 20 years experience managing and preparing planning and environmental studies for airports. She has extensive knowledge and understanding of aviation and related planning and environmental issues. As part of planning and environmental processes, Ms. Cullen has designed and implemented public involvement programs to establish community outreach and build consensus. In addition to her project responsibilities, Ms. Cullen manages Pittsburgh's Aviation Services group that consists of over 20 airport engineers, planners, environmental scientists, and support staff.

Years with Baker: 13

Years with Other Firms: 8

Education

M.U.R.P., 1991, Urban and Regional Planning, University of Pittsburgh

Master's Certificate, 2006, Project Management, University of Pittsburgh

B.A., 1988, Political Science, Chatham College

Licenses/Certifications

American Institute of Certified Planners, 1994

Experience

Sabre Heliport Improvements- Final Design, Sabre Heliport, Ft. Campbell, Kentucky. *U.S. Army Corps of Engineers, Omaha District.* Environmental Manager. Responsible for completing the environmental documentation. Sabre heliport is a training installation for the UH-60 "Blackhawk" helicopters. Baker provided planning and design of a runway and taxiways to accommodate the future use of the Osprey V-22 aircraft. The design included a 4,450 foot by 100 foot helicopter runway, a 3,788 foot by 50 foot parallel taxiway, three 15-meter wide connecting taxiways, a 30 meter square Visual Flight Rule (VFR) helipad, a perimeter road, and security fencing. The parallel taxiway consists of the rehabilitation and extension of the existing runway at the facility. The initial phases of the project involved the development of a Project Definition (PD) Report that included a concept layout of the project and cost estimate.

Airport Land Use and Utility Master Plan, John Murtha Johnstown-Cambria County Airport (JST), Johnstown, Pennsylvania. *U.S. Army Corps of Engineers, Baltimore District.* Senior Planner. Responsible for preparation of land use and utility maps, an assessment of existing utilities and land use, and recommendations addressing the best way for the airport to meet future utility demands and land use requirements. Baker Conducted a Utility Master Plan Study at Johnstown-Cambria County Airport.

On-Call Planning and Environmental Services, Pittsburgh International, and Allegheny County Airports (PIT/AGC), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Project Manager. Responsible for managing a team that includes eight subconsultants. Provided oversight and management for updates to the airport's property mapping. Since 2002, Baker has provided On-Call Planning and Environmental Services to the Allegheny County Airport Authority for Pittsburgh International and Allegheny County Airports.

Runway Relocation/Realignment Study, Potomac Airfield (VKX), Friendly, Maryland. *Maryland National Capital Park & Planning Commission.* Senior Planner. Responsibilities included assisting in preparation of a feasibility study for a proposed runway relocation. Baker conducted the runway relocation study to determine the feasibility of relocating the existing runway at Potomac Airfield. The goal of the proposed runway relocation was to improve the safety and reduce the noise impacts to local communities.

Baker analyzed three different runway locations to compare the community benefits, environmental impacts, and construction costs.

Runway 10L Safety Area Improvements, Pittsburgh International Airport (PIT), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Environmental Manager. Completed environmental clearances for the RSA project. Baker provided engineering and environmental services to expand and lengthen the Runway 10L Safety Area at Pittsburgh International Airport and make ancillary roadway modifications.

On-Call Multi-Discipline Services, Pittsburgh International, and Allegheny County Airports (PIT/AGC), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Task Manager. Completed various planning and environmental requests, including completion of FAA environmental clearances. Since 1989, Baker has provided multidiscipline, on-call services to the Allegheny County Airport Authority (ACAA). The ACAA owns and operates Pittsburgh International Airport (PIT) and Allegheny County Airport (AGC). Baker acted as an extension to the ACAA's staff, providing the depth of resources and experience of the entire company when called upon by the ACAA. Baker provided a full range of services to ACAA on an "On-Call/As-Needed" basis, including architecture, civil, structural, mechanical, electrical, and environmental engineering, general engineering administration, construction support, and other areas.

General Engineering Services, Altoona-Blair County Airport (AOO), Martinsburg, Pennsylvania. *Blair County Airport Authority.* Environmental Manager. Responsible for preparation of Environmental Evaluation Form B. Role included preparation of the form, agency coordination, and FAA coordination. Provided oversight and direction for an environmental assessment for the proposed extension of Runway 12-30. Baker provided program management services, including scoping, contract preparation, technical reviews, and general project oversight for capital projects. Baker also prepared grant applications, project closeout packages, and capital improvement plans for capital projects. Additional services included the preparation of a snow removal equipment analysis, obstruction services, and preparation of a passenger facility charge (PFC) application.

Runway 6-24 Extension, Environmental Permitting, and Engineering Services, Erie International Airport/Tom Ridge Field (ERI), Erie, Pennsylvania. *Erie Municipal Airport Authority.* Project Manager. Provided project management and oversight. Baker is providing environmental permitting and engineering services in support of the extension of Runway 6-24 at Erie International Airport. Project tasks include environmental compliance monitoring, wetland mitigation site identification and screening, stream and wetland permit application preparation, stream and wetland mitigation design, and Powell Avenue relocation design.

FAA Environmental Evaluation Form "C" Preparation for Runway 3-21 Safety Area Improvements, Wheeling-Ohio County Airport (HLG), Wheeling, West Virginia. *Ohio County Commission.* Project Manager. Provided project management oversight and conducted coordination with FAA. Baker will prepare a Federal Aviation Administration Environmental Evaluation Form "C" to meet environmental documentation requirements for the extension of the Runway 3-21 Runway Safety Area at Wheeling-Ohio County Airport.

William S. Shiderly, P.E.

Civil Engineer

General Qualifications

Mr. Shiderly is a senior civil engineer with a broad range of technical experience in construction, site development, aviation, municipal representation, and project management for private, public, and government clients. He is currently technical manager for the aviation department in Baker's headquarters office.

Years with Baker: 11

Years with Other Firms: 11

Education

B.S.C.E., 1993, Civil Engineering, Geneva College

Graduate Studies, Project Management, University of Pittsburgh, Katz Graduate School of Business

Licenses/Certifications

Professional Engineer, Pennsylvania, 1999

Professional Engineer - Civil, Ohio, 2008

Experience

A/E Services Contract for the Pennsylvania National Guard, 171st Air Refueling Wing, Pittsburgh International Airport (PIT), Coraopolis, Pennsylvania. *Pennsylvania Depart. of Military and Veterans (formerly Departments of the Army and the Air Force).* Senior Engineer. Prepared technical contract drawings, specifications, and cost estimates. Coordinated surveying, geotechnical, civil, landscape architecture, and environmental permitting. The United States Property and Fiscal Office (USPFO) and the 171st Air Refueling Wing (ARW) selected Baker for an Indefinite Delivery/Indefinite Quantity (IDIQ) contract for architectural and engineering services. Task orders contracted under this Indefinite Delivery/Indefinite Quantity (IDIQ) Contract include: a 129,634-square-foot Combined Support Maintenance Shop; a 3,000-gross-square-foot, $920,000 Crew Readiness Center; a $200,000 Base Marquee; a $405,000 upgrade to the West Apron Lighting for the Pennsylvania Air National Guard; a Deicing Collection Study for the 171st ARW; and Phase One services in support of the conversion of the Pennsylvania Army National Guard's 56th Brigade to a Stryker Brigade Combat Team (SBCT) at various locations throughout the state.

Rehabilitation of Taxiways B2, C, N, P, and R, Pittsburgh International Airport (PIT), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Senior Engineer. Responsible for technical review of design plans, calculations, quantities, and specifications of work prepared for the project. Rehabilitation methods included joint cleaning and resealing, spall repairs, isolated PCC slab replacements, and full depth pavement removal and replacement. In addition to the pavement repairs, subsurface drainage was evaluated and replaced or new drainage was installed as conditions necessitated. This project also included taxiway edge lighting replacement, new centerline lighting, and electrical vault modifications.

Program Management - FedEx Mid-Atlantic Hub, Piedmont Triad International Airport (GSO), Greensboro, North Carolina. *Piedmont Triad Airport Authority.* Senior Engineer. Responsible for technical review of design plans, calculations, quantities, and specifications of work prepared for the project. Baker provided program management, airfield planning, and design services for the development of a site and support infrastructure to serve the proposed Federal Express Mid-Atlantic Hub Sorting Facility for the Piedmont Triad Airport Authority (PTAA). This $550 million Development Program was the largest on-going development project in North Carolina and will likely be the catalyst for considerable spin-off development.

Pavement Management Program, Pittsburgh International and, Allegheny County Airports (PIT/AGC), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Civil Engineer. Prepared technical contract drawings, specifications, and cost estimates for various infrastructure improvements. Baker

has developed and maintains a Pavement Management Program for Pittsburgh International Airport and Allegheny County Airport. The program was developed in accordance with the FAA Advisory Circular 150/5380-7A, "Airport Pavement Management Program" and utilizes Micropaver software to maintain and manage the data.

Master Planning Support Services, Various locations throughout the District, Fort Worth, Texas. *U.S. Army Corps of Engineers, Fort Worth District.* Civil Engineer. Prepared technical contract drawings, specifications, and cost estimates. Under the terms of Baker's second five-year, $7.5 million contract, Baker provided a variety of planning services that cover any military or civil works within the district. Those services include: master planning, natural resources planning, environmental assessment, facilities planning and building programs integrated with geographic information systems.

Readiness Center for PAARNG Stryker Brigade Combat Team, Lewistown, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Senior Engineer. Prepared technical contract drawings, specifications, and cost estimates. Coordinated surveying, geotechnical, civil, landscape architecture, and environmental permitting. Baker developed the conceptual design and Design/Build RFP documents for the conversion of the PAARNG's 56th Brigade to a Stryker Brigade Combat Team (SBCT). Key program components include two building types: Readiness Centers (RC) for the training of SBCT Soldiers and Field Maintenance Shops (FMS) for the maintenance and storage of a variety of military vehicles, including the Stryker military vehicle. The existing historic 15,000-square-foot Lewistown Armory, was transformed to house diverse units with 240 soldiers. The renovated RC provides 52,501 square feet of vehicle maintenance training bays, administrative, classroom, and storage areas. The project meets a Gold SPiRiT sustainability rating.

