

Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Centralized Expression of Interest 02 — Architect/Engr

Proc Folder: 530551

Doc Description: EOI- Wheeling AASF#2 Aircraft Hangar Addition

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No		Version
2019-01-04	2019-01-25 13:30:00	CEO! 0603	3 ADJ1900000013	1

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV

25305

US

VENDOR

Vendor Name, Address and Telephone Number:

Alpha Associates, Inc 209 Prairie Ave. Morgantown, WV 26501 304-296-8216

RECEIVED

2019 JAN 24 AM 10: 03

W PURCHAGING DIVISION

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale (304) 558-8801

stephanie.l.gale@wv.gov

Signature X

FEIN # 550516286

DATE 1/22/19

All offers subject to all terms and conditions contained in this solicitation

Page: 1

FORM ID: WV-PRC-CEOI-001

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Richard A. Colebank, President & COO
(Name Title)
(Printed Name and Title)
209 Prairie Ave, Morgantown, WV 26501
(Address)
<u>304-296-8216/ 304-296-8245</u>
(Phone Number) / (Fax Number)
rick.colebank@thinkalphafirst.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Alpha Associates, inc
(Company)
hullelul
(Authorized Signature) (Representative Name, Title)
Frahano A. Colebank Parswort dlos
(Printed Name and Title of Authorized Representative)
1/22/19
(Date)
304-296-8216/ 304-296-8245
(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:	
(Check the box next to each addenda	m received)
Addendum No. 1 Addendum No. 2 Addendum No. 3 Addendum No. 4 Addendum No. 5	Addendum No. 6 Addendum No. 7 Addendum No. 8 Addendum No. 9 Addendum No. 10
discussion held between Vendor's re-	ne receipt of addenda may be cause for rejection of this bid epresentation made or assumed to be made during any oral presentatives and any state personnel is not binding. Only added to the specifications by an official addendum is
Alpha Associates, Inc Company	
Authorized Signature	
Audiorized Signature	
1/22/19	
Date	
NOTE The 11 1	

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

West Virginia Ethics Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Contracting Busin	ess Entity: Alpha Associates, Inc	Address: _209	Prairie Ave, Morgantown, WV 26501
Authorized Agent:	Richard A. Colebank	Address;	<u> </u>
Contract Number:	CEOI 0603 ADJ1900000013		Wheeling #AASF2 Aircraft Hangar
Governmental ager	ncy awarding contract: West Virgin	ia Purchasing Division	Addition
☐ Check here if th	is is a Supplemental Disclosure		
List the Names of Into entity for each categor	erested Parties to the contract which a ory below (attach additional pages if a	are known or reasonably ar necessary):	nticipated by the contracting business
1. Subcontractors	or other entities performing work	or service under the Cor	itract
☐ Check here if r	none, otherwise list entity/individual n	ames below.	
	ltants- Scott Kunselman ompany- Thomas Deter		
2. Any person or each Check here if n	ntity who owns 25% or more of controlled the of controlled the order of controlled the order of	ntracting entity (not applanes below.	icable to publicly traded entities)
Richard A. Co Richard W. K			
3. Any person or e services related	entity that facilitated, or negotiate to the negotiation or drafting of the	d the terms of, the app	olicable contract (excluding legal
Check here if n	one, otherwise list entity/individual na	mes below.	
Signature: Mult	Select fre do	Date Signed: 1/2	2/10
Notary Varificati		Date Signed	2113
State of West Virginia	, Co	unty of Upshur	
I, <u>Kayla Facemire</u> entity listed above, bei penalty of perjury.	ing duly sworn, acknowledge that the	the authorize Disclosure herein is beir	ed agent of the contracting businessing made under oath and under the
Taken, sworn to and si	ubscribed before me this 22nd	day	
	La	MARTA	
To be completed by S Date Received by State	e Agency:	Notary Public's Sig	
Date submitted to Ethic	s Commission:		OFFICIAL SEAL
Governmental agency	submitting Disclosure:		STATE OF WEST VIRGINIA NOTARY PUBLIC Kayla D Facemire

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, 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; (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. 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.

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.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the

"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.

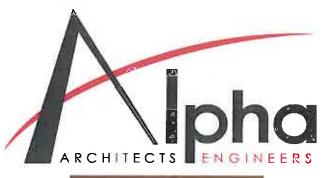
AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

My Commission expires Sep. 13, 2020

Vendor's Name: Alpha Associates, Inc		
Authorized Signature: hulleleleleled	Date: 1/22/19	
State of West Virginia		
County of Upshur , to-wit:		
Taken, subscribed, and sworn to before me this 22 day of		
My Commission expires September 19		
AFFIX SAFETHER STATE OF WEST VIRGINIA NOTARY PUBLIC	NOTARY PUBLIC	
Kayla D Facemire PO Box 1083 Buckhannon, WV 26201 My Commission Expires Sep. 19, 2023	Purchasing Affidavit (Revised 01/19/2018)	







$\frac{\text{H.F. LENZ}}{\text{COMPANY}}$

West Virginia Purchasing Division CEOI 0603 ADJ1900000013

Wheeling AASF#2 Aircraft Hangar Addition

Architectural/Engineering Services

January 25, 2019
EXPRESSION OF INTEREST











January 25, 2019

Purchasing Division 2019 Washington St E Charleston, WV 25305

ATTN: Stephanie Gale

RE: CEOI 0603 ADJ1900000013

Wheeling AASF#2 Aircraft Hangar Addition

Dear Ms. Gale,

Alpha Associates, Incorporated is pleased to submit this Expression of Interest to provide architectural and engineering services for the Wheeling AASF#2 aircraft hangar addition project. We understand the Hanger will be utilized to store and maintain two UH-60 Helicopters. The program will be provided to the successful Architect. Alpha's experience in the area and previous work performed along with our unparalleled level of expertise makes us the perfect partnering firm for the State on this project.

Engineering Services for Airports and the ARNG require a different mindset from the normal project. It is important that the engineers be able to understand the needs of the airport and the ARNG not only from the engineering aspect but also from the pilot, airport administration and ARNG point of view. As engineers and pilots, Alpha Associates, Incorporated understands the many challenges that are faced in this ever-changing industry. This hanger will have different uses rather than a normal parking place for the helicopters. It will also be a maintenance hangar that will require special needs to facilitate the mission of Alpha has the experience to assist you in the pursuit having the ARNG. performed engineering services for airports since 1995. With that in mind Alpha Associates, Incorporated has selected GAI Consultants as a team member to provide the additional aviation experience that may be needed for this specific contract, as well as HF Lenz for all mechanical, electrical and plumbing expertise. A summary of our Team's qualifications is included for your consideration.

EXPERIENCE

Alpha is experienced in the design of airport facilities and the various requirements of the Federal Aviation Administration (FAA) as well as ARNG. Several of the personnel working on the airport projects are pilots as well as



engineers and as such understand the airport from a working as well as engineering standpoint. Throughout the years, Alpha has made a significant commitment to gaining and maintaining our knowledge of FAA guidelines and changes and the interaction with National Guard facilities.

SUMMARY

Alpha's work has literally touched all facets of airport operations and FAA regulations. Our experience as engineers and pilots provide us with more than the engineering knowledge needed to do a good job but also with the practical experience needed to foresee problems the text books don't anticipate We will work side by side with the West Virginia Army National Guard to ensure this project is completed in a timely, cost effective manner with minimal complications or interruptions. If you have any questions or require additional information, please call me at 304-296-8216 extension 102.

Sincerely,

ALPHA ASSOCIATES, INCORPORATED

Richard A. Colebank, PE, PS

President and COO

rick.colebank@thinkALPHAfirst.com















FIRM NAME

Alpha Associates, Incorporated

OFFICE LOCATIONS

209 Prairie Avenue Morgantown, West Virginia 26501

535 West King Street Martinsburg, West Virginia 25401

INCORPORATED

1969; Morgantown, WV

FIRM PRINCIPALS

Richard A. Colebank, PE, PS; President and COO Richard W. Klein, PE, PS; Chairman and CEO Charles B. Luttrell, PE; Principal Charles B. Branch, PE; Principal

NUMBER OF EMPLOYEES

24 Employees

SERVICES

Architectural Design
Civil Engineering
Structural Engineering
Surveying
Interior Design
Landscape Architecture
Construction Administration



Alpha Associates, Incorporated was established in 1969 and since that time has completed hundreds of projects throughout West Virginia and the surrounding states. Alpha's Corporate Office is located in Morgantown with our Eastern Regional Office located in Martinsburg.





Johnstown Headquarters

1407 Scalp Avenue Johnstown, PA 15904 Phone: 814-269-9300 Fax: 814-269-9301

Pittsburgh Office

1051 Brinton Road Pittsburgh, PA 15221 Phone: 412-371-9073

Ohio Office

322 State Street Conneaut, OH 44030 Phone: 440-599-7800 Fax: 440-599-7801

Connecticut Office

101 Centerpoint Drive Suite 237 Middletown, CT 06457

Phone: 203-314-5523

H.F. Lenz Company

H.F. Lenz Company was established 1946 in its present form, under the name H.F. Lenz Company, R.E., and in 1953 the company was incorporated, as a Private Corporation, in Pennsylvania as H.F. Lenz Company. Our projects span the nation, with the heaviest concentration in the Northeast, and exceed \$530 million in MEP, Civil and Structural construction annually. Each market sector—corporate, government, health care, education, and industry—is served by a team of specialists who understand the unique needs of the clients they serve. Our staff consists of 150 individuals, including 50 Licensed Professional Engineers and 17 LEED Accredited Professionals. Our headquarters is in Johnstown, Pennsylvania with branch offices in Pittsburgh, Pennsylvania Conneaut, Ohio, and Middletown, Connecticut.

DISCIPLINES/SERVICES OFFERED IN-HOUSE INCLUDE:

- > Mechanical Engineering
- Electrical Engineering
- Data/Communications Engineering
- Fire Protection / Life Safety Engineering
- > Structural Engineering
- Civil Engineering
- Surveying
- GIS

- Construction Phase Services
- Commissioning and Training
- 3D CADD with Full Visualization
- Energy Modeling
- Sustainable design/LEED
 Services
- Building Information Modeling (BIM)

AVIATION FACILITIES

H.F. Lenz Company has extensive experience in the design of aviation facilities of various types for both private and public clients. This experience includes our current new terminal project at Williamsport Regional Airport, as well as projects at the Erie International Airport (Tom Ridge Field), Greater Pittsburgh International Airport, John Murtha Johnstown-Cambria County Airport and facilities for several large corporate clients and governmental agencies such as the Ohio National Guard, U.S. Air Force, U.S. Army, and the Pennsylvania Air National Guard. Our team's experience ranges from a new 80-acre aviation facility, to a new regional maintenance facility for military vehicles of all types and sizes, to a new pressurized hydrant fueling system, to hangars for both fixed wing and rotary wing aircraft, to various renovation and upgrade projects for an International airport.

We are thoroughly familiar with current FAA standards and procedures, as well as with Pennsylvania Building Codes and NFPA standards.

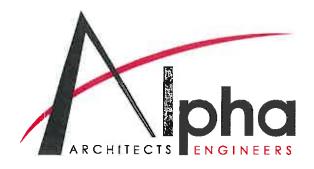




Transforming ideas into reality® since 1958, GAI Consultants is an employee-owned company that delivers award-winning engineering, planning, and environmental expertise to energy, transportation, development, government, and industrial clients worldwide. GAI's accomplished specialists are dedicated to earning our clients' trust—they approach every initiative with enthusiasm and integrity, delivering multifaceted services to meet the greatest challenges.

Transforming The Way We Travel

Airports nationwide face a capital development need of over \$75.7 billion for the next four years, while the proposed FAA funding for the same period is projected to be less than a quarter of that amount. Vital to transporting people and cargo around the world, airports face the complex challenge of maintaining a safe, reliable facility while enduring some of the most challenging economic and funding conditions in decades. GAI strives to provide sustainable, economical solutions to maximize our clients' infrastructure investment. We employ professionals who are accomplished in land development, design, transportation planning, environmental studies, and construction phase services. Our team of professionals understand the importance of building strong relationships with our clients through honest communication, concise plans and reports, commitment to the project from start to finish, and providing outstanding service throughout.



STATEMENT OF QUALIFICATIONS

Alpha Associates, Incorporated is an Architectural and Engineering design firm that provides services in the areas of Architectural Design, Civil Engineering, Structural Engineering, Landscape Design, Interior Design, Construction Administration, Project Management, and Surveying. Our clients benefit from our unique combination of extensive design and construction experience, advanced technical tools, dedicated principals and highly skilled staff members.

Alpha is experienced in the design of airport facilities and the various requirements of the Federal Aviation Administration (FAA). Several of the personnel working on the airport projects are pilots as well as engineers and as such understand the airport from a working as well as engineering standpoint. Our work encompassed four separate airport administrators, two city managers, new personnel at the FAA regional office, and various other changes that have occurred throughout the industry including the many changes that occurred after September 11, 2001. Throughout the years, Alpha has made a significant commitment to gaining and maintaining our knowledge of FAA guidelines and changes. Alpha has many years of experience with airport facilities ranging from equipment purchases to ramp repairs all the way to Runway and Taxi rehabilitations, hangars and modifications of navigation aids.

We have provided projects that combine multiple government agencies and a variety of sources of funding including FAA discretionary and FHWA funding. We are experts at delivering non-conventional projects. Alpha can provide you the best combination of experience, location and value for your airport.

Everyone at Alpha, from the President to the administrative staff, all work towards the goal of completing successful projects. Our principals are involved with projects from the earliest stages right through final completion and beyond. They will consistently update you on your project by using effective communication tools to manage the projects and all the involved parties. Our skilled staff of twenty-four (24) architects, engineers, surveyors and administrative personnel all work diligently toward producing the drawings and specifications that will deliver our clients successful projects, completed on time and within budget.

Alpha has thrived for 50 years because we are a professional organization dedicated to providing superior architectural and engineering design services to our clients. While our staff is large enough to handle any size project, we are also small enough to give each and every one of our projects the individual attention to detail that will make them successful projects for our clients.





STAFFING PLAN

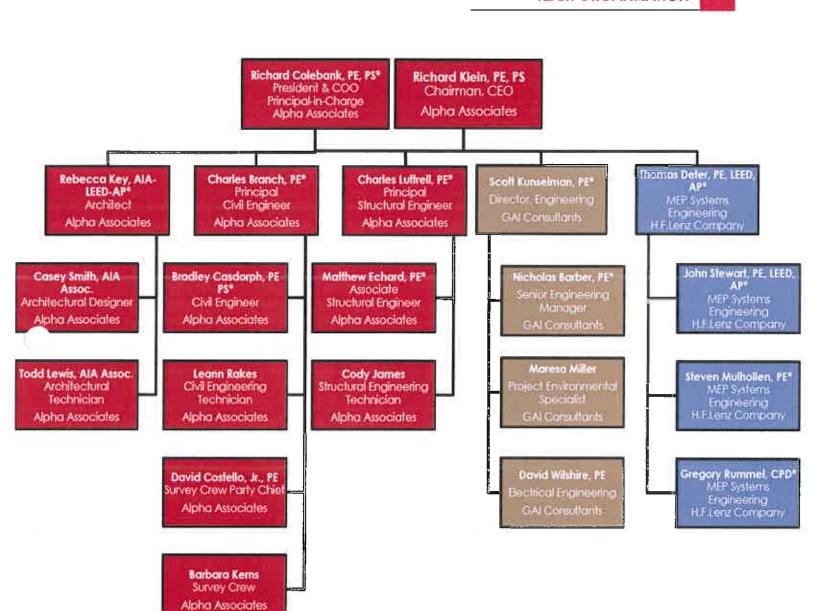
All work to be performed for the Wheeling AASF #2 Aircraft Hangar Addition project will be managed out of Alpha's Morgantown office. In addition to your dedicated Project Team, Alpha's staff as well as GAI Consultants, HF Lenz and support staff will be available to assist with any potential project need.







TEAM ORGANIZATION





COST AND SCHEDULE CONTROL

Alpha Associates, Incorporated has an excellent track record of producing projects on time and within the Owner's budget. Many architectural firms can claim the same successes few actually achieve the results Alpha has over the years. One of the determining factors is the tools the firms utilize to produce the budgets. Alpha utilizes a number of tools, both traditional and modern to exceed our clients' expectations.

A project schedule is a dynamic, ever changing entity. Your project schedule depends on many factors including:

- Personnel assigned to the project
- Chosen method of construction
- Changes to project scope
- Unique construction elements for each project

Successful project management depends upon consensus regarding work efforts, milestones and goals. The Alpha team has found that the development of detailed work plans, which delineate tasks and deliverables for each project phase, in concert with the client and full project team, is the most effective means of establishing expectations regarding the efforts required by the respective disciplines. In addition to guiding the efforts of the design team, the work plan sets forth specific time frames and decision points for Owner and user reviews, comments and approvals. Adherence to the schedule is the responsibility of the Project Manager. The Project Manager must insure the team members, including the owner have bought into the schedule and are maintaining their respective duties.

Developing an overall project schedule is a critical task that must take into account many factors: building type, owner's desire for occupancy, scope of work and level of documentation, whether contract(s) is bid or negotiated, available fee, and prior experiences on similar projects. Characteristic of the client, its organization, or the involvement of a construction manager and his responsibility for document review must also be considered.

This starts with a kick-off meeting which establishes ground rules, responsibilities, and line of communication. We have found that a team visioning session is a





great way to get everyone started off on the right track.

Determining a project schedule is a task that must be done with all parties involved in the process. Once the design process begins, a very detailed, realistic project schedule can be developed and communicated to all involved.

In a world where "time is money", the schedule of a project is almost as important as controlling the cost. Alpha also works diligently to control the budget of a project. The best way to control the cost of a project is to avoid the "scope creep" that can occur

Alpha also has an excellent record of budget control. Alpha's in house cost estimators, combined with an excellent relationship with contractors throughout the area enable us to develop accurate estimates early in the design process. The Alpha estimators begin at the schematic design phase of the project and develop a line item estimate of probable construction costs that can be carried through each of the project phases. At each phase the project estimate is updated to include a more detailed estimate in order that the accuracy can be enhanced. During these updated estimates, specific increases or decreasing can be identified allowing the owner to make informed decisions moving forward on the important budget issues for the project.

Many projects employ the use of alternatives' to control the budget through obtaining actual contractor pricing during the bid process. This allows flexibility for the owner in determining the costs of portions of the project that may be optional and critical for budget control.





CAPACITY AND SOFTWARE



Capacity

Alpha Associates, Incorporated is prepared to commit staff resources to the Wheeling AASF#2 Aircraft Hangar Addition project. Alpha has the qualified and experienced personnel, administrative support, along with the production equipment and resources to ensure the successful completion of this project. We are confident in our ability to provide the WVANGA with a committed and dependable design team. Our multidisciplinary design team is prepared to meet and exceed the expectations of the State by committing any resources necessary to meet the project schedule.

Software

The project team incorporates the latest computer and software capabilities required to complete the working drawings and specifications for this project. Our cost accounting system is top-of-the-line and we have the ability to differentiate fees according to task. We have secure e-mail and internet capability to allow efficient transfer of information between Alpha and the client. We currently have the latest editions of the following software:

- AutoCAD 18
- ➤ REVIT (Editions up to ➤ Enercalc) 2018)
- Civil 3D
- ➤ RISA 3D
- ➤ RISA Floor
- > RISA Foundation
- MathCAD

- Autodesk Suite
- AutoTURN
- ➤ TopCon GR5 GPS System
- TopCon Total Station with Reflectorless Capabilities
- Carlson Surveyor & Data Collector





SUMMARY



ALPHA RESUMES



Richard A. Colebank, PE, PS President and COO

Mr. Colebank is President and Chief Operating Officer of Alpha. He has been with Alpha Associates, Incorporated since 1985. He began his career with Alpha as a staff engineer and progressed through the ranks from Project Manager to his current position. Mr. Colebank has worked with diverse clients such as WVU, City of Morgantown, WVDOH, WVU Foundation, and the Morgantown Municipal Airport, as well as numerous other public and private clients. Since 1988, Mr. Colebank has been the Principal-In-Charge of the Civil Engineering projects developed at Alpha. In his current capacity, Mr. Colebank provides financial and administrative guidance for the day to day operations of the company while continuing to manage projects.