Readiness Center for PAARNG Stryker Brigade Combat Team, Bradford, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Senior Engineer. Prepared technical contract drawings, specifications, and cost estimates. Coordinated surveying, geotechnical, civil, landscape architecture, and environmental permitting. Baker developed the conceptual design and Design/Build RFP documents for the conversion of the PAARNG's 56th Brigade to a Stryker Brigade Combat Team (SBCT). Key program components included two building types: Readiness Centers (RC) for the training of SBCT Soldiers and Field Maintenance Shops (FMS) for the maintenance and storage of a variety of military vehicles, including the Stryker military vehicle. A 32,497-square-foot Readiness Center (RC) will be constructed to house a unit strength of 175 personnel. The new RC will provide the necessary vehicle maintenance training work bays, administrative, training, and storage areas required to achieve proficiency in required training tasks. The new facility will meet a Gold SPiRiT sustainability rating.

Louisville District IDIQ for Various Civil and Military Projects, Great Lakes and Ohio River Division, Louisville, Kentucky. *U.S. Army Corps of Engineers, Louisville District.* Civil Engineer. Reviewed drawings and specifications for conformance to contract drawings and latest design guides. A variety of planning and design services were provided to the U.S. Army Corps of Engineers, Louisville District under an Indefinite Delivery Contract. Delivery Orders including master plan updates, capital investment strategies, installation design guides, and facility designs for an Army Reserve Center, Battalion Operations Facility, and an Army Base High School.

THE LPA GROUP
TRANSPORTATION CONSULTANTS
A UNIT OF MICHAEL BAKER CORPORATION

TERRY BUMPUS, P.E.
Assignment: Airfield Design

QUALIFICATIONS:

B.S., Civil Engineering, 1988
University of Tennessee

REGISTRATION:

Professional Engineer (CO, MI, NC, OK, SC, TN, WV)

PROFESSIONAL EXPERIENCE:

1982 - 2010 (Career)
1989 - 2010 (LPA)

Manager of Airport Design
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Mr. Bumpus has been involved in both design and construction management and inspection of numerous airport projects. Some examples of design projects include:

- ❑ Tri-State Airport, Huntington, West Virginia
  - R/W Lighting Replacement Project - Project Manager for the design of the replacement of the R/W lights and control system.
  - Safety Overrun / Runway Extension Project - Project Manager for the design of site preparation for the Runway 12 safety overrun including approximately 540,000 cy of unclassified excavation, drainage installation, erosion control, fencing, and lighting rehabilitation.
  - Taxiway A Rehabilitation Project – Design of taxiway relocation project including embankment, bituminous pavement and new edge lighting.
- ❑ Ft. Campbell Kentucky, Clarksville, Tennessee – Keyhole Hardstand Replacement Project – Project Manager for the design and construction management of a new Portland cement concrete aircraft parking apron. The project cost exceeded $10 million and was sized to accommodate five C5A aircraft.
- ❑ McEntire ANG Base, Eastover, South Carolina
  - Partial Reconstruction of a Parallel Taxiway - Project Manager, resident project representative and construction management for the partial reconstruction of the parallel taxiway. The project included coordination with numerous federal agencies for trial use government designed a rut resistant asphalt.
  - Airfield Pavement Project - Project Manager for evaluation and repair/rehabilitation of a base-wide airfield pavement project in excess of $5 million. The work involved development of pavement evaluation program, NDI/PCI work, as well as preparation of construction documents for a $3 million worth of pavement repair and strengthening project.
- ❑ Tinker Air Force Base, Midwest City, Oklahoma - Repair Primary Runway – Design Project Manager for the rehabilitation of the primary runway. Work included both PCC pavement replacement, a new PCC keel section and asphalt overlay of the outboard shoulders.
- ❑ McGhee Tyson Airport, Knoxville, Tennessee
  - Continental Express Maintenance Hangar – Member of the design team responsible for the site preparation and landside construction at the Continental Express aircraft maintenance facilities at McGhee Tyson Airport.

AREAS OF EXPERTISE:

- *Airport Design*
- *Pavement*
- *Signage*
- *Drainage*
- *Construction Management*

PROFESSIONAL EXPERIENCE (Continued):

- Airfield Signage Project – Project Manager for the design and construction management for 1992. The project included replacement of all airfield signage associated with both runways and the associated taxiways.

❑ Coastal Carolina Regional Airport, New Bern, North Carolina

- Parallel Taxiway Project – Project Manager for the rehabilitation of the primary parallel taxiway consisting of the bituminous overlay and repair of the Taxiway A pavement west of Runway 13-31 and the Connector Taxiway C pavement. The project included single surface treatment, crack sealing, P-401 bituminous surface course, and pavement marking.
- General Aviation T/W Extension Project – Project Manager for the design of the extension of Taxiway B, construction of new connector taxiways, extension of T-hangar taxilanes.
- Pavement and Drainage Study – Project Manager for the pavement and drainage study of the entire airport property. Past project research was performed to develop data bases of pavement thicknesses and existing drainage structures. Site investigations were also performed to gather data and inspect the existing pavement and drainage systems. Drawings were then developed showing the existing pavement conditions and the existing drainage layout. The pavement condition and drainage systems were the analyzed through selected computer models.

❑ Plymouth Memorial Airport, Plymouth, North Carolina

- General Aviation Apron, Connector Taxiway, and Runway 3-21 Rehabilitation Project – Project Manager for the bituminous overlay of the General Aviation Apron, Connector Taxiway, and Runway 3-21. Project includes various incidental work, including marking, tie-down installation, and minor earthwork.
- Airfield Lighting Rehabilitation Project – Project Manager for the rehabilitation of existing airfield lighting. Project includes removal of existing runway lights and signs and replacement of the same. The project also includes installation of new PAPI and REIL units as well as a new airfield electrical vault.
- Runway-21 Extension Project – Project Manager for the 1800' extension of Runway 21 including earthwork, paving, drainage, erosion control, and lighting.

❑ Tarboro-Edgecombe County Airport, Tarboro, North Carolina – Approach Clearing Project - Project Manager for the clearing and grubbing of trees in the approaches to Runway 9-27. Project includes clearing and grubbing, erosion control features, seeding, and mulching.

❑ Franklin County Regional Airport, Louisburg, North Carolina – T-Hangars Construction Project - Project Manager for the construction of two, nine unit T-Hangars. Project includes building erection, foundation construction, electrical wiring and limited site work.

❑ Martin County Regional Airport, Williamston, North Carolina – Approach Clearing Project - Project Manager for clearing and grubbing of 14 acres of trees in the approach to Runway 21. Project included wetland clearing, clearing and grubbing, erosion control features, seeding, and mulching.

PROFESSIONAL EXPERIENCE (Continued):

- Pitt-Greenville Airport, Greenville, North Carolina – Design of a new corporate hangar complex and relocation of taxiway 'A'.
- Pueblo Memorial Airport, Pueblo, Colorado – Design of various airfield improvements including overlay of the taxiway system and installation of new edge lights.
- Columbia Metropolitan Airport, South Carolina – Preliminary planning for rental car maintenance facilities: Five parking lots constructing 15.6 acres of paved surface. Truck and car access roadway consisted of 0.67 mile.
- Greenville-Spartanburg International Airport, South Carolina - Rental car facilities. The project included repairs of existing pavement, single surface treatment, and overlay work. Five parking lots consisting of 16.4 acres. Car access road of 0.73 mile, and a truck access road of 0.65 mile.
- Albert J. Ellis Airport, Jacksonville, North Carolina – Design of additional general aviation parking apron, T-hangar complex, airfield drainage improvements and an access roadway.
- Halifax-Northampton Regional Airport, Roanoke Rapids, North Carolina – Design of a new general aviation airport including a 5,500 foot runway and associated support facilities.
- Sanford-Lee County Airport, Sanford, North Carolina – Design of an additional 4.5 acres of general aviation aircraft parking apron.
- DeKalb Peachtree Airport, Atlanta, Georgia – "1992 Airfield Pavement Improvements", Project consisting of the following work elements:
  - Rehabilitation of R/W 2L-20R;
  - Rehabilitation of R/W 2R-20L;
  - Construction of runway safety area for R/W 20R;
  - Construction of asphalt holding area for R/W 20R;
  - Construction of concrete holding area for R/W 20L;
  - Rehabilitation and reconstruction of Clairmont taxilane/ramp; and
  - Rehabilitation and reconstruction of west ramp.
- Greenville-Spartanburg International Airport, Greer, South Carolina
  - Runway Extension and Strengthening – Design team member of a $54 Million runway extension and strengthening project including a 3,400 foot runway extension involving over 7 million cubic yards of earthwork, paving, lighting, a complicated NAVAIDs relocation program and a 50,000+ square yard apron for two (2) B747 aircrafts.
  - Air Carrier Apron Taxilane Reconstruction Project – Project Manager for the replacement of the existing air carrier apron taxilane. Work included 25,000 square yards of 15" PCC pavement.
  - FedEx 3K Facility - Project Manager for the airside and landside design of a FedEx 3000 package per hour sort facility. Tasks included expansion of the existing aircraft parking apron, new employee parking area, road widening, storm drainage and truck parking area. Construction estimate 5.1 Million.