PROFILE

Broad-based responsibilities in the following areas:

- Project Management
- Business Operations and Financial Management
- Quality Assurance/Quality Control
- Civil Engineering Project Management and Design
- New Business Development
- Expert Testimony and Investigation

PROFESSIONAL HIGHLIGHTS

Project Manager:

- WVU Research Park; Morgantown, WV
- Federal Bureau of Prisons Hazelton Medium Security Prison
- WV Medal of Honor Recipients Plaza; Hazelton, WV
- North Fork Hughes River Recreation Facilities; Ritchie County, WV
- WVDOH I-77 Welcome Center; Williamstown, WV
- Ices Ferry Bridge; Morgantown, WV
- Monongalia General Hospital Expansion; Morgantown, WV
- Monongalia General Hospital Access Road; Morgantown, WV
- Morgantown Municipal Airport Access Road; Morgantown, WV
- West Virginia State Office Building; Clarksburg, WV
- WVU College of Physical Education and Sports Science/Student Health Center; Morgantown, WV

Indefinite Delivery/Indefinite Quantity Contracts:

- Morgantown Municipal Airport Open End Contract
- West Virginia Division of Highways Open End Contract
- National Energy Technology Laboratories Open End Contract
- West Virginia University Open End Contract
- United States Postal Service Open End Contract









Richard A. Colebank, PE, PS President and COO



1985 - Current Alpha Associates, Incorporated
 1983-1985 Charles Townes and Associates, P.C.
 1983 US Army Corps of Engineers

EDUCATION

West Virginia University

Masters of Business Administration; 1999

Bachelor - Civil Engineering; 1982

QUALIFICATIONS

 License: Professional Engineer: West Virginia, Maryland, Pennsylvania, Virginia

Professional Surveyor: West Virginia

Certified Private Pilot

AFFILIATIONS

- Former NSPE/PEPP Governor of WV
- American Red Cross Regional Chairman
- University High School Foundation; Charter Member; President
- Morgantown Area Chamber of Commerce; Past Chairman
- WVU College of Civil and Environmental Engineering Visiting Committee
- WVU College of Business and Economics MBA Advisory Committee





Contact Richard A. Colebank 304.296.8216 800.640.8216 rick.colebank@thinkalphafirst.com









SUMMARY

Richard W. Klein, PE, PS Chairman and CEO

Mr. Klein, in addition to Chairman and CEO, serves as Regional Manager and Civil Engineer of our Martinsburg Office. He has more than 43 years of experience in Civil Engineering Design, Construction Phase Services, Project Management and Operations Management. During the past 29 years, Mr. Klein worked on numerous projects in the Eastern Panhandle serving clients such as the Cities of Martinsburg, Shepherdstown, Harper's Ferry, Charles Town and Berkeley Springs; Public Service Districts In Berkeley, Jefferson, and Morgan Counties; industries such as Winchester and Western Railroad, Halltown Paperboard, Millville Quarry, ESSROC and major developments including Liberty Business Park, Coast Guard Operations Systems Center and the Eastern Management Development Center.



PROFILE

Broad-based responsibilities in the following areas:

- Municipal Engineering
- Site Planning
- Storm Water Management
- Water Distribution Systems
- Waste Water Collection and Treatment
- New Business Development

PROFESSIONAL HIGHLIGHTS

Civil Engineering Projects:

- Shepherd University Pedestrian Underpass; Shepherdstown, WV
- Washington High School; Charles Town, WV
- Harpers Ferry/Bolivar WWTP Design Improvements
- Bradstone-Shenandoah Casting Plant Site Plan
- TB&H Ready-Mix Concrete Plant Site Design
- The Woods Home Owners Association Water System Analysis
- Shepherd College Interceptor Sewer; Shepherdstown, WV
- Martinsburg Roundhouse Site Design; Martinsburg, WV
- Cumberland Valley Railroad Depot; Martinsburg, WV
- Halltown Paperboard Company, Wastewater Treatment Plant
- * Corp. of Shepherdstown, Renovation of Main Sewage Pump Station
- Martinsburg Little League Fields, Martinsburg, WV
- Berkeley Co. Court House, Parking Lots and Storm Water Management
- Berkeley Springs Water Storage Tank/ Mainline Extension
- United States Coast Guard Parking Lots and Guard House
- Swift Transportation Truck Depot Site Plan
- Eastern Management Development Center; Shepherdstown, WV
- Berkeley Springs Water System Improvements Phase 1, 2, and 3
- Rt. 522 South, Water and Sewer System Extensions; Morgan County
- Colonia! Hills Subdivision; Jefferson County, WV
- Quail Ridge Subdivision; Berkeley County, WV









Richard W. Klein, PE, PS | Chairman and CEO



1995 - Current Alpha Associates, Incorporated

1974-1995 Kelley, Gidley, Blair and Wolfe, Incorporated



University of Charleston Masters of Business Administration; 1987 West Virginia Institute of Technology Bachelor of Science - Civil Engineering; 1973

QUALIFICATIONS

• License: Professional Engineer: West Virginia, Maryland, South Carolina

Professional Surveyor: West Virginia

AFFILIATIONS

- WV Society of Professional Engineers
- National Society of Professional Engineers
- American Society of Civil Engineers
- American Water Works Association
- Water Pollution Control Federation
- Main Street Martinsburg, Member
- Berkeley County Historical Association, Member
- Shepherdstown Rotary Club
- •WVU Medicine, University Healthcare Foundation Executive **Board**
- For the Kids by George Children's Museum





Contact

Richard W. Klein 304.264-0051 877-264-0051

richard.klein@thinkalphafirst.com









Charles Branch, PE | Principal, Civil Engineer

SUMMARY

As Chief Engineer for site development and planning projects, Mr. Branch is a vital part of the design process at Alpha. His involvement spans from strictly civil engineering projects, to the design of large scale educational projects and medical facilities. Mr. Branch acts as peer review for young engineers in the firm on issues ranging from storm water management to site design. Mr. Branch is also involved in commercial and residential development design, roadway and bridge design and utilities layout.



PROFILE

Broad-based responsibilities in the following areas:

- Highway Design
- Municipal Engineering
- Wastewater Collection
- Storm Sewer System Design
- Storm Water Management
- Site Engineering
- Project Management

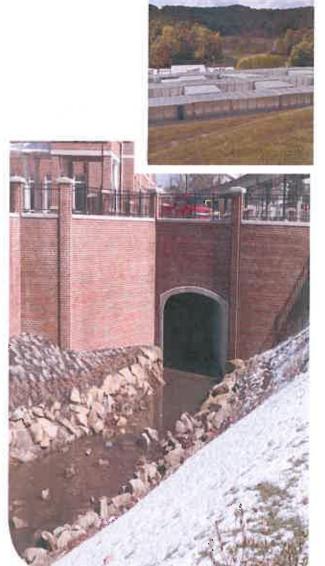
PROFESSIONAL HIGHLIGHTS

Civil Engineer/Project Manager:

- Jane Lew Truck Stop; Jane Lew, WV
- Clarksburg State Office Building;' Clarksburg, WV
- WVU Reedsville Farm Redevelopment; Morgantown, WV
- Freedom Automotive Group Dealerships; Morgantown, WV
- Freedom Kia; Clarksburg, WV
- WVU Parking Lot 81 Renovations; Morgantown, WV
- WVU Doll's Run Burn Room; Morgantown, WV
- WVU Alumni Center Parking Lot; Morgantown, WV
- WVU Alumni Center Storm Water Management; Morgantown, WV
- WVU Evansdale Redevelopment; Morgantown, WV
- WVU Health Sciences Center Eastern Division; Martinsburg, WV
- Blackshere Bridge; Mannington, WV
- WVDOH I-77 Welcome Center; Williamstown, WV
- WV Medal of Honor Recipients Plaza; Hazelton, WV
- Lewis County High School Bridge; Weston, WV
- Wyoming County Route 10 Relocation; Wyoming County, WV
- Fairmont Federal Credit Union; Bridgeport, WV









Charles Branch, PE

Principal, Civil Engineer

EMPLOYMENT HISTORY

1992 – Current Alpha Associates, Incorporated 1988-1992 Reimer, Muegge, & Associates, Inc.

EDUCATION

West Virginia University
Bachelor - Civil Engineering; 2000
Fairmont State College
Bachelor Architectural Engineering Technology; 1988

QUALIFICATIONS

• License: Professional Engineer: West Virginia

AFFILIATIONS

- WV Society of Professional Engineers
- National Society of Professional Engineers



Contact Charles B. Branch
304.296.8216
800.640.8216
chuck.branch@thinkalphafirst.com



SUMMARY



ALPHA RESUMES



Charles B. Luttrell, PE | Principal, Structural Engineer

Mr. Luttrell has worked with Alpha Associates, Inc. since 1996. He is the chief structural engineer on all projects at Alpha. Before coming to Alpha, Mr. Luttrell's graduate work resulted in several contributions to the cold-formed steel deck industry. His new method of analysis for non-uniform loads on composite concrete and cold formed steel decks has been made a permanent part of the Steel Deck Institute's design manual. Mr. Luttrell also worked on projects that involved pre-stressed timber bridge research with the WVU Constructed Facilities Center. Since coming to Alpha, Mr. Luttrell has had significant involvement in the effort to begin utilizing modern composite materials in practical bridge applications.



PROFILE

Broad-based responsibilities in the following areas:

- Bridge Structural Design and Analysis
- Innovative Bridge Materials Applications
- Building Structural Design and Analysis
- Historical Restoration and Evaluations

PROFESSIONAL HIGHLIGHTS

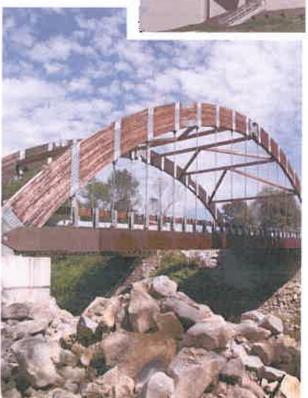
Structural Engineer:

- Freedom Automotive Group 3 Dealerships; Morgantown, WV
- Hazel Ruby McQuain Equine Education & Resource Center; WVU
- WVDOH Arnettsville Replacement Bridge; Morgantown, WV
- Clarksburg State Office Building; Morgantown, WV
- Grant County Bank Addition & Renovation; Petersburg, WV
- South Berkeley Fire Station; Inwood, WV
- Alumni Center Structural Framing and Foundation; WVU
- Engineering Science Building, East Wing Addition, WVU
- Hazel Ruby McQuain Amphitheater Roof; Morgantown, WV
- · West Buckeye Bridge; Core, WV
- Washington High School; Charles Town, WV
- WVU Coliseum Structural Inspection; Morgantown, WV
- WVU Coliseum Scoreboard Hoist Project; Morgantown, WV
- Alderson Broaddus College, Rex Pyles Arena Deck; Philippi, WV
- Mountaineer Middle School Renovation; Morgantown, WV
- Salem International Building Inspections; Salem, WV
- Monongalia County Sheriff's Building; Morgantown, WV
- South High Street Bridge, Morgantown, WV
- Ices Ferry Bridge, Morgantown, WV









ALPHA RESUMES

Charles B. Luttrell, PE Principal, Structural Engineer

EMPLOYMENT HISTORY

1996 - Current Alpha Associates, Incorporated

1995-1996 Larry D. Luttrell, PE, Ph D 1991-1994 West Virginia University

1990-1991 WVU Constructed Facilities Center

EDUCATION

West Virginia University

Masters - Structural Engineering; 1995 Bachelor - Civil Engineering; 1993

QUALIFICATIONS

• License: Professional Engineer: West Virginia, Pennsylvania

AFFILIATIONS

- WV Society of Professional Engineers
- National Society of Professional Engineers
- Chi Epsilon; Member
- American Concrete Institute; Member

Research Experience

- Cold Formed Steel Deck Research
 - ✓ Fastener Failures
 - Edge conditions/failures
 - Buttoned overlap sheer failures
- Composite Cold Formed Steel and Concrete Deck Research
 - ✓ Line load behavior/failures
 - Concentrated load behavior/failures
 - ✓ Web crippling
 - Punch failures



Contact

Charles B. Luttrell 304.296.8216 800.640.8216 charlie.luttrell@thinkalphafiist.com





ALPHA RESUMES



Bradley Casdorph, PE, PS | Civil Engineer

SUMMARY

Mr. Casdorph joined the Alpha Associates, Incorporated team in 2004 and currently works as a project engineer in the Morgantown office. He has 36 years of professional experience with roadway design, storm sewer design, airport airside renovation and design, storm water management including conveyance and detention, environmental permitting, project administration supervision and inspection, as well as boundary and construction surveying.



PROFILE

Broad-based responsibilities in the following areas:

- Airport Planning and Design
- Highway Design
- Hydraulic and Hydrology Studies
- Site Plan Development
- Land Surveying

PROFESSIONAL HIGHLIGHTS

Civil Engineering:

- Platinum Properties Waterfront Conference Center; Morgantown, WV
- Hart Field Runway Safety Area; Morgantown, WV
- Hart Field Ramp Renovation and Deicing Facility; Morgantown, WV
- * Hart Field Signage and Lighting; Morgantown, WV
- Hart Field Airport Certification Manual; Morgantown, WV
- Hart Field Air Rescue and Fire Fighting Vehicle Procurement, WV
- WVU Lot 81 Parking Area Improvements; Morgantown, WV
- *WVU Animal Facilities Annex, Engineering Retrofit; Morgantown, WV
- McKee Crossing 120 Acre Subdivision; Martinsburg, WV
- Morgantown Municipal Airport Access Road; Morgantown, WV
- Davisson Estates 60 Acre Subdivision; Morgantown, WV
- Mon General Hospital East Parking Area; Morgantown, WV
- Applebee's Restaurant, Site Plan; Morgantown, WV
- WVU CPASS/Student Health; Morgantown, WV
- WVU Research Park- 100 Acre ALTA/ACSM Survey; Morgantown, WV
- WVU Museum; Morgantown, WV









Bradley Casdorph, PE, PS | Civil Engineer



2004 – Current Alpha Associates, Incorporated 1979-2004 Triad Engineering, Incorporated

EDUCATION

West Virginia University Masters - Soil Conditions and Foundation Design; 1982 Bachelor - Civil Engineering; 1979

QUALIFICATIONS

 License: Professional Engineer: West Virginia Professional Surveyor: West Virginia Certified Private Pilot

AFFILIATIONS

- WV Society of Professional Engineers
- National Society of Professional Engineers
- WVSPS Mountain Regional Chapter; President
- Aircraft Owners and Pilots Association; Member





Contact Bradley Casdorph 304.296.8216 800.640.8216 brad.casdorph@thinkalphafirst.com



Bachelor of Science, Electrical Engineering Technology, 1987, University of Pittsburgh at Johnstown

EXPERIENCE

H.F. Lenz Company 1992-Present Parfitt/Ling Consulting Engineers 1990-1992 • Gary Johnston & Assoc., Inc. 1987-1990

PROFESSIONAL REGISTRATION / CERTIFICATION

Licensed Professional Engineer in Pennsylvania, Arkansas, Idaho Illinois, Indiana, Maryland, Nebraska, New Jersey, North Carolina, Ohio, Oklahoma, Oregon, South Dakota, Virginia, and West Virginia • LEED Accredited Professional

PROFESSIONAL AFFILIATIONS

NSPE/PSPE • U.S. Green Building Council

Thomas F. Deter, P.E., LEED AP

Principal-in-Charge of MEP Systems Engineering

Mr. Deter has over 30 years of experience and is responsible for the engineering design of all trades, the supervision of senior designers, the preparation of reports to determine optimal systems and/or equipment selections, and the coordination and checking of contract documents for completeness and quality. He has extensive experience in the design of building systems for both new buildings and building retrofits for educational, health care, commercial, government, industrial, residential, and utility related facilities. He is experienced in the design of power distribution systems; emergency power systems and monitoring; uninterruptible power supplies; lighting and emergency lighting systems; fire alarm systems; security; sound; and telephone systems.

PROJECT EXPERIENCE

U.S. Armed Forces Aviation Facility, Johnstown, Pennsylvania

New 120,000 sq.ft, multi-complex aviation facility for both rotary and fixed wing aircraft on an 80-acre site

911th Airlift Wing, U.S. Air Force Reserve, Greater Pittsburgh International Airport, Coraopolis, Pennsylvania

 Various renovations and new construction under two term contracts including hangar renovations

Pennsylvania Air National Guard, Johnstown, Pennsylvania

- New 23,560 sq.ft. maintenance shop with eight maintenance bays, flammable storage, general storage areas, and an on-site fuel dispensing station
- Feasibility Study and design services for the repairs to the Composite Support Facility for the 256th Air Traffic Control Squadron

Pennsylvania Army National Guard, Pennsylvania

- Rehabilitation of New Castle Readiness Center
- Rehabilitation of Crane Readiness Center

Letterkenny Army Depot, Chambersburg, Pennsylvania

- Over 100 projects completed under seven consecutive term contracts
- Rocket Army Munititions Center (LEMC), AP Rocket Motor Destruction Facility, Phase I

U.S. Army Reserve Center, Wheeling, West Virginia

 Design/build training building with classrooms, administrative areas, library, assembly hall, weaponeers room and medical section, and 17,000 sq.ft. OMS/AMSA





Master of Science, Mechanical Engineering, 1995, University of Pittsburgh

Graduate Courses in Facilities Engineering, 1984-1987, Air Force Institute of Technology

Bachelor of Science, Mechanical Engineering, 1984, University of Pittsburgh

EXPERIENCE

H.F. Lenz Company 1995 – Present / Peter F. Loftus Division, Eichleay Engineers, Inc. 1989 – 1996 / Newport News Shipbuilding 1988 – 1989 / U.S. Air Force 1984 – 1988

PROFESSIONAL REGISTRATION / CERTIFICATION

Licensed Professional Engineer in Pennsylvania; LEED Accredited Professional

PROFESSIONAL AFFILIATIONS

American Society of Heating, Refrigerating, and Air-Conditioning Engineers; APPA; U.S. Green Buildings Council

John C. Stewart, P.E., LEED AP

Alechanica Euripeur

Mr. Stewart has 34 years of experience in the design of HVAC, plumbing, and fire protection systems. His responsibilities have included code compliance verification, schematic layout, calculations, equipment selection, control system selection, specification writing, coordination, life cycle cost analyses, and cost estimating. His experience includes the design of mechanical systems for laboratories, hospitals, educational facilities, industrial plants, and military installations. He has also been involved in the design of chiller and boiler plants.

PROIECT EXPERIENCE

Ohio National Guard, Akron-Canton Regional Airport, Akron, Ohio

 New 26,400 sq.ft, aircraft storage facility and partial demolition, expansion, and renovations to the existing hanger. The project included the design of a new fire suppression system

911th Airlift Wing, U.S. Air Force Reserve, Greater Pittsburgh International Airport, Coraopolis, Pennsylvania

 Various renovations and new construction under two term contracts including hangar renovations

Pennsylvania Air National Guard, Johnstown, Pennsylvania

- New 23,560 sq.ft. maintenance shop with eight maintenance bays, flammable storage, general storage areas, and an on-site fuel dispensing station
- Feasibility Study and design services for the repairs to the Composite Support Facility for the 258th Air Traffic Centrol Squadron

Letterkenny Army Depot, Chambersburg, Pennsylvania

- Over 100 projects completed under seven consecutive term contracts
- → Building 1, New SCIF

Pennsylvania Army National Guard, Pittsburgh, Pennsylvania

- Rehabilitation of New Castle Readiness Center
- > Rehabilitation of Crane Readiness Center

Camp Dawson, U.S. Army National Guard, Kingwood, West Virginia

Three new billeting facilities

Walter Reed Army Medical Center

 Renovation and upgrade to Building 12, Provost Marshal's Facility





Bachelor of Science, Electrical Engineering, 1988, The Pennsylvania State University

EXPERIENCE

H.F. Lenz Company 1999 – Present • L. Robert Kimball & Associates 1996 – 1999 • Leach Wallace Associates, Inc. 1990 – 1996 • E.A. Mueller, Inc. 1988 - 1990

PROFESSIONAL REGISTRATION / CERTIFICATION

Licensed Professional Engineer in Pennsylvania, Alabama, California, Florida, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Maryland, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Rhode Island, Tennessee, West Virginia, DC

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronics Engineers, Inc.

Steven P. Mulhollen, P.E.

Showical Siginous

Mr. Mulhollen is experienced in the design of power distribution systems, control systems, emergency power systems, lighting and emergency lighting systems, fire alarm systems, security, sound, and telecommunication systems for correctional, educational, institutional, industrial, health care, and commercial facilities.

PROIECT EXPERIENCE

Ohio National Guard, Akron-Canton Regional Airport, Akron, Ohio

New 26,400 sq.ft. aircraft storage facility and partial demolition, expansion, and renovations to the existing hangar. The project included the design of a new fire suppression system

911th Airlift Wing, U.S. Air Force Reserve, Greater Pittsburgh International Airport, Coraopolis, Pennsylvania

 Various renovations and new construction under two terms contracts including hangar renovations

Pennsylvania Air National Guard, Johnstown, Pennsylvania

- New 23,560 sq.ft. maintenance shop with eight maintenance bays, flammable storage, general storage areas, and an on-site fuel dispensing station
- Feasibility Study and design services for the repairs to the Composite Support Facility for the 256th Air Traffic Control Squadron

Letterkenny Army Depot, Chambersburg, Pennsylvania

- Over 100 projects completed under seven consecutive term contracts
- Rocket Army Munititions Center (LEMC), AP Rocket Motor Destruction Facility, Phase I
- Building 1, New SCIF

Pennsylvania Army National Guard, Pittsburgh, Pennsylvania

- Rehabilitation of New Castle Readiness Center
- Rehabilitation of Crane Readiness Center

Camp Dawson, U.S. Army National Guard, Kingwood, West Virginia

> Three new billeting facilities

Lincoln County E-911 Communications Center – Hamlin, West Virginia

New 8,620 sq.ft. emergency communications center, includes Enhanced 911, Emergency Medical Dispatch, and Telecommunications Device for the Deaf (TDD)





Bachelor of Science, Mechanica! Engineering Technology, 2000, Point Park College

Associate in Specialized Technology 1984, Architectural Drafting and Construction with CAD Technology, Triangle Institute of Technology

EXPERIENCE

H.F. Lenz Company 1989- Present Newport News Ship Building 1984-1989

PROFESSIONAL REGISTRATION / CERTIFICATION

Certified in Plumbing Design, ASPE

Gregory D. Rummel, CPD

Plumbing/Fire Protection Designer

Mr. Rummel has designed complete plumbing and fire protection systems for colleges, schools, office buildings, hospitals, prisons, laboratories, industrial facilities, and military installations. He is fully knowledgeable of NFPA codes and is experienced in the design of wet, dry, preaction, FM200, and deluge fire protection systems. He is responsible for plumbing and sprinkler system design, layout, and calculations; selection and sizing of equipment; cost estimates; and site survey work. Mr. Rummel supervises drafting personnel; coordinates the plumbing design with utility companies, with other trades, and with the Project Engineer and Project Architect; and is responsible for assembling complete and accurate plumbing bid documents which meet H.F. Lenz Company standards.