THE LPA GROUP
TRANSPORTATION CONSULTANTS
A UNIT OF MICHAEL BAKER CORPORATION

M. J. "MICK" METCALF, P.E.
Assignment: Airfield Design and Construction

QUALIFICATIONS:

B.S., Civil Engineering, 1992
North Carolina State University

B.A., Political Science, 1989
North Carolina State University

A.A.S., Aviation Systems Technology, 2003
Guilford Technical Community College

REGISTRATION:

Professional Engineer (MO, NC)

PROFESSIONAL EXPERIENCE:

1991 - 2010 (Career)
2000 - 2010 (LPA)

Airport Engineer
THE LPA GROUP INCORPORATED

AREAS OF EXPERTISE:

- *Construction Management*
- *Grading*
- *Drainage Design*
- *Concrete Overlay*
- *Land Acquisition*

Selected project experience includes:

- ❑ Greenbrier Valley Airport, West Virginia – Project Engineer responsible for Construction Administration for rehabilitation of approximately 17,000 square yard concrete and asphalt parking apron. The underlying soil was in poor condition and required remediation prior to placement of the 12" concrete pavement section.
- ❑ Greenbrier Valley Airport, West Virginia – Project Engineer responsible for Construction Administration for rehabilitation of approximately 17,000 square yard concrete and asphalt parking apron. The underlying soil was in poor condition and required remediation prior to placement of the 12" concrete pavement section.
- ❑ Danville Regional Airport, Danville, Virginia – Taxiway E Rehabilitation – Project Engineer responsible for Construction Administration for the rehabilitation of an existing connector taxiway. The project included drainage improvements, pavement grade correction, crack repair, the installation of a crack reducing pavement fabric, and airfield lighting improvements.
- ❑ Danville Regional Airport, Danville, Virginia – Hangar Facility and Corporate Taxiway – Served as Project Manager/Engineer and completed all grading, drainage, and utility design for a joint use clear span and T-hangar facility. Responsible for all aspects of the project during design, bidding, construction, and project closeout.
- ❑ Piedmont Triad International Airport, Greensboro, North Carolina – Runway 5L-23R – Served as Project Engineer responsible for the design of a new 55 million dollar, 9,000' air-carrier runway with supporting parallel and connector taxiways. Project included 5,000,000 cubic yards of earthwork, 40,000 feet of storm sewer, two 1,100' box culverts designed to meet 401/404 permitting requirements regarding aquatic wildlife migration, multiple water quality and detention pond designs, extensive utility relocation coordination and phasing, innovative gravity sanitary sewer installation within box culvert, and project coordination with multiple engineering firms, review agencies and utility companies during design and construction.
- ❑ Anson County Airport, Wadesboro, North Carolina – Runway 16-34 – Served as Project Engineer to complete the design of a new 5,500' runway. The project included 401/

PROFESSIONAL EXPERIENCE (Continued):

404 permitting and mitigation, runway and safety area grading design, ultimate design of future airfield drainage and detention systems, design of 1000' extended runway safety areas, and obstruction clearance studies for future navigational aids. The project involved 650,000 cubic yards of earthwork along with the installation of 3,700 linear feet of drainage pipe.

- Andrews-Murphy Airport, Andrews, North Carolina – Served as Project Engineer to coordinate the design of a 500' runway extension and associated mitigation measures to meet permitting requirements. Of particular interest was the design of associated drainage improvements to function with the high water table associated with a trout stream located on airport property.
- Coastal Carolina Regional Airport, New Bern, North Carolina – Served as Project Engineer to complete the design of an aircraft parking apron rehabilitation. The project included drainage enhancements for an existing apron and connecting taxiway. Of particular interest was designing the storm sewer system to operate with the high water table associated with the airport's proximity to the adjacent Trent and Neuse Rivers.
- Monroe Municipal Airport, Monroe, North Carolina – Taxiway Relocation and Apron Expansion - Served as Project Engineer to complete the design of an apron expansion, new parking lot and parallel taxiway relocation project. Of particular interest was the phasing of the work in order to provide constant access to airport facilities for the duration of the project.
- Piedmont-Triad International Airport, Greensboro, North Carolina – Runway 14 Safety Area – Served as Project Engineer to complete the design of a 1000' extended runway safety area project. The project included the design of both drainage and erosion control plans for multiple borrow areas that totaled over 35 acres of disturbed area. Of particular interest was the impact of the borrow areas with the development of a parallel runway and other future land usage of the airport.

CERTIFICATIONS:

FEMA Damage Assessment Program/Hurricane Floyd Volunteer, 1999
North Carolina Erosion and Sediment Control Workshop, 1994
Urban Stormwater Management Workshop, 1994
FAA, Eastern Regional Laboratory Procedures Manual, 1993

AIRMAN CERTIFICATIONS:

Aircraft Owner and Instrument-Rated Private Pilot
FAA Licensed Aviation Maintenance Technician – Airframe & Powerplant

J. Brad Homan, P.E.

Project Manager

General Qualifications

Serving aviation clients for the majority of his career, Mr. Homan has gained extensive experience in a number of airport planning and design tasks, some of which include preparation of specifications and construction plans for airfield improvements, pavement condition surveys, pavement management plan reports, FAR Part 77 surface studies, and grant and program management.

Mr. Homan's experience consists of preparation of grant applications, FAA Airport Capital Improvement Plans, PENNDOT 12-Year Plan Worksheets and 5-Year Capital Improvement Plans, and Environmental Evaluation Forms. Furthermore, he has designed significant airfield improvements for the rehabilitation and construction of new runways, taxiways, and aprons.

Years with Baker: 17

Years with Other Firms: 0

Education

Master's Certificate, 2008, Project Management, University of Pittsburgh, Katz Graduate School of Business

B.S., 1992, Civil Engineering, West Virginia University

Licenses/Certifications

Professional Engineer, West Virginia, 2000

Professional Engineer, Pennsylvania, 1999

As a Project Manager, Mr. Homan has supervised a range of noteworthy initiatives, such as runway, taxiway, and lighting rehabilitations, obstruction removal, navigational aid installation, grant and pavement management programs, land acquisition, and deicing pad design, for the Pittsburgh International Airport, Stewart Newburgh International Airport, Fentress Naval Auxiliary Landing Field, Altoona-Blair County Airport, Wheeling-Ohio County Airport, and Lawrence County Airport. In addition, he has been the Project Manager of a team of professionals that has functioned as an extension of staff to some of Baker's repeat clients, including Wheeling-Ohio County, Pittsburgh International, and Altoona-Blair County, among others.

Experience

Repair Runway 5R-23L, Oceana Naval Air Station, Virginia Beach, Virginia. *U.S. Navy Naval Public Works Center.* Engineer. Assisted with the preparation of the preliminary design report and construction drawings. Baker designed the rehabilitation of Runway 5R-23L and associated taxiways at Oceana Naval Air Station. This was a 12,000-foot runway and 200 feet wide with a combination of Portland cement concrete pavement and bituminous concrete pavement. The work included panel replacement, spall repairs, crack sealing, joint resealing, flexible panel removal and replacement, storm drainage and subdrainage systems.

Rehabilitation of Runway 5-23, Naval Auxiliary Land Field - Fentress, Chesapeake, Virginia. *U.S. Navy Naval Public Works Center.* Engineer. Responsible for the rehabilitation of an 8,000-foot runway which consisted of bituminous and concrete pavements with two arrestor gear systems, rehabilitation of 350 feet of taxiway consisting of concrete, bituminous, and composite pavement structures. Performed pavement inspection to determine causes of pavement distress and the best method of rehabilitation. Prepared preliminary design report which outlined proposed rehabilitation alternatives. Performed structural evaluation of the existing pavement structures to determine whether they would be adequate for the traffic projected to use the airfield. Baker provided civil engineering design services for the rehabilitation of concrete and bituminous pavements for Runway 5-23, composite pavements for Taxiway E, and composite, bituminous, and concrete pavements for the airfield access road.

Indefinite Quantity Contract for Civil Engineering Services, Norfolk, Virginia. *U.S. Navy Naval Public Works Center.* Engineer. Responsible for preparing design plans and specifications. On-call civil engineering services, including construction plans, specifications, and cost estimates.

Rehabilitation of Runway 17R-35L and Taxiway E, Ellington Field Airport (EFD), Houston, Texas. *Houston Airport System.* Engineer. Responsible for horizontal geometry, including layout for taxiway fillet widening on two taxiways and layout of new bypass taxiway. Responsible for pavement design, which included development of the required pavement section for the 20-year projected forecast fleet mix and required concrete overlay thickness. Also responsible for concrete joint layout which consisted of determining joint spacings and joint types for the entire runway and portions of taxiways being rehabilitated. This project required pavement evaluation, fault zone analysis, and pavement design. Project included full keel section replacement, unbonded RPCC overlays and new and rehabilitated connector and parallel taxiways. The design also included the replacement of the entire airfield lighting system that included the rehabilitation of the 17R-35L edge lighting system, installation of centerline and Touchdown Zone (TDZ) lights along 17R-35L, vault, regulator and backup generator improvements, and control panel adjustments. Additionally, two BAK 12/14 arrestor barriers were rehabilitated and raised to meet proposed grades.

Taxiway B West Relocation and Apron Construction, Washington County Airport (AFJ), Washington, Pennsylvania. *Washington County Planning Commission.* Engineer. Responsible for geometric design for Taxiway B. Baker provided complete planning, engineering, and construction management services for the relocation of approximately 2,000 feet of Taxiway B. The project included construction of the 35-foot-wide relocated taxiway with bituminous concrete pavement, new taxiway edge lighting system, new drainage system, construction of tie-down aprons in bituminous concrete pavement, crack seal and seal coat the existing terminal apron, the removal of the existing taxiway surface, and associated site grading.

Deicing Collection Study, 171st Air Refueling Wing, Pittsburgh International Airport (PIT), Pittsburgh, Pennsylvania. *Pennsylvania Air National Guard.* Project Manager. Responsible for technical oversight; adherence to scope, schedule, and budget; and technical review. Baker analyzed alternatives and associated costs to improve the recovery of aircraft deicing fluid (ADF) runoff from the East Ramp of the 171st Air Refueling Wing of the PANG in Moon Township, Pennsylvania. The goal of the study was to identify ways to reduce residual chemical contamination of area surface water and groundwater resources and enable the base to dispose of spent fluids more cost effectively.

Widebody Deicing Facility Design, Pittsburgh International Airport (PIT), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Project Manager. Responsibilities included the following: Airspacing evaluation; Pavement design; Project layout; Project safety and phasing; Geometric layout; Joint layout; Grading; Pavement marking; and Construction support services. The new Widebody Deicing Facility at Pittsburgh International Airport was designed to permit deicing of two Boeing 747-400 aircraft simultaneously. In lieu of the widebody aircraft a variety of three Group III and IV aircraft may be deiced simultaneously. It consists of approximately 15.5 acres of concrete pavement. It was designed with a collection system to collect and store spent glycol fluid or divert stormwater during non-deicing events to existing storm collection facilities.