PROJECT EXPERIENCE

Ohio National Guard, Akron-Canton Regional Airport, Akron, Ohio

 New 26,400 sq.ft. aircraft storage facility and partial demolition, expansion, and renovations to the existing hangar. The project included the design of a new fire suppression system

U.S. Armed Forces Aviation Facility, Johnstown, Pennsylvania

New 120,000 sq.ft. multi-complex aviation facility for both rotary and fixed wing aircraft on an 80-acre site

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- Feasibility Study and design services for the repairs to the Composite Support Facility for the 258th Air Traific Control Squadron

Letterkenny Army Depot, Chambersburg, Pennsylvania

 Rocket Army Munititions Center (LEMC), AP Rocket Motor Destruction Facility, Phase!

U.S. Army Reserve Center, Wheeling, West Virginia

 Design/build training building with classrooms, administrative areas, library, assembly hall, weaponeer room and medical section, and 17,000 sq.ft. OMS/AMS/A





Director, Engineering



Education

 BS, Mechanical Engineering, 1988, United States Military Academy, West Point, New York

Licenses/Registrations

Professional Engineer
 (PE): FL – 2016,

; PA – 1997,

Skills

- Civil Engineering
- Airport Runway and Facilities Design
- Stormwater
 Management
- Structural Engineering and Foundation

Total Years of Experience: 26

Years with GAI: 26

Years with Other Firms: 0

Professional Summary

Mr. Kunselman specializes in airport engineering and design. He has 26 years of experience in engineering consulting, and has spent the last 19 years in a management role directing design teams to successfully complete aviation projects. His experience includes design and management of asphalt taxiway, runway, and apron projects; master planning; obstruction identification and removal; deicing fluid collection; land acquisition; baggage handling systems; snow removal equipment acquisition; maintenance and snow removal equipment building projects; new hangar construction; and terminal access and parking projects. Mr. Kunselman has been involved in projects at 10 different airports in Florida and Pennsylvania, working with representatives of the Federal Aviation Administration (FAA) and respective Departments of Transportation.

Professional Experience

Pennsylvania Projects

Arnold Palmer Regional Airport (APRA) – Airport Deicing Pad, Westmoreland County Airport Authority (WCAA), Latrobe, Pennsylvania. Project Engineer for a \$400,000 project to construct an aircraft deicing pad and collection system. (1996)

APRA – Terminal Restroom Addition, WCAA, Latrobe, Pennsylvania. Project Manager for a \$250,000, 420-square-foot (sf) restroom addition to the terminal building. (2013)

APRA – Terminal Parking Expansions, WCAA, Latrobe, Pennsylvania. Project Manager for new parking projects totaling \$2 million. (2012, 2016)

APRA – Master Plan Update and Sustainability Plan, WCAA, Latrobe, Pennsylvania. Project Manager for a master plan update with sustainability component. (2017)

APRA – Corporate Hangar Apron, WCAA, Latrobe, Pennsylvania. Project Manager for a hangar site preparation and apron reconstruction project totaling \$950,000. (2013)

APRA – Terminal Building Expansion, WCAA, Latrobe, Pennsylvania. Project Design Engineer performing structural design on a \$6 million terminal expansion project. (1996)

APRA – Pennsylvania Department of Transportation (PennDOT) SR 981 Land Release, WCAA, Latrobe, Pennsylvania. Project Manager for the coordination and submission of a land release request for Federal Aviation Administration (FAA) approval for 4.3 acres of Authority property to PennDOT for their SR 981 improvements project. (2016)

APRA – Parallel Taxiway Rehabilitation, WCAA, Latrobe, Pennsylvania. Project Principal for two phases totaling \$2.5 million for the rehabilitation of the parallel taxiway for Runway 5-23. Work included bituminous and concrete pavement design, pavement marking layout, environmental permitting, construction management, resident inspection, and grant coordination. (2014, 2016)

APRA – Terminal Addition Design, WCAA, Latrobe, Pennsylvania. Project Manager for the design of a proposed \$12 million expansion of the APRA terminal building to include the addition of a new secure passenger holding area and three new gates. (2016)

APRA – Rehabilitate and Strengthen Runway 5-23, WCAA, Latrobe, Pennsylvania. Project Manager for a \$2.6 million rehabilitation and strengthening project for the 8,200-ft-long by 100-ft-wide Runway 5-23. Work included bituminous pavement design, pavement marking layout, environmental permitting, coordination with FAA Facilities for navigational aid (NAVAID) adjustments, construction management, resident inspection, and grant coordination. (2017)

APRA – Rehabilitate Apron, WCAA, Latrobe, Pennsylvania. Project Principal for \$1 million rehabilitation project of the main apron area, to include a total mill and bituminous overlay. Work included bituminous pavement design, pavement marking layout, environmental permitting, construction management, resident inspection, and grant coordination. (2017)

Rostraver Airport – Runway 8 Safety Area Expansion and Land Acquisition, WCAA, Belle Vernon, Pennsylvania. Project Manager for an \$800,000 project to improve the Runway 8 safety area to current FAA standards. (2006)

Rostraver Airport – Apron Expansion, WCAA, Belle Vernon, Pennsylvania. Project Manager for a \$425,000 project to expand the General Aviation (GA) apron by 3,000-square-yard (sy) with lighting, and provide a 1,300-sy bypass pad for the corporate hangar taxiway. (2007)

Rostraver Airport – Construct New T-Hangars, WCAA, Belle Vernon, Pennsylvania. Project Engineer for the construction of a new six-unit T-Hangar for \$550,000. (2005)

Rostraver Airport - Construct New Hangar, WCAA, Belie Vernon, Pennsylvania. Project Manager for the construction of a new 2,500-sf box hangar for \$400,000. (2010)

Rostraver Airport – Construct GA Taxiway, WCAA, Belle Vernon, Pennsylvania. Project Manager for the construction of new access taxiways in the GA hangar area for \$170,000. (2011)

Rostraver Airport – Runway and Taxiway Rehabilitation, WCAA, Belle Vernon, Pennsylvania. Project Manager for a \$100,000 rehabilitation (crack seal and marking) of the runway and parallel taxiway pavements. (2010)

Rostraver Airport – Acquire Snow Removal Equipment, WCAA, Belle Vernon, Pennsylvania. Project Manager for the purchase of \$250,000 of various tractors, mowers, and plow equipment. (2011)

Bradford Regional Airport – Runway 32 Safety Area Expansion, Bradford Regional Airport Authority (BRAA), Lewis Run, Pennsylvania. Project Manager for a \$420,000 project to improve the Runway 32 safety area to current FAA standards. (2003)

Bradford Regional Airport – Runway 14 Safety Area Expansion, BRAA, Lewis Run, Pennsylvania. Project Manager for a \$415,000 project to improve the Runway 14 safety area to current FAA standards. (2005)

Bradford Regional Airport – Deicing Vehicle Acquisition, BRAA, Lewis Run, Pennsylvania. Project Manager for the acquisition of a deicing vehicle for \$150,000. (2005)

Butler County Airport – Construct Northwest Apron, BCAA, Butler, Pennsylvania. Project Manager for the design and construction of a new 13,500-sy apron for \$600,000. (2002)

Butler County Airport – Fuel Tank Removal, BCAA, Butler, Pennsylvania. Project Manager for the removal of an existing storage tank for \$130,000. (2007)

DuBois Regional Airport – Runway 7 Safety Area Expansion, Clearfield-Jefferson Counties Airport Authority (CJCAA), Reynoldsville, Pennsylvania. Project Manager for a \$525,000 project to improve the Runway 7 safety area to current FAA standards. (2001)

DuBois Regional Airport – Runway 25 Safety Area Expansion and Land Acquisition, CJCAA, Reynoldsville, Pennsylvania. Project Manager for a \$1.6 million project to improve the Runway 25 safety area to current FAA standards. (2003)

DuBois Regional Airport – Construct New Hangar Access Road and Parking Lots, CJCAA, Reynoldsville, Pennsylvania. Project Manager for a \$2.5 million project to relocate State Road (SR) 830 access to the airport terminal, and construct more than 200 parking spaces, with related items such as drainage, lighting, and utility improvements to the industrial park. (2005–2008)

DuBois Regional Airport – T-Hangar Site Preparation, CJCAA, Reynoldsville, Pennsylvania. Project Manager for a \$275,000 project to construct a T-Hangar taxiway and prepare a site for construction of a new T-Hangar cluster, to include drainage. (2005)

DuBois Regional Airport – Maintenance Building Expansion, CJCAA, Reynoldsville, Pennsylvania. Project Engineer for a \$200,000 project to add a vehicle bay to the maintenance building. (1995)

DuBois Regional Airport – Airport Deicing Pad, CJCAA, Reynoldsville, Pennsylvania. Project Engineer for a \$475,000 project to construct a 90-ft by 157-ft concrete aircraft deicing pad with drainage and a fluid collection system. (1995)

DuBois Regional Airport — Upgrade Perimeter Security Fencing, CJCAA, Reynoldsville, Pennsylvania. Project Manager for a \$550,000 project to replace and realign more than 13,000 linear feet of perimeter security fencing with 10-ft-high chain link fence topped with barbed wire. Work included grading, drainage, fencing, signage, and new gates. (2004)

Mifflin County Airport — T-Hangar Site Preparation, Mifflin County Airport Authority (MCAA), Lewistown, Pennsylvania. Project Manager for a \$275,000 project to construct access taxiways and prepare a site for construction of a new T-Hangar cluster, to include utilities and drainage. (2009)

Mifflin County Airport – Runway, Taxiway, and Apron Rehabilitation, MCAA, Lewistown, Pennsylvania. Project Manager for a \$100,000 project to crack seal and remark airport runway, taxiway, and apron pavements. (2009)

Mifflin County Airport - Construct T-Hangars, MCAA, Lewistown, Pennsylvania. Project Manager for a \$650,000 project to construct a 10-unit, nested T-Hangar cluster with associated aprons. (2011)

Wellsboro-Johnston Airport – Obstruction Removal, Grand Canyon Airport Authority (GCAA), Wellsboro, Pennsylvania. Project Manager for a \$60,000 project to remove various tree obstructions to the Part 77 surfaces associated with the runway. (2012)

Wellsboro-Johnston Airport - Fuel Farm Upgrades, GCAA, Wellsboro, Pennsylvania. Project Manager for a \$30,000 project to provide upgrade to the airport fuel farm. (2010)

Weilsboro-Johnston Airport – Snow Removal Equipment Acquisition, GCAA, Weilsboro, Pennsylvania. Project Manager for a \$220,000 project for the acquisition of a snow removal vehicle. (2012)

Wellsboro-Johnston Airport – Construct New Hangar, GCAA, Wellsboro, Pennsylvania. Project Principal for a \$1.45 million project to construct a 120-ft by 120-ft box hangar with associated drainage, utilities, and apron. (2014)

Wellsboro-Johnston Airport – Runway Remarking, GCAA, Wellsboro, Pennsylvania. Project Manager for a \$50,000 project to remark Runway 10 for a new GPS approach. (2011)

Wellsboro-Johnston Airport - Install AWOS, GCAA, Wellsboro, Pennsylvania. Project Manager for a \$210,000 project to install a new AWOS system. (2013)

University Park Airport (UPA) – Airfield Pavement Remarking, UPA/Penn State University (PSU), State College, Pennsylvania. Project Principal for a \$40,000 project to remark airport pavements. (2014)

UPA – Airport Drainage Improvements, UPA/PSU, State College, Pennsylvania. Project Manager for a \$450,000 project to construct various drainage improvements and repair sinkholes. (2013)

- **UPA Update Master Plan, UPA/PSU, State College, Pennsylvania.** Project Manager for supporting work on cost estimates and feasibility reviews for \$17,000 as a subconsultant to Mead & Hunt, Inc., for an Airport Master Plan Update project. (2013)
- **UPA Rehabilitate Taxiway Lighting, UPA/PSU/Mead & Hunt, Inc., State College, Pennsylvania.** Project Manager for supporting work as a subconsultant to Mead & Hunt, Inc., for a \$1.1 million taxiway lighting rehabilitation project, providing field survey, construction management, and resident inspection services. (2014)
- UPA Terminal Baggage Carouse! Replacement, Centre County Airport Authority, State College, Pennsylvania. Project Manager for a \$480,000 project to construct a new baggage carousel system at the University Park Airport Terminal. (2011)
- **UPA Rehabilitate GA Apron, Taxiway B and D, UPA/PSU/Mead & Hunt, Inc., State College, Pennsylvania.** Project Manager for subconsultant work for the reconstruction of the GA apron, extension of Taxiway B, and relocation of Taxiway D. The project changed the apron grades to meet FAA AC standards. GAI was responsible for drainage and utility design, environmental and municipal permitting, and providing construction management and resident inspection for the \$10 million project. (2015–2017)
- **UPA Land Use Determination**, **UPA/PSU**, **State College**, **Pennsylvania**. Project Manager for an environmental clearance of an area with potential wetland resources. (2015)
- St. Marys Municipal Airport Remove Obstructions, St. Marys Municipal Airport Authority (SMMAA), St. Marys, Pennsylvania. Project Principal for a \$255,090 project to remove tree and building obstructions to the airport Part 77 surfaces. (2015)
- St. Marys Municipal Airport Acquire Snow Removal Equipment, SMMAA, St. Marys, Pennsylvania. Project Principal for a \$105,000 project to acquire snow removal equipment. (2014)
- William T. Piper Memorial Airport Rehabilitate Airfield Pavements, City of Lock Haven, Lock Haven, Pennsylvania. Project Manager for a \$60,000 project for crack sealing and marking airport runway, taxiway, and apron pavements. (2010)

Florida Projects

Belle Glade State Municipal Airport – Runway Lighting Study, FDOT District Four, Belle Glade, Florida. As Quality Assurance/Quality Control (QA/QC) Manager, performed QA for report associated with the Runway Lighting Study. (2018)

Daytona Beach International Airport - Cell Phone Parking Lot, Daytona Beach, Florida. QA/QC Manager responsible for performing QA review for design. This project involves Airport land development, property acquisition, and grant management services at Daytona Beach International Airport. (2018)

Flagler Executive Airport – Runway 11-29 Relocation and Extension Construction Services, Flagler County, Palm Coast, Florida. Project Engineer responsible for assisting Project Manager as needed with construction administration services associated with \$12.5 million construction of a new 5,500-ft-long runway and associated grading, drainage, and lighting elements. Improvements included property acquisition, wetland mitigation, and wildlife remediation. The existing runway was reconstructed as a full-length parallel taxiway as the final phase of the project. (2017–2018)

Flagler Executive Airport – Phoenix East Aviation (PEA) Parking Lot, Flagler County, Palm Coast, Florida. QA/QC Manager responsible for design QA review associated with the PEA Parking Lot. (2018)

Umatilla Municipal Airport – Environmental Assessment (EA) for the Extension of Runway 1-19, City of Umatilla, Umatilla, Florida. QA/QC Manager responsible report QA as part of planning phase services support for the EA of Extension of Runway 1-19 at Umatilla Municipal Airport. This project will document the demand for the 500-ft extension of the Airport's single runway. (2018)

Umatilla Municipal Airport – Partial Parallel Taxiway South – Design, City of Umatilla, Umatilla, Florida. As QA/QC Manager, performed QA review for design of the remainder of parallel Taxiway A at the Umatilla Airport. This project included site grading, clearing and grubbing, construction of a new pavement section, and associated airfield electrical work. (2018)







Education

 BS, Civil Engineering, 2001, Pennsylvania State University

Registrations

-Professional Engineer (PE): PA – 2008,

Skills

- Civil Engineering
- Airport Runway and Facilities Design
- Stormwater
 Management

Total Years
of Experience: 16

Years with GAI: 16

Years with Other Firms: 0

Professional Summary

Mr. Barber specializes in airport engineering and design, and has 16 years of airport-related design, construction, and project management experience. His projects have focused on new or rehabilitated airport pavements, hangar structural and foundation design, site development, and obstruction removal projects. He has successfully worked with representatives of the Pennsylvania Department of Transportation (PennDOT) Bureau of Aviation (BOA) and Federal Aviation Administration (FAA).

Professional Experience

Airports

Arnold Palmer Regional Airport (APRA), Terminal Expansion, Westmoreland County Airport Authority (WCAA), Westmoreland County, Pennsylvania. Project Manager responsible for the structural design and land development of the terminal expansion. Services included the complete structural design of a 15,000-square-foot (sf) rigid frame building and land development. The expansion served to alleviate overcrowding of the existing terminal building. Coordinated with architectural firm, the airport, and various funding agencies.

APRA, Rehabilitate Parallel Taxiway, WCAA, Westmoreland County, Pennsylvania. Project Manager responsible for the rehabilitation of a portion of Taxiway "A," which included a 2-inch bituminous pavement overlay and construction of a concrete pad. The taxiway had not been rehabilitated in more than 20 years, and pavement failure was occurring. The P-401 bituminous pavement and the P-501 Portland cement concrete pavement (PCCP) were designed using FAA FAARFIELD computer software.

APRA, Rehabilitate De-Icing Pad, WCAA, Westmoreland County, Pennsylvania. Project Manager responsible for the rehabilitation of the existing de-icing pad. The project consisted of removing existing trench drains adjacent to the de-icing pad and replacing the PCCP. A failing bituminous pavement section was removed and replaced with a flexible P-401 bituminous pavement surface. The project was completed within schedule and under budget.

APRA, New Terminal Restrooms, WCAA, Westmoreland County, Pennsylvania. Project Manager responsible for the construction of the new restrooms adjacent to the existing terminal building. The restrooms were constructed to alleviate overcrowding of the existing restroom. Coordinated with architectural firm, the airport, and funding agency.

McVille Airport, New Runway, Armstrong County, Pennsylvania. Project Manager responsible for the design and construction of a new 60-ft by 2,800-ft bituminous pavement runway. The previous turf runway had been removed for strip mining operations, and a new bituminous pavement runway was constructed to once again facilitate aircraft operations. The runway was designed in accordance with FAA Advisory Circulars and appropriate environmental permitting regulations.

Mifflin County Airport, Construct T-Hangar and Apron, Mifflin County Airport Authority (MCAA), Mifflin County, Pennsylvania. Project Engineer responsible for the construction of a 10-unit nested T-hangar and new apron. The airport required new facilities for tenants to store their aircraft. Designed the site layout in accordance with the appropriate FAA Advisory Circulars and obtained necessary permitting for local and state entities. Prepared drawings and contract documents in accordance with the Bureau of Aviation requirements.

Mifflin County Airport, Construct Taxiway, MCAA, Mifflin County, Pennsylvania. Project Manager for the construction of the new taxiway used to access corporate hangars. Taxiway construction consisted of P-401 bituminous pavement, which was designed using FAA FAARFIELD

computer software. Quality assurance testing of the P-401 bituminous pavement was performed by GAI's inspectors per FAA Advisory Circular requirements.

Pittsburgh International Airport, Gateway Landscape, Allegheny County Airport Authority (ACAA), Allegheny County, Pennsylvania. Project Manager responsible for the design of the new signage and landscaping area adjacent Airport Boulevard. The project consisted of designing a retaining wall for the proposed exit sign and preparing a land development plan for the proposed area. Prepared drawings and contract documents in accordance with ACAA requirements.

Rostraver Airport, Construct Hangar Utilities, WCAA, Westmoreland County, Pennsylvania. Project Engineer for the construction of utility service to a proposed private hangar. Coordinated with local utility companies and designed the utility installation per local requirements.

Rostraver Airport, Obstruction Removal, WCAA, Westmoreland County, Pennsylvania. Project Manager and Construction Supervisor for the removal of obstructions within the Federal Aviation Regulation (FAR) Part 77 surfaces and FAA Approach Surfaces. The project consisted of obtaining an aerial survey to evaluate several different air surfaces. Coordination with homeowners was required to obtain aerial easements and right-of-entry agreements. The project was completed within schedule and within budget.

University Park Airport, Medium Intensity Approach Lighting System (MALSR) Service Road, Pennsylvania State University, State College, Pennsylvania. Project Engineer for the design of an access road to service the MALSR. Performed road alignment layout and site contouring, determined cut and fill quantities, and prepared plans and specifications in accordance with FAA guidelines.

William T. Piper Memorial Airport, Runway Rehabilitation, City of Lock Haven, Clinton County, Pennsylvania. Project Engineer for the runway rehabilitation, which consisted of profile milling the existing bituminous pavement, crack sealing, and crack repairing the remaining bituminous pavement, placing paving fabric, and overlaying with two-inch Superpave bituminous pavement wearing course. Construction also consisted of milling the outer 12.5-ft sections of bituminous pavement from the runway and moving the conduit, duct banks, and runway lighting to meet the FAA Advisory Circular requirements.

General Civil Engineering

Butler Troop C Building Addition, Pennsylvania Department of General Services (DGS), Butler, Pennsylvania. Project Engineer for the design of a two-story, 2,000-sf addition. Coordinated with local architectural firm for the building layout design. Designed the shallow concrete foundation, underpinning for existing foundation, floor joists, and masonry unit (CMU) walls. Also provided structural evaluation of existing floor joists for structural capacity to support new walls, and designed lintels for openings in existing walls. Structural analysis was completed in accordance with Pennsylvania's Uniform Construction Code.