Rehabilitation of Taxiways B2, C, N, P, and R, Pittsburgh International Airport (PIT), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Project Manager. Responsible for technical oversight; adherence to scope, schedule, and budget; and technical review. Rehabilitation methods included joint cleaning and resealing, spall repairs, isolated PCC slab replacements, and full depth pavement removal and replacement. In addition to the pavement repairs, subsurface drainage was evaluated and replaced or new drainage was installed as conditions necessitated. This project also included taxiway edge lighting replacement, new centerline lighting, and electrical vault modifications.

THE LPA GROUP
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GARY HAMILTON LOTT, P.E.
Assignment: Electrical

QUALIFICATIONS:

B.S., Electrical Engineering, 1986
University of South Carolina

REGISTRATION:

Professional Engineer (AL, AR, CO, FL, GA, KY, LA, MD, MS, NC, PA, SC, TN, VA, WV)

PROFESSIONAL EXPERIENCE:

1986 - 2010 (Career)
2003 - 2010 (LPA)

Principal / Manager of Airport Design
THE LPA GROUP INCORPORATED

Gary Lott has worked in the aviation consulting field since 1986 after graduating from the University of South Carolina. He has extensive experience in the design and project management of airport design and electrical systems. He has performed project management and designed airfield lighting systems, airfield sign systems, airfield lighting vaults, NAVAID systems, airfield lighting control systems, airfield lighting computer systems (touch screen systems), roadway lighting, roadway sign lighting, parking lot lighting systems, electrical distribution systems, and emergency generator systems. Projects include airports, roadways, parking lots, and military facilities.

AREAS OF EXPERTISE:

- *Airfield Electrical*
- *Airfield Vault Work*
- *Electrical Distribution Systems*
- *Emergency Generator Systems*
- *NAVAIDS*
- *Roadway / Parking Lighting*

Project experience for airports includes:

- Eastern West Virginia Regional Airport, Martinsburg, West Virginia – Medium Intensity Taxiway Lighting, Airfield Signs, Airfield Lighting Vault Equipment.
- Fort Campbell, Kentucky – Concrete encased duct banks, manholes, relocated utility lines, Medium Intensity Taxiway Lights and Cables. Aircraft Holding Apron was $10.5 million Design/Build project. Reconstruction of Taxiway 5 at Fort Campbell was $4.5 million Design/Build project.
- McGhee Tyson Airport, Knoxville, Tennessee – 4-Box Precision Approach Path Indicator system (PAPI), High Intensity Runway Lighting, Runway Centerline Lighting, Touchdown Zone Lighting, Taxiway Centerline Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Aircraft Parking Apron, Airfield Lighting Vault Building.
- Brantley County Airport, Brantley County, Georgia – Medium Intensity Runway Lights, Airfield Signs, Medium Intensity Taxiway Lights, 2-Box PAPI Systems, Beacon and Beacon Tower, Precast Airfield Lighting Vault, and Vault Equipment.
- Paulding Northwest Atlanta Airport, Paulding County, Georgia – High Intensity Runway Lights, Medium Intensity Taxiway Lights, Airfield Signs, 4-Box PAPI Systems, Mid-field Windcone and Segmented Circle, Supplemental Windcones, Beacon and Beacon Tower, Precast Airfield Lighting Vault, and Vault Equipment.
- "CE" Rusty Williams Airport, Mansfield, Louisiana – Medium Intensity Runway Lighting, Airfield Signs, Relocated REIL System, and Relocate 2-Box PAPI System.
- Bearce Airport, Mount Ida, Arkansas – Medium Intensity Runway Lighting, Airfield Signs, and Relocated 2-Box PAPI System.
- Petit Jean State Park Airport, Morrilton, Arkansas – Medium Intensity Runway Lights, LED Medium Intensity Taxiway Lights, Airfield Signs, 2-Box PAPI Systems, Mid-field Windcone, Precast Airfield Lighting Vault, and Vault Equipment.

PROFESSIONAL EXPERIENCE (Continued):

- Baton Rouge Metropolitan Airport, Baton Rouge, Louisiana – High Intensity Runway Lights, LED Medium Intensity Taxiway Lights, Airfield Signs, and Airfield Vault Equipment.
- Monroe Regional Airport, Louisiana – New airfield lighting vault to replace the vault and equipment. The new constant current regulators will be sized to serve the runway lighting systems, taxiway lighting systems, guidance signs, PAPI systems, and REIL systems. A new airfield lighting control system will be designed to replace the existing equipment. The control system will be computer-based and have a LCD touchscreen in the ATCT.
- Albert Whitted Airport, St. Petersburg, Florida – Airfield Guidance Signs and Airfield Lighting Vault Equipment.
- Albert J. Ellis Airport, Richlands, North Carolina – Medium Intensity Taxiway Lighting Cable Replacement, Airfield Signs, Airfield Lighting Vault Equipment, L-821 Control Panel, Airfield Lighting Vault Distribution Equipment, Runway End Identification Lights (REIL), 4-Box Precision Approach Path Indicator (PAPI), L-807 Wind Cone.
- Andrews-Murphy Airport, Cherokee County, North Carolina – Medium Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, 2-Box Precision Approach Path Indicator system (PAPI), Runway End Identification Lights (REIL), Precast Airfield Lighting Vault, Airfield Lighting Vault Equipment.
- Athens-Ben Epps Airport, Clarke County, Georgia – Medium Intensity Taxiway Lighting, Airfield Signs, Helipad Lighting, Vault Equipment, Emergency Generator, Glide Slope Facility.
- Augusta Regional Airport, Augusta, Georgia – High Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Medium Intensity Runway Lighting, Airfield Guidance Signs, 4-Box Precision Approach Path Indicator system (PAPI), Airfield Lighting Vault Equipment.
- Barnwell County Airport, Barnwell, South Carolina – Medium Intensity Taxiway Lighting, Airfield Signs, 2-Box PAPI, Omnidirectional Approach Lighting system (ODAL), Automated Weather Observing System (AWOS).
- Berrien County Airport, Berrien, Georgia – Medium Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Runway End Identification Lights (REIL), 2-Box Precision Approach Path Indicator system (PAPI), Airfield Lighting Vault Equipment.
- Clayton County Regional Airport, Hampton, Georgia – Medium Intensity Runway Lighting, Airfield Signs, Airfield Lighting Vault Equipment, Apron Flood Lighting.
- Cobb County Airport – McCollum Field, Kennesaw, Georgia – Medium Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Airfield Lighting Vault Equipment, FAA 4-Box Precision Approach Path Indicator system (PAPI), Relocate FAA Runway End Identification Lights (REIL).
- Columbia Metropolitan Airport, Columbia, South Carolina – High Intensity Runway Lighting, Runway Centerline Lighting, Touchdown Zone Lighting, Taxiway Centerline Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Elevated Runway Guard Lights, Aircraft Parking Apron Flood Lighting, Airfield Lighting Vault Equipment, Vault

PROFESSIONAL EXPERIENCE (Continued):

Electrical Distribution System, Emergency Generator System, Runway 11 Approach Lighting System with Flashers (ALSF-2), Inner Marker Antenna Relocation, 4-Box Precision Approach Path Indicator system (PAPI), Airfield Lighting Computer System (ALCS with Touch Screen), LED Elevated Taxiway Edge Lights.

- Jim Hamilton-L.B. Owens Airport, Columbia, South Carolina – Apron Floodlighting, Medium Intensity Taxiway Lighting.
- Coastal Carolina Regional Airport, New Bern, North Carolina – Airfield Lighting Vault Equipment, Airfield Lighting Vault Distribution Equipment, Emergency Generator System.
- Crystal River Airport, Citrus County, Florida – Medium Intensity Runway Lighting, Area Lighting.
- Danville Regional Airport, Danville, Virginia – Medium Intensity Taxiway Lighting.
- Davidson County Airport, Lexington, North Carolina – Medium Intensity Taxiway Lighting, Airfield Signs Relocate 2-Box Precision Approach Path Indicator system (PAPI), Relocate Runway End Identification Lights (REIL).
- Darlington County Jetport, Darlington, South Carolina – Medium Intensity Runway Lighting, Omnidirectional Approach Lighting system (ODAL).
- Douglas Municipal Airport, Douglas, Georgia – Medium Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Airfield Lighting Vault Equipment, Medium Intensity Approach Lighting System with Runway Alignment indicator Lights (MALSR).
- Florence Regional Airport, Florence, South Carolina – 4-Box Precision Approach Path Indicator system (PAPI), Medium Intensity Taxiway Lighting, Airfield Lighting Vault Equipment.
- GSP International Airport, Greer, South Carolina – High Intensity Runway Lighting, Runway Centerline Lighting, Touchdown Zone Lighting, Taxiway Centerline Lighting, Medium Intensity Taxiway Lighting, Airfield Guidance Signs, Aircraft Parking Apron Floodlighting, Airfield Lighting Vault Equipment including Constant Current Regulators and Electrical Distribution Equipment, Airfield Lighting Vault Emergency Generator System, Airfield Lighting Computer Control System with ATCT Touch Screen, Runway and Taxiway Cable and Isolation Transformer Replacement.
- Gulfport-Biloxi Regional Airport, Gulfport, Mississippi – High Intensity Runway Lighting, Runway Centerline Lighting, Touchdown Zone Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Airfield Floodlighting Vault Equipment, Apron Lighting.
- Henry E. Rohlsen Airport, St. Croix, U.S.V.I. – High Intensity Runway Lighting, Airfield Signs, Runway Distance Remaining Signs, Airfield Lighting Vault Equipment, FAA MALSR, FAA 4-Box PAPI, Relocate FAA Glide Slope, Relocate FAA REILS, Relocate ASOS.
- Huntsville International Airport, Huntsville, Alabama – High Intensity Runway Lighting, Runway Centerline Lighting, Touchdown Zone Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Elevated Runway Guard Lights, Airfield Lighting Vault Equipment, Generator System.

THE LPA GROUP
TRANSPORTATION CONSULTANTS
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RON E. SHEPPARD
Assignment: Electrical

QUALIFICATIONS:

B.S., Electrical Engineering, 1977
University of South Carolina

A.S., Engineering, 1974
University of South Carolina

PROFESSIONAL EXPERIENCE:

1977 - 2010 (Career)
2003 - 2010 (LPA)

Senior Airfield Electrical Engineer
THE LPA GROUP INCORPORATED

Ron Sheppard has worked in the aviation consulting field since 1977 after graduating from the University of South Carolina. He has extensive experience in design and project management of electrical systems. He has designed airfield lighting systems, NAVAIDS, airfield lighting vault equipment, electrical distribution systems, roadway lighting and emergency generator systems. Projects include airports, roadways, parking lots, and military facilities.

Airport projects for which electrical design services have been provided:

- ❑ Fort Campbell, Kentucky – Concrete encased duct banks, manholes, Medium Intensity Taxiway Lights and Cables. Reconstruction of Taxiway 5 at Fort Campbell was $4.5 million Design/Build project.
- ❑ Brantley County Airport, Brantley County, Georgia – Medium Intensity Runway Lights, Airfield Signs, Medium Intensity Taxiway Lights, 2-Box PAPI Systems, Beacon and Beacon Tower, Precast Airfield Lighting Vault, and Vault Equipment.
- ❑ Paulding Northwest Atlanta Airport, Paulding County, Georgia – High Intensity Runway Lights, Medium Intensity Taxiway Lights, Airfield Signs, 4-Box PAPI Systems, Mid-field Windcone and Segmented Circle, Supplemental Windcones, Beacon and Beacon Tower, Precast Airfield Lighting Vault, and Vault Equipment.
- ❑ Greenville Spartanburg International Airport, Greer, South Carolina – Airfield Lighting Vault Equipment including Constant Current Regulators and Electrical Distribution Equipment, Airfield Lighting Vault Emergency Generator.
- ❑ "CE" Rusty Williams Airport, Mansfield, Louisiana – Medium Intensity Runway Lighting, Airfield Signs, Relocated REIL System, and Relocate 2-Box PAPI System.
- ❑ Bearce Airport, Mount Ida, Arkansas – Medium Intensity Runway Lighting, Airfield Signs, and Relocated 2-Box PAPI System.
- ❑ Petit Jean State Park Airport, Morrilton, Arkansas – Medium Intensity Runway Lights, LED Medium Intensity Taxiway Lights, Airfield Signs, 2-Box PAPI Systems, Mid-field Windcone, Precast Airfield Lighting Vault, and Vault Equipment.
- ❑ Baton Rouge Metropolitan Airport, Baton Rouge, Louisiana – High Intensity Runway Lights, LED Medium Intensity Taxiway Lights, Airfield Signs, and Airfield Vault Equipment.

AREAS OF EXPERTISE:

- *Airfield Electrical*
- *Airfield Vault Work*
- *Electrical Distribution Systems*
- *Emergency Generator Systems*
- *NAVAIDS*
- *Roadway / Parking Lot Lighting*

PROFESSIONAL EXPERIENCE (Continued):

- Albert Whitted Airport, St. Petersburg, Florida – Airfield Guidance Signs and Airfield Lighting Vault Equipment.
- Lancaster County Airport, Lancaster, South Carolina – Medium Intensity Threshold Lighting, Medium Intensity Taxiway Lighting, 2-Box PAPI Relocation, Design Phase of Automated Weather Observing System (AWOS).
- Crystal River Airport, Citrus County, Florida – Medium Intensity Runway Lighting, Area Lighting.
- Tallahassee Regional Airport, Tallahassee, Florida – High Intensity Runway Lighting, Airfield Signs, 4-Box Precision Approach Path Indicator System (PAPI), Wind Cone, Airfield Lighting Vault Equipment, Medium Intensity Taxiway Lighting, Apron Floodlighting.
- Zephyrhills Airport, Zephyrhills, Florida – Medium Intensity Taxiway Lighting, Airfield Signs, Airfield Lighting Vault Equipment, Electrical Service for Airfield Lighting Vault.
- Augusta Regional Airport, Augusta, Georgia – Medium Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Airfield Guidance Signs, 4-Box Precision Approach Path Indicator system (PAPI).
- Cobb County Airport – McCollum Field, Kennesaw, Georgia – Medium Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Airfield Lighting Vault Equipment, FAA 4-Box Precision Approach Path Indicator system (PAPI), Relocate FAA Runway End Identification Lights (REIL).
- Albert J. Ellis Airport, Richlands, North Carolina – Medium Intensity Taxiway Lighting Cable Replacement, Airfield Signs, Airfield Lighting Vault Equipment, L-821 Control Panel, Airfield Lighting Vault Distribution Equipment, Runway End Identification Lights (REIL), 4-Box Precision Approach Path Indicator (PAPI), L-807 Wind Cone.
- Coastal Carolina Regional Airport, New Bern, North Carolina – Airfield Lighting Vault Equipment, Airfield Lighting Vault Distribution Equipment, Emergency Generator System.
- North Carolina Global Transpark, Kingston, North Carolina – Runway Centerline Lighting, Touchdown Zone Lighting, Airfield Lighting Vault Equipment, Airfield Lighting Vault Distribution Equipment, L-821 Control Panel, Emergency Generator System.
- Piedmont Triad International Airport, Guilford County, North Carolina – Medium Intensity Taxiway Lighting, Airfield Signs, Duct Banks.
- Andrews-Murphy Airport, Cherokee County, North Carolina – Medium Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, 2-Box Precision Approach Path Indicator system (PAPI), Runway End Identification Lights (REIL), Pre-cast Airfield Lighting Vault, Airfield Lighting Vault Equipment.
- Barnwell County Airport, Barnwell, South Carolina – Design of Medium Intensity Taxiway Lighting, Airfield Signs.
- Danville Regional Airport, Danville, Virginia – Medium Intensity Taxiway Lighting.
- Gulfport-Biloxi Regional Airport, Gulfport, Mississippi – Medium Intensity Taxiway Lighting, Apron Floodlighting.

PROFESSIONAL EXPERIENCE (Continued):

- Henry E. Rohlsen Airport, St. Croix, U.S.V.I. – Airfield Signs, Runway Distance Remaining Signs, FAA MALSR, FAA 4-Box PAPI, Relocate FAA Glide Slope, Relocate FAA REILS, Relocate ASOS.
- Hilton Head Airport, South Carolina – New parallel taxiway lighting, new runway lighting system, replace existing taxiway lighting system, new PAPI systems, and associated vault work.
- Fayetteville Regional Airport, Fayetteville, North Carolina – New taxiway and new general aviation apron lighting system.
- Lexington County Airport at Pelion, Pelion, South Carolina – Medium Intensity Runway Lighting, Medium Intensity Taxiway Lighting, Airfield Signs, Precast Airfield Lighting Vault Building, Airfield Lighting Vault Equipment, Vault Electrical Distribution System.
- Johnston County Airport, Smithfield, North Carolina – Airport hangar utilities, MALSR system.
- Concord Regional Airport, Concord, North Carolina – MALSR, glideslope and localizer.
- Wilkesboro County Airport, Wilkesboro, North Carolina – Emergency power system for all airfield lighting and NAVAIDS systems, MALSR.
- Farmville Airport, Farmville, Virginia – Lighting system for runway extension.
- Cook County Airport, Adel, Georgia – Provided PAPI system and associated vault work.
- Pickens County Airport, Liberty, South Carolina – Provided new runway and taxiway lighting systems, vault building, vault equipment, AWOS.
- Ashboro County Airport, Ashboro, North Carolina – New vault building, vault equipment and controls.
- THK Olympic Facilities Airport, Atalya, Turkey – Power and lighting system for new airport, including runway, taxiway and NAVAIDS.
- Valdosta - Lowndes County Airport, Valdosta Georgia – New signage system, replaced high intensity runway lighting system, replaced taxiway lighting system, provided new PAPI systems for both runways, vault work and associated controls.
- Rock Hill Municipal Airport, Rock Hill, South Carolina – Taxiway lighting for new taxiway and associated vault work.
- Peach Tree City Airport, Peachtree, Georgia – Modified ODAL system to clear new railroad line, lighting system for taxiways at new hangar area.
- Aiken Municipal Airport, Aiken, South Carolina – New runway and taxiway lighting system, new PAPI system, new ODAL system, new vault building and vault equipment.
- Anderson Regional Airport, Anderson, South Carolina – New taxiway lighting systems, new signage system and associated vault work.
- Jim Hamilton-L.B. Owens Airport, Columbia, South Carolina – Replaced existing runway and taxiway lighting systems, new PAPI system, new rail system, new vault building, generator and vault building equipment, apron floodlighting, parking lot

THE LPA GROUP
TRANSPORTATION CONSULTANTS
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RICHARD E. HARRIS
Assignment: Construction

QUALIFICATIONS:

Mr. Harris has over 42 years of construction and construction administration experience. He carries a strong background in planning and scheduling, surveying, quality control and testing in utility and heavy construction. Representative project experience includes:

Resident Project Representative: 1991 to 2010. Mr. Harris has completed approximately 50 individual airport contracts in the last 19 years.

Contracts with THE LPA GROUP:

- ❑ Danville Regional Airport, Danville, Virginia (1 contract)
- ❑ Greenbrier Valley Airport, Lewisburg, West Virginia (3 contracts)
- ❑ Asheville Regional Airport, Asheville, North Carolina (3 contracts)
- ❑ Piedmont Triad International Airport, Greensboro, North Carolina (2 contracts)
- ❑ Andrews-Murphy Airport, Andrews, North Carolina (2 contracts)
- ❑ Anson County Airport, Anson County, North Carolina (1 contract)
- ❑ Daytona Beach International Airport, Daytona Beach, Florida (1 contract)

Other Airport experience:

- ❑ Asheville Regional Airport, Asheville, North Carolina (5 contracts)
- ❑ Asheboro Airport, Asheboro, North Carolina (3 contracts)
- ❑ Statesville Airport, Statesville, North Carolina (4 contracts)
- ❑ Lincolnton Airport, Lincolnton, North Carolina (3 contracts)
- ❑ Wilkesboro Airport, Wilkesboro, North Carolina (3 contracts)
- ❑ Anderson Airport, Anderson, South Carolina (3 contracts)
- ❑ Tifton Airport, Tifton, Georgia (1 contract)

Highways: 1990 to 1991. Served as Project Manager on 2 1/2 mile section to upgrade existing Highway 311 to Interstate 40.