Main Street Office Building, Dubois Regional Medical Center (DRMC), DuBois, Pennsylvania. Project Manager for the design of a two-story, 10,000-sf commercial building, which was constructed with structural steel framing and metal stud exterior walls with brick fascia. Designed the foundations, steel framing, elevation CMU walls, concrete floors, and additional supports for rooftop HVAC packaged units (RTU). Structural analysis was completed in accordance with Pennsylvania's Uniform Construction Code.

Retaining Wall, Pennsylvania Turnpike, Bedford County, Pennsylvania. Project Manager for the design and QA/QC of a soldier pile retaining wall. The project consisted of designing a caisson/soldier pile retaining wall for a 500-ft section of the Pennsylvania Turnpike. Design calculations, project plans, and project specifications were prepared for the project.

Facilities Upgrades, Niagara Cutter, DuBois, Pennsylvania. Project Manager for the building retrofit design. The project consisted of analyzing the existing roof joists to determine if existing joist could support new heating, ventilation, and air-conditioning (HVAC) equipment. The project also

consisted of designing lintels and masonry walls. Structural analysis was completed in accordance with Pennsylvania's Uniform Construction Code.

Pharmacy Facility, Penn Highlands, DuBois, Pennsylvania. Project Manager for the design and construction of the building frame and site design. Coordinated with local architectural firm for the building layout design. The structural design for the building was in accordance with Pennsylvania's Uniform Construction Code. Prepared subdivision and land development plans, which included stormwater management design that was in accordance with the municipal requirements.

Building Inspection, Miller Welding, Brookville, Pennsylvania. Project Engineer responsible for inspection of the existing building and subsequent report. The inspection was required to determine the structural condition and capacity of the existing building. Structural calculations were performed to determine the allowable capacities of each different structural configuration.

Sports Complex, Seneca Nation on Indians, Salamanca, New York. Project Engineer for the design of two sports complexes, which consisted of an arena for ice hockey, locker rooms, swimming pool, running track, basketball court, and other miscellaneous rooms. The structural design for the building was in accordance with the Building Code of New York State. Coordinated with a local architectural firm for the building layout design.

Penn State DuBois Campus, Building Structural Analysis, Pennsylvania State University, DuBois, Pennsylvania. Project Engineer for the structural analysis of the Swift building to determine if the structural framing was suitable to support additional HVAC roof loading. Designed the HVAC supports.











Maintenance Building 2005

Architectural Case Study

Morgantown Municipal Airport Maintenance Building Morgantown, WV

Alpha Associates, Incorporated designed and provided construction administration for the Hart Maintenance Building. The building provides garage and storage for the airport's snow-blowing and lawn-cutting machines. This project features six highbay areas with one maintenance/repair pit. The balance of the area consists of auxiliary spaces such as dry and liquid storage, overhead crane hoist with access to а storage mezzanine. The building was constructed using split face block and metal panels over a pre-engineered steel rigid frame metal building.

Project Contact:

Jackie Marhefka 100 Hart Field Road Morgantown, WV 26505 304-291-7461



At a Glance

CLIENT: City of Morgantown

LOCATION: Morgantown, WV

COMPLETION DATE: 2005

SIZE: 8,000 SF

CONSTRUCTION COST: \$850,000











ARFF Building 2003

Architectural Case Study

Morgantown Municipal Airport Air Rescue and Fire Fighting Building Morgantown, WV

Alpha Associates, Incorporated provided architectural design, civil and structural engineering and surveying services this latest building at the Morgantown Municipal Airport. The building serves as an Air Rescue and Fire Fighting Building, housing two fire trucks and equipment.

Additional space for Airport Management offices and a training center are also included in the building.

Project Contact:

Jackie Marhefka 100 Hart Field Road Morgantown, WV 26505 304-291-7461



At a Glance

CLIENT: City of Morgantown

LOCATION: Morgantown, WV

COMPLETION DATE: 2003

SIZE: 7,000 SF

CONSTRUCTION COST: \$1 Million



AIRPORT EXPERIENCE

Runway Safety Area

Alpha Associates, Inc. did the original feasibility study for the Safety Area. There were several options for runway safety enhancements for Hart Field. Alpha has completed the design for Phase 1 and Phase 2 and is in the process of designing Phase 3. Some of the scope of the design phase of the project consists of: The design of an 1100' x 500' embankment consisting of approximately 3,000,000 cubic yards of material. The design shall be in accordance with pertinent FAA Advisory



Circulars. The acquisition of all necessary permits including stormwater, NPDES, West Virginia Water Quality State 401 Certification and the U.S. Army Corp of Engineers 404 permit.

Taxiway Extension

This project incorporated a unique solution to taxiway extension project. During the design phase, it was discovered that undocumented landfill material was used previously in this location, a portion of which was removed and disposed of in a certified landfill. The remaining material was bridged with geotextile and engineered backfill. The length of the asphalt taxiway is 2057 feet (626.97 m) with a typical width of 75 ft



(22.86 m) and a width of 150 ft (45.72 m) at the holding bay near the connection to runway 36. The project also contains new signage and drainage.

Runway 18/36 Rehabilitation

Alpha Associates, Inc. and the Morgantown Municipal Airport have a long-standing relationship. Recent projects include the Rehabilitation of Runway 18/36 completed in late 2000. This project consisted of milling the entire runway surface (5200 ft), repair of approximately three miles of pavement cracks, overlaying the surface with asphalt and painting of pavement markings.



Signage and Lighting

The Morgantown Municipal Airport was tasked to update their taxiway and runway signage and pavement markings to revised standards. Alpha Associates, Inc. provided design services for the replacement of all lighted edge signs and runway identifiers with new frangible units. This provided for







replacement of fading surface panels as well as any aging electrical connections to the regulators. Additionally, updated markings included provisions within FAA Advisory Circular AC150/5340 "Standards for Airport Markings" for inclusion of surface painted location signs.

Perimeter Fence Project

Alpha Associates, Incorporated provided surveying and consulting services for this project at the Morgantown Municipal Airport. This project was an 8-foot high fence around the perimeter of the Airport property with all necessary access gates.



Ramp Pavement Rehabilitation and Dejoing Containment Facility

Alpha Associates, Inc. recent projects for the Morgantown Municipal Airport include the Ramp Pavement Rehabilitation and Deicing Containment Facility in late 2005. Alpha provided concept drawings, design drawings, specifications,



construction administration, project inspections and bidding documents.

Air Rescue and Fire Fighting Building

Alpha Associates, Incorporated completed the design of the latest building at the Morgantown Municipal Airport. The building serves as an Air Rescue and Fire Fighting Building that houses two fire trucks and equipment with additional space for offices and a training center.



Maintenance Building

Alpha Associates, Incorporated designed and provided construction administration for the Hart Field Maintenance Building. The building provides garage and storage for the airport's snow-blowing and lawn-cutting machines. This project features six high-bay areas with one maintenance/repair pit.



Procurement Services

As part of Alpha's Open End Term Contract with the Morgantown Municipal Airport, we have provided procurement services for a wide variety of equipment. Including: High tech radio system, Air Rescue and Fire Fighting Vehicle, Snow Removal Equipment, Video Surveillance System, Keygate







Security System, All Terrain Vehicle, Service Trucks, and FOD Removal Equipment. Alpha's engineers researched the equipment options, prepared the specifications, managed the bidding process and assisted the Airport with the awarding of contracts.

<u>Terminal Addition and Renovation</u>

Alpha's staff provided programming, space planning, interior design and full-time construction administration services for a 10,000 square foot addition to the existing terminal originally constructed in 1993. Also included in this project was the design of a new terminal entrance and elevator tower.



Restaurant Renovations/Termina! Improvements

Alpha's designed the renovation and expansion of the airport restaurant along with improvements to the circulation from the North terminal to the South Terminal. The toilet rooms in the South terminal were completely renovated with new fixtures, new interior walls, new ceramic tile, and casework. The North terminal passenger departure and passenger waiting areas have new interior partitions, new finishes and new furniture.



Parking Lot Redesign and Expansion

Alpha provided design services for the parking lot at the Morgantown Municipal Airport. This project provided for 246 vehicles. Alpha's staff provided engineering design specifications, bidding and construction documents and construction administration services.



Agent Services

Alpha Associates, Incorporated assisted the Morgantown Municipal Airport during the development of the Facilities Master Plan update. Alpha's role during this process included

assisting the client with administrative duties, information gathering and distribution and overall project management. Alpha also provided assistance in updating the MGW Airport Certification Manual (ACM) utilized by the airport staff and emergency response members.





Morgantown Airport Access Road

Alpha provided design services that included traffic impact analysis, coordination with DOH, actual access road design, design of all turning lanes, pavement markings, signage, permitting, coordination with utility companies, preparation of right of way documents, and all other details pertinent to the completion of the project.





HANGAR DESIGN

HANGAR HEATING

Hangars require heating systems capable of quick recovery. We have designed hangars with each hangar door segment opening individually, but generally huge amounts of cold outdoor air still enters the hangar when aircraft are towed in and out. Our most successful heating system application is the use of hot water radiant floor systems. Our design utilizes an 82 deg F floor surface temperature which provides excellent quick recovery, very little wasted energy due to air stratification and the system never "overheats." Being a low temperature radiant heating system (below human body temperature) and with automatic controls, when warm weather is encountered during the spring and fall, the system regulates itself since radiant energy is only transmitted based on the temperature difference between the concrete floor slab and the various building components. If warm outdoor air enters the hangar through open doors and heats walls and ceilings, then the system will radiate less heat. Regarding occupant comfort, the helicopter maintenance staff and crews are usually very satisfied with lower ambient indoor air temperatures achieved with radiant floor systems. Flexible plastic tubing would be imbedded in the concrete floor slab with no fittings. Epoxy floor coatings are also an excellent surface finish working well with the radiant floor system. Another less expensive, but effective, heating system option is high temperature overhead radiation using direct-fired natural gas (such as co-ray-vac).

HANGAR AMENITIES

We have incorporated many useful features into utility trenches and overhead for operational and maintenance staff needs. Compressed air, soap supply solution, hot water and cold water can be provided within utility trenches. Overhead power cord reels and compressed air hose reels are also provided. The hangar door tracks, embedded in the concrete slab, are always provided with an ice and snow melt system for dependable operation in the winter.

HANGAR FIRE PROTECTION

Our recent experience in National Guard Hangars for helicopters has been with High Expansion Foam systems. We have also successfully designed AFFF using monitors, deluge heads and conventional sprinkler heads. In all cases strict attention must be given to draft curtains, head locations and automatic detection and activation. Also many times there is not sufficient water flow and duration capability at an existing base or new site. We have designed several on-site water storage systems (up to 250,000 gallons) and diesel-fired fire pump systems to meet DOD and NFPA requirements, when base or utility infrastructure is inadequate.

HANGAR FLUID DISCHARGE PROVISIONS

Several contaminants exist on hangar floors which must be collected and stored for proper disposal. We are experienced in the design of interceptors for sand, oil and acids. Also, any fire protection discharge of AFFF or High Expansion Foam must be properly collected and disposed of properly.