Environmental Projects - Engineering & Management

- ❑ 1983 to 1990: Water Line, Sewer Line, Plant Facilities in North Carolina, South Carolina, and Florida.
- ❑ 1968 to 1983: Miscellaneous Heavy Construction Projects.

AREAS OF EXPERTISE:

- *Airfield Construction Administration*
- *Scheduling*
- *Quality Control and Testing*

UNITED PARCEL SERVICE REGIONAL CENTER - SOUTHEAST HUB

Columbia, South Carolina

Owner: Richland-Lexington Airport Commission

Construction Cost: $29 Million

Completion Date: June 1996

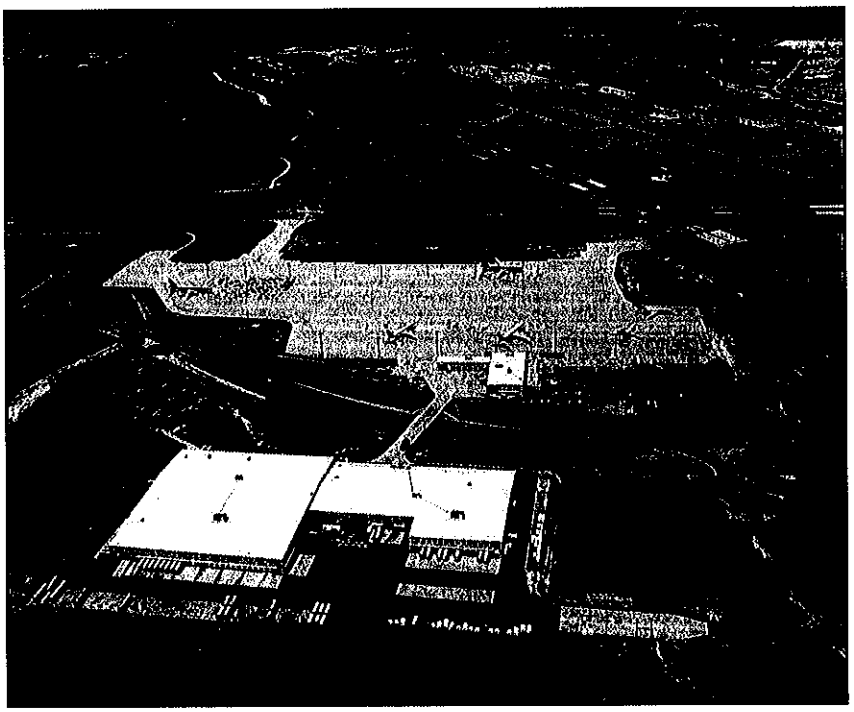
Scope of Services:

- Program Management
- Planning
- Environmental Assessment
- Marketing
- Construction Inspection
- Final Design (Airfield, Roadway, and Bridge)

The Firm provided complete services for this project from concept to completion. THE LPA GROUP worked closely with local officials in proposing Columbia as the best site for this major facility. After selection of Columbia by UPS, the Firm provided planning and environmental services for the project and worked with the Commission in pursuit of federal funds for eligible portions of the $29 million program. The project included a 1,000-foot concrete extension to Runway 5/23, construction of an apron for 14 B757/DC-9 aircraft and regional commuters, construction of a 400-foot long bridge over S.C. Route 302 to connect the apron to the UPS sort facility, relocation and lowering of two miles of S.C. Route 302, and major stormwater detention and glycol collection ponds. The apron, runway, and taxiways were constructed of 15" of PCC (P-501) pavement over 8" of CABC (P-209). Flood lighting, 400-Hz service pits, and an emergency generator were also included in the project. Because of severe time constraints, the entire project was constructed in 11 months.

CONTACT:

Mr. Charles M. Henderson, A.A.E.
Director of Operations
Columbia Metropolitan Airport
Post Office Box 280037
Columbia, SC 29228-0037
Phone: (803) 822-5017
Fax: (803) 822-5141



APRON REHABILITATION

Greenbrier Valley Airport, Lewisburg, West Virginia

Owner: Greenbrier Valley Airport Authority

Construction Cost: $1,847,000

Completion Date: 2001

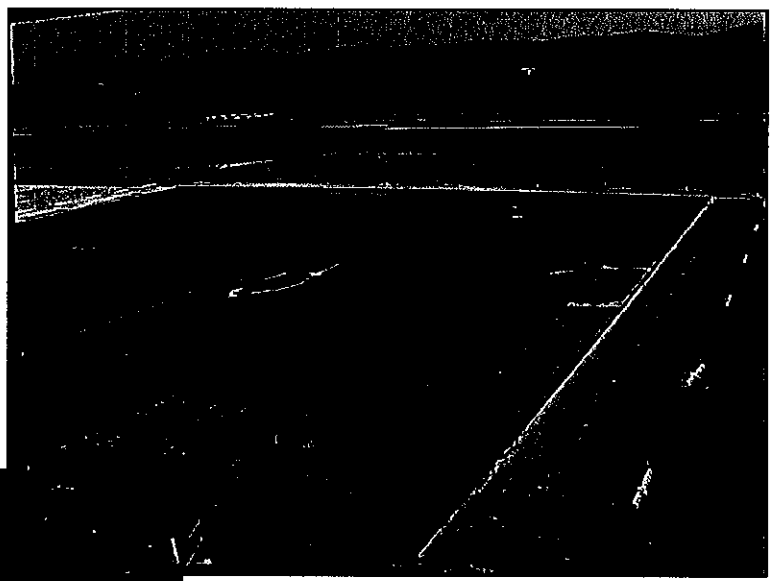
Scope of Services:

- Civil Design
- Bidding
- Construction Administration
- Inspection

This project consisted of rehabilitation of approximately 17,100 square yards of aircraft apron pavement. The existing concrete pavement was replaced with bituminous pavement in the general aviation area and concrete pavement in the air carrier areas.

CONTACT:

Greenbrier Valley Airport Authority
Mr. Jerry O'Sullivan
Route 219
Lewisburg, West Virginia 24901
Phone: (304) 645-3961



NORTH AIR CARGO APRON - BMW OPERATION

Greenville-Spartanburg International Airport

Owner: Greenville-Spartanburg International Airport

Construction Cost: $2.9 Million

Completion Date: 1998

Scope of Services:

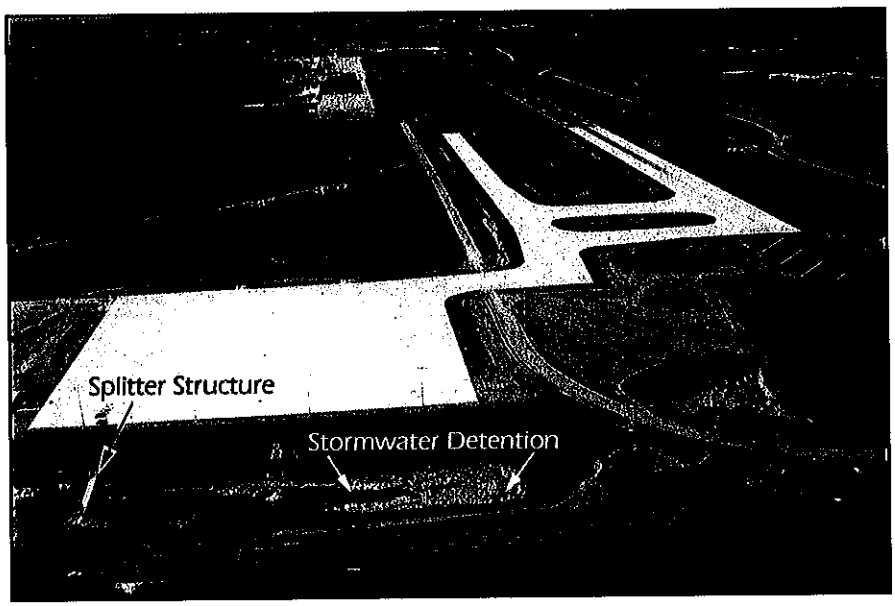
- Preliminary Design
- Final Design
- Environmental Document and Permits
- Bidding
- Construction Inspection / Management
- Quality Assurance and Materials Testing

The project consisted of the planning, design, and construction of a new cargo apron (500' by 700') to handle up to two Boeing B-747 Cargo Freighters under the "power in - power out" operating condition.

The work involved excavation of approximately 300,000 cubic yards of onsite soil / rock material and placement of the excavated material in the embankment of the new runway extension and safety overrun areas. Additionally, an innovative system of water quality and stormwater detention was designed which accommodates the requirements of SCDHEC for water quality and stormwater detention by a "splitter" structure which acts as an overflow after the treatment of the first inch of runoff from the new apron.

CONTACT:

Mr. Larry Holcombe
Airport Manager
Greenville-Spartanburg Airport Commission
2000 GSP Drive, Suite 1
Greer, South Carolina 29651
Phone: (864) 848-6262



MISSISSIPPI AIR NATIONAL GUARD APRON

Gulfport-Biloxi International Airport, Gulfport, Mississippi

Owner: Mississippi Air National Guard

Construction Cost: $7 Million

Completion Date: 1994

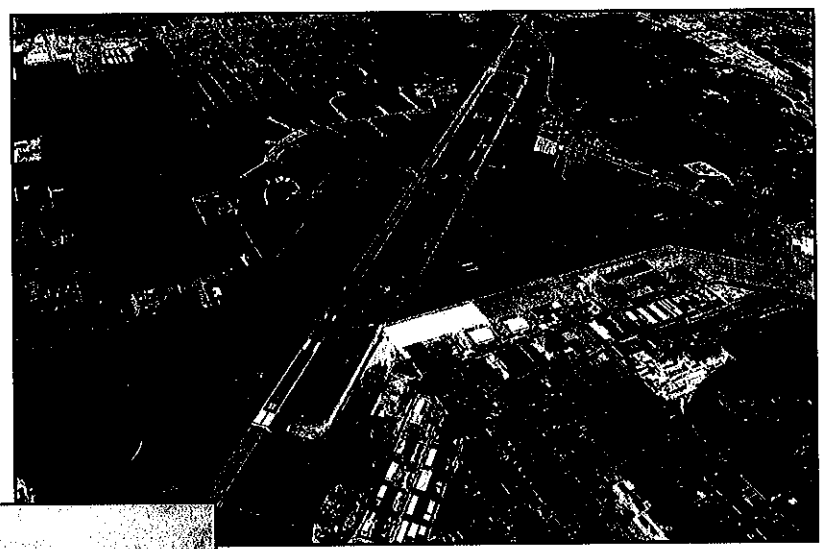
Scope of Services:

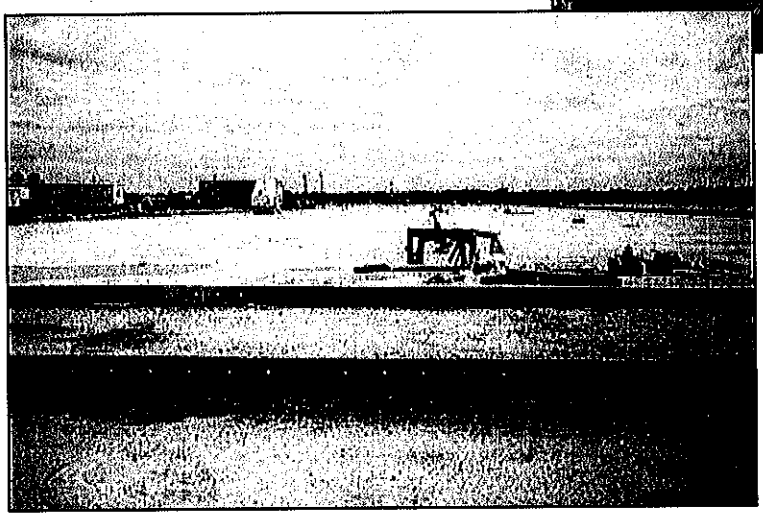
- Engineering Design
- Construction Inspection

THE LPA GROUP was retained by the Mississippi Air National Guard to provide engineering services relating to a comprehensive concrete (PCC) pavement rehabilitation of the Guard's apron. The initial phase of the project included a complete pavement evaluation and PCI survey of the Base's aircraft parking apron and taxiway system. Various features of the design included total pavement replacement, limited slab replacement, crack and spall repair, and joint resealing.

CONTACT:

Captain Bobby C. Thornton
USPFO-MS
144 Military Drive
Jackson, Mississippi 39208-8880
Phone: (228) 936-7502





DESIGN & CONSTRUCTION OF AIRCRAFT HOLDING APRON (KEYHOLE HARDSTAND EXPANSION)

Fort Campbell, KY

Owner: U.S. Army Corps of Engineers

Construction Cost: $10.5 Million

Completion Date: December 2002

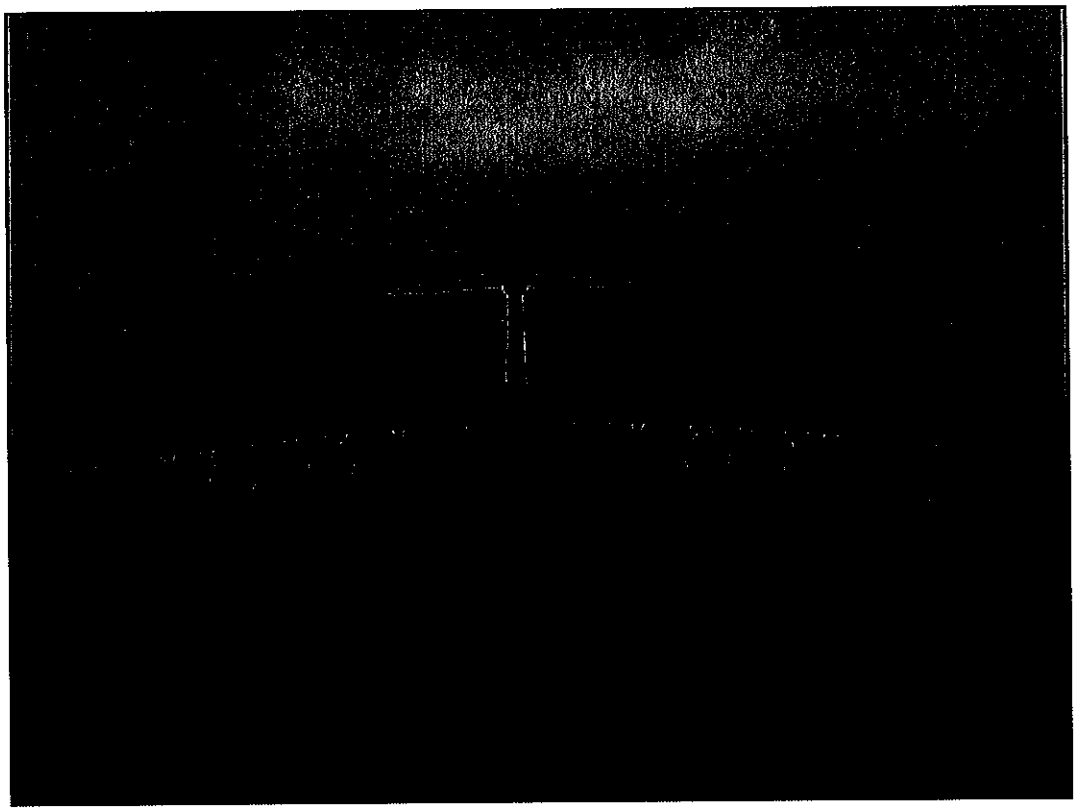
Scope of Services:

- Complete Engineering Design Services

The **Team** of **THE LPA GROUP INCORPORATED** and **The Lane Construction Corporation** was selected by the US Army Corps of Engineers for this important Design / Build project. The scope of the project included removal of five existing concrete hardstand parking positions and replacement with a new 14.5" PCC parking apron. The new apron accommodates up to five C-5 aircrafts, twelve C-130 aircrafts or a fleet mixture. The physical size of the new apron exceeds 19 acres.

CONTACT:

Mr. Rick Lotz
U.S. Army Corps of Engineers
Post Office Box 59
Louisville, Kentucky 40201-0059
Phone: (502) 315-6818



ARMY AVIATION SUPPORT (AASF) HANGAR ADDITION #2

McEntire Joint National Guard Base, Eastover, South Carolina

Owner: South Carolina Army National Guard

Construction Cost: $26.5M

Start Date: January 2010 (Est.)

Completion Date: June 2012 (Est.)

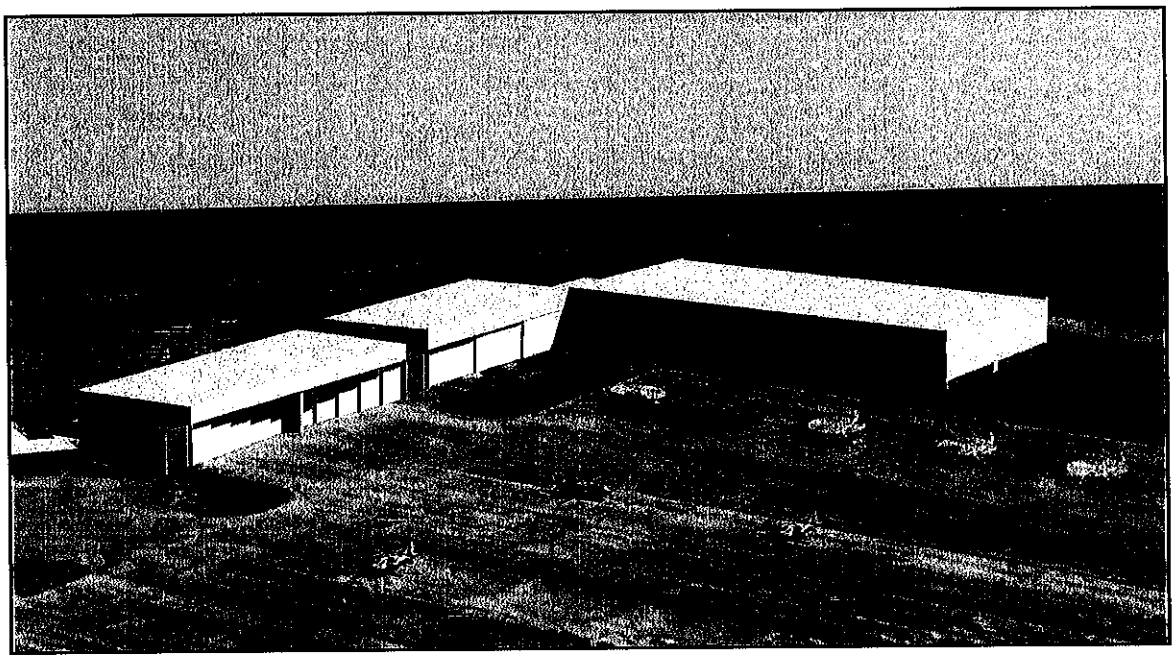
Scope of Services:

- Civil Design
- Civil Construction Administration

The project consists of constructing a one-story hangar for the SC National Guard to store and maintain the military attack helicopter Apache Longbow (UH-64) and to serve the peace time missions of the assigned units. The space will permit all personnel to perform the necessary tasks that will improve the units' readiness posture. Additionally, the building will be approximately 79,000 square feet and will be physically attached on one side to an existing hangar facility. The AASF and supporting civil facilities will provide hangar, administrative, supply, classroom, locker, latrine and maintenance space and will include an automatic AFFF fire suppression system.

CONTACT:

Mr. Gary Grant
Facility Engineer
SC Army National Guard
1 National Guard Road
Columbia, South Carolina 29201
Phone: (803) 806-4467



ARMY AVIATION SUPPORT FACILITY (AASF)

South Carolina Technology and Aviation Center, Greenville, South Carolina

Owner: South Carolina National Guard Bureau

Construction Cost: $40,210,000

Completion Date: Spring 2010 - Design (Estimated)
Spring 2011 - Construction (Estimated)

Scope of Services:

- Preliminary and Final Design
- Bidding
- Construction Administration
- Permitting

The project consists of constructing a new 108,600 square feet Army Aviation Support Facility for the SC National Guard to support and maintain six military heavy lift helicopter Chinook (CH-47) and four military light utility helicopter Lakota (UH-72) and to serve the daily requirements of the assigned units. The facility will permit personnel to perform the tasks of the unit's mission. The facility includes 68,400 square yards of concrete airfield pavement to support parking of six CH-47 helicopters, taxi operations, wash rack facility and a helipad for army helicopter operations. Heavy duty access roadways, a 225 space parking lot, security fencing and gates, necessary utilities, drainage, water quality and detention were included in the design of the project. The AASF and supporting civil facilities will provide hangar, administrative, supply, classroom, locker, latrine and maintenance space and includes automatic AFFF fire suppression system. Project is at 95% completion level in November 2009, with bid documents to be completed prior to Spring 2010.

CONTACT:

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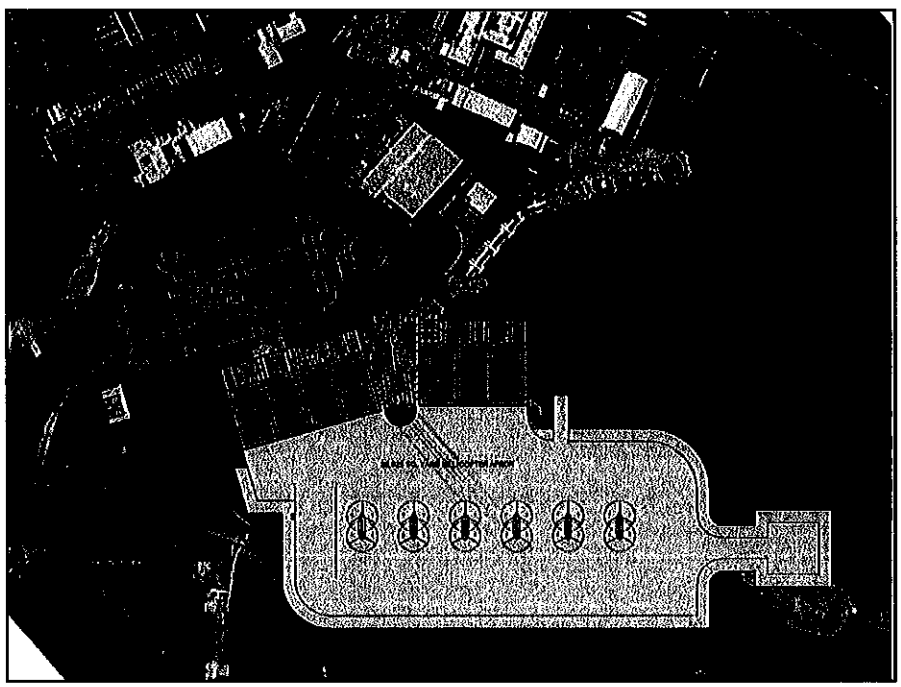
1 National Guard Road
Columbia, SC 29201
Phone: (803) 806-4467



Runways 1L-19R and 7R-25L Intersection Pavement Study

General Mitchell International Airport (MKE), Milwaukee, Wisconsin

Baker was selected to perform a detailed evaluation of the pavement within the intersection of Runway 1L-19R and Runway 7R-25L at General Mitchell International Airport to identify the necessary type of rehabilitation and alternatives to accomplish the rehabilitation.

Improvement of the intersection pavement is critical to maintaining airport operations, since Runway 1L-19R and Runway 7R-25L are the two primary runways that serve the facility.

Annual pavement inspections have revealed cracking and open joints. Results from the most recent survey indicate escalating fatigue cracking and pavement deterioration.

Tasks consist of reviewing available records and data; conducting non-destructive tests, obtaining cores of existing pavement sections; analyzing all data collected; and developing alternatives and providing rehabilitation alternatives as highlighted below.

Client
Milwaukee County Department of Transportation and Public Works
General Mitchell International
5300 South Howell Ave
Milwaukee, WI 53207-6189

Paul Montalto, P.E.
Project Manager
414-747-5774

Ed Baisch, P.E.
Engineering Director
414-747-5722

Completion Date
Estimated: 2010

Project Costs
$484,544 (Fee)

Records and Data Review. The review of existing data will include examining historical construction plans, maintenance and repair records, current and projected aircraft forecast data, and previous studies of the intersection. Results from this task will be considered in evaluating current pavement condition, and developing alternatives.

Pavement Condition Testing and Surveying. Pavement evaluation entailed performing non-destructive testing to evaluate pavement structural integrity, conducting a geotechnical investigation to validate the structure of the existing pavement section and the properties of the subgrade soils, and performing topographic surveys to create mapping for the project site.

Data Analysis. Analysis of all data collected will include updating the existing mapping based on topographic survey results, and determining whether groundwater has contributed to the pavement deterioration, and if so, whether measures to remediate groundwater impacts will extend the life of the existing pavement. This task will summarize findings relating to the cause(s) of deterioration of the pavement, as well as the pavement's structural integrity and estimated remaining service life.

Alternatives Development and Final Recommendations. Based on data analysis, alternatives to rehabilitate or reconstruct the intersection of Runway 1L-19R and Runway 7R-25L will be developed. In addition, alternatives will be developed that consider the impacts of forecasted future aircraft demand and associated pavement requirements. Forecasted aircraft traffic data will be utilized to develop the proposed pavement structure, according to current FAA pavement design methods and criteria. The constructibility and cost of each alternative will also be examined, with particular attention given to the available construction windows. Cost assessment will include life-cycle cost analysis.

Findings will be detailed in a final report. The report provides details of all the testing, a detailed discussion of the alternatives, constructibility reviews of each, estimated cost of each and a cost benefit analysis.

Project Features

Field investigation must be done at night on weekends, due to airport operations.

Final report is due 1-1/2 months after completion of field investigation.

2370 BC Apron Rehabilitation, Phase 2

Baltimore/Washington International, Thurgood Marshall Airport (BWI), Baltimore, Maryland

This $5 million construction project involved the rehabilitation of 4.4 acres of bituminous asphalt pavement along Taxiway A, at the Taxiway E intersection. The majority of this area required full-depth pavement reconstruction, with a small portion of mill and overlay. In addition, underdrains were installed and turf areas were re-graded to ensure adequate drainage. The project also included removing and reinstalling existing taxiway centerline lights along Taxiway A and Taxiway E within the project limits.

Baker's subconsultant performed the construction phasing portion of the design. Construction phasing was complicated by the proximity of the work area to Pier B of the terminal building. Detailed construction phasing was required to relocate terminal gates, Taxiway A, and a vehicle service road.

Several construction phasing alternatives were presented to the client and stakeholders. The consensus was to complete the project in the shortest time possible, which would result in consistent impacts to operations, versus to perform tasks over longer periods with smaller impacts and variations in traffic pattern. However, it was indicated that conditions of use always change prior to starting construction, and it would be more prudent to bid the project based on the more complicated construction condition. Therefore, a deduct alternate was included in the bid documents to identify the savings that would be realized if the project were constructed as one simplified phase.

Under either option, Delta Airlines had to be temporarily relocated to open up the gates at C10, C12, and C14 for construction. Meetings were held with Delta Airlines to establish the carrier's needs for the relocation. Baker then collaborated with its construction phasing subconsultant to prepare construction documents for the interior improvements necessary for Delta Airlines to temporarily occupy other available gates.

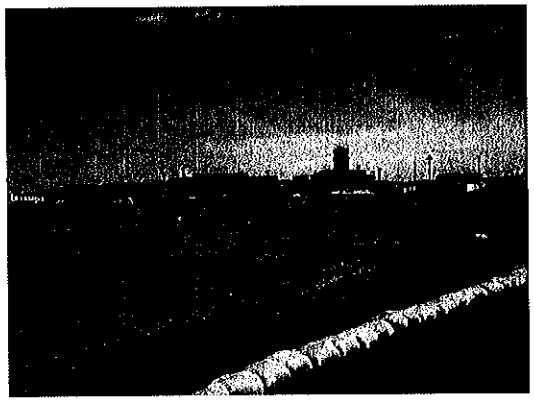
Client
Maryland Aviation Administration
P.O. Box 8766
Third Floor, Terminal Building
BWI Airport, MD 21240-0766

Completion Date
Estimated: 2010

Project Costs
$636,549 (Fee)
$636,549 (Fee)

Baker's Role

- Project administration
- Subconsultant management for construction phasing, geotechnical investigation, and surveying
- Civil design drawings
- Engineer's design report
- Technical specifications and bidding documents
- Permitting for erosion and sedimentation control
- Construction cost estimation
- Bidding and construction contract award assistance
- Construction administration



Baker also coordinated the phasing and geometric and airfield lighting design with the ongoing airfield lighting cable and drainage upgrades and CD apron reconstruction projects currently in construction.

Challenge and Solution

Challenge

The project was located in one of the most high-traffic areas of the airport. It was not practical to close the taxiway intersection for the duration of construction.

Solution

The Baker team's solution was to reroute the taxiway traffic around the construction site by moving the taxiway centerline closer to the terminal building. The team closely coordinated with the airlines in the temporary relocation of eight gates to other areas of the terminal to avoid impacts to airline operations.

Value-Added

The Baker team helped to save the client time and money by taking a proactive approach to issues involving project guidance, direction, and decision making. Early buy-in from the airlines and stakeholders prevented any unnecessary project redesign. Close coordination with the client and the FAA throughout the project helped to expedite approvals. Bid alternates were prepared for the construction phasing to identify the most cost-effective construction sequence with the least impacts to airfield operations.