Ohio National Guard – Akron-Canton Regional Airport

Alumn Ohlo

EXPANSION AND ALTERATIONS TO THE ARMY AVIATION SUPPORT FACILITY HANGAR

H.F. Lenz Company provided the mechanical, electrical, plumbing, fire protection, and structural engineering services for the expansion and alteration of the existing Army Aviation Support Facility (AASF) hanger. The existing hanger, originally constructed in 1986, did not have adequate capacity to house the newly assigned CH-47 helicopters at the facility. The existing facility was also not equipped with a fire suppression system. The requirements of the project included partial demolition, expansion of the foundation and floor area of the existing hangar by 11,088 sq.ft., a new fire suppression system, modifications to the existing security systems and various interior improvements. The expanded facility is now able to accommodate three CH-47 helicopters.

The project also included the design of a new 26,400 sq.ft. aircraft storage facility.

Key elements of the design included:

- Design of FAA lighting
- > Fuel/water separator systems
- Fixed form fire suppression systems
- Structural supports
- > Tie downs

Project Cost:

\$6,700,000

Project design was complete in 2008

Client Contact:

Mr. George McCann Ohio Adjutant General's Department 2825 West Dublin-Granville Road Columbus, OH 43235 Attn: AlOH-FM-DP 43235

Phone: (614) 336-7413 Fax: (614) 336-7154

george.mccann@oh.ngb.army.mil

PROJECT EXPERIEN

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U.S. Army Aviation Facility

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NEW HELICOPTER SUPPORT FACILITY

The H.F. Lenz Company provided mechanical, electrical, and fire protection engineering; site development; and surveying services for the planning and development of a new U.S. Army Reserve Center and Aviation Support Facility located at the Johnstown Municipal Airport. The project consisted of a 120,000 sq.ft. multi-building complex located on a 75-acre site and includes:

- A U.S. Army Reserve. Aviation Maintenance Shop with administrative offices, conference areas, classrooms, tool and parts storage, battery storage and charging room, flammable storage, 31,000 sq.ft four aircraft maintenance hangar bays, special shop areas, a wash bay, and military aircraft and vehicle parking.
 - Hangar floor area of 330' x 94' with a safety corridor around the perimeter is comprised of flexible work bays and a wash bay.
 - Individually motorized operation sliding doors.
 - A 5-ton crane with a 40 foot span serves the entire hanger.
 - A foam water fire suppression system is provided along with a detention area.
 - The project included extensive shop areas and aircraft related spaces.
- Administrative spaces include offices and common administration area, classrooms, legal, medical, computer work area and reserve facilities.
- Common spaces include lobby, break room, toilets & locker rooms.
- Access road, utilities, taxiways, hangar apron areas, compass rose, associated aircraft and taxiway lighting, and site storm drainage collection and retention.
- An Armed Forces Reserve Center with administrative areas, unit common space, an education facility with assembly hall, classrooms, learning center, library, and flight simulator.
- Van pad with support facilities.
- Cost estimates using the M-CACES software.
- Life cycle cost analysis (LCCA).
- The project included design of hot water radiant floor, fuel/water separator systems, fixed foam fire suppression systems, elevators, structural supports, and tie downs and a new fire pump house and water distribution loop serving the entire site









U.S. Air Force, 911th Airlift Group/CE

Creater Pittiburgh International Airpon – Coraopoils, Pennsulvania

HFL provided design services for the 911 Airlift Group on a two-year indefinite delivery A/E contract. On all projects, operations of the Base were maintained during construction. Major projects included:

Alter Hangar Building 129: HVAC, plumbing, electrical, fire protection and structural engineering design services for the renovations to Hangar Building 129. Electrical system design included new underground electrical service. A manhole and a load interrupter switches were installed and the new service was routed to a pad mounted, liquid-filled transformer. New underground secondary service was extended from the pad mounted transformer to the main distribution panel located within the Building. Other Electrical Systems for the Hangar addition included the installation of receptacles, lighting fixtures, emergency lighting and exit signs and the 28 Volt DC power system. The fire alarm system for the Hangar was also extended to service the addition. A high expansion foam fire protection system was added.

Aircraft Maintenance Hangar, Building 416: Modified existing wet pipe sprinkler system and provided new automatic wet fire sprinkler system for building addition.

Repair/Add to/Alter Building 332: Designed a new vehicle wash building including radiant heating and vehicle carbon-monoxide monitoring and exhaust system with new state-of-the-art fuel delivery system with leak detection and monitoring system.

Apron Paving Repairs

Alter Pharmacy, Building 319: Replaced existing roof and provided a canopy over the loading dock. Removed and relocated all exterior lighting. The entire building was considered hazardous storage.

New Parking Lot: along Defense Avenue

Maintain/Repair/Alter Building 300 (Base Exchange): Three new vestibules were added to the building.

Repair Base Fire/Security Alarm System: Replaced existing fire and security alarm monitoring system with a new microprocessor-based system along with a computer and printers.

Base Civil Engineering Building: Under a separate contract, HFL provided engineering services for a new 21,700 sq.ft. Base Civil Engineering Building









Department of Defense Facilities

U.S. ARMY CORPS OF ENGINEERS, BALTIMORE

ARMY RESERVE AVIATION FACILITY

 New 120,000 sq.ft, multi-building complex including an armed forces reserve center and an aviation maintenance shop

ARMY RESERVE CENTER 100% 10 11/19 11/19

 New 300-member reserve center with training building and maintenance shop

ARMY RESERVE CENTER

 New 300-member reserve center with training building and maintenance shop

ARMY RESERVE CENTER William Minus Mi

 New 284-member reserve center with training building and maintenance shop

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 New 200-member reserve center with training building and maintenance shop

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ARMY RESERVE CENTER STOP A Mile For a service de

New 200-member reserve center with training building and maintenance shop

ARMY RESERVE CENTER Johns County Ivania

 New 200-member reserve center with training building and maintenance shop

ARMY RESERVE CENTER With the Windows

Maintenance shop

ARMY RESERVE CENTER Grants like Was Windinia

 New 100-member reserve center with training building and maintenance shop

ARMY RESERVE CENTER THANKS Wast Visitation

New 60-member reserve centers with training building and maintenance shop







> HVAC modifications

COPELY ARMY RESERVE CENTER Of the February Line

Boiler addition

STEELE ARMY RESERVE CENTER Sites in gin, it can be in the

Complete HVAC system replacement.

CAMP DAWSON Kingmond, Vind. vinduin

Three new billeting facilities

LETTERKENNY ARMY DEPOT Characteristics and learning

 Seven indefinite-delivery contracts for mechanical, electrical, civil, and structural engineering and surveying services

FORT RICHIE PLANT RECTUE Manufacia

 Two indefinite-delivery contracts for mechanical, electrical, civil, and structural engineering and surveying services

AMMUNITION PLANT Securition Found Audito

Upgrade lighting system in production shop.

911 AIRLIFT GROUP, GREATER PITTSBURGH INTERNATIONAL AIRPORT Production from the following the state of the control of the cont

- Study and design of new Base Civil Engineer Facility
- Indefinite delivery contract for architectural and engineering services

U.S. ARMY CORPS OF ENGINEERS, NORFOLK

WALTER REED ARMY MEDICAL CENTER MAINTAINED D.C.

Eriergy engineering analysis program, main hospital building

U.S. ARMY CORPS OF ENGINEERS, PHILADELPHIA

PHILADELPHIA, PENNSYLVANIA

Tenant fit-up

PA DEPARTMENT OF MILITARY AFFAIRS

FORD CITY ARMORY Parel City, Pennsylvapia

 New 24,400 sq.ft. training center with classrooms and kitchen/dining facilities











NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC), NORTHERN DIVISION

NAVAL AIR STATION

Air conditioning tune-up study

NAVAL SHIP PARTS CONTROL CENTER A Jacobanianing Form why wante

Administrative facility improvements

NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC), CHESAPEAKE & ATLANTIC DIVISION

NAVAL RESEARCH LABORATORY 1 Van Market Co. C.

 Three indefinite delivery contracts for mechanical, electrical, and structural engineering services (Chesapeake Division)

OCEANA NAVAL STATION A STATION AND A STATION

- > Energy monitoring and control system
- Boiler plant medifications (Atlantic Division)

NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC), SOUTHEAST DIVISION

P-8A INTEGRATED SIMULATION/TRAINING CENTER | Jackson ville, Provides

 New \$42.5 million, 165,000 sq.ft. operational training facility for a new Multi-Mission Maritime Aircraft (MMA)/P8-A located at the Naval Air Station; Project goal is LEED Gold

DEPARTMENT OF GENERAL SERVICES

PENNSYLVANIA NATIONAL GUARD John Worms Johns William

Mew 23,560 sq.ft. Regional Maintenance Facility

PENNSYLVANIA ARMY NATIONAL GUARD, 128TH BRIGADE SUPPORT BATTALION

 Renovation of the 26,700 sq.ft. Crane Readiness Center which houses 250 soldiers

PENNSYLVANIA ARMY NATIONAL GUARD, 107TH FIELD ARTILLERY BATTALION

 Rehabilitation of 23,000 sq.ft. New Castle Readiness Center which houses approximately 120 soldiers DOD FACILITIES



AIRPORT HANGAR EXPERIENCE

Wellsboro-Johnston Airport – Corporate Hangar Construction, Wellsboro, Pennsylvania

This project consisted of the construction of a 14,400-sf corporate hangar with office space, restroom facilities, and concrete apron. Work included earthwork, foundations, paving, drainage, building erection, HVAC, and electrical work. GAI was responsible for design, bid and award, construction supervision, and inspection services for the project.



Venango Regional Airport – Corporate Hangar Construction, Franklin, Pennsylvania

This project consisted of the construction of a 12,000-sf corporate/community hangar with restroom facilities. Work included demolition of existing building structures, earthwork, foundations, paving, drainage, building erection, HVAC, and electrical work. GAI was responsible for design, bid and award, construction supervision, and inspection services for the project.

Construction Cost: \$975K • Date of Completion: 2011





Butler County Airport – Rehab Maintenance Hangar, Butler, Pennsylvania

This project consisted of the rehabilitation of the exterior of the C-5 maintenance hangar located on the south side of runway 8-26 as well as the rehabilitation of the existing restrooms to meet current code regulations.

Work included the removal and disposal of existing wall panels, insulation, and accessories where shown; and the installation of new metal wall panels, insulation, and accessories, including the required furring, base trim, J-trim, eave trim, and gable trim, metal soffit, and fascia. Also included in the base bid was the construction of a dry well system as a means to convey the roof drainage on the north end of the hangar away from the building foundation.





An alternate to renovate the existing vestibule and restrooms was completed. The renovations afforded the Butler County Airport accessible Americans with Disabilities Act (ADA)-compliant public restrooms for the patrons utilizing the south side T-hangars. The project included the addition of an accessible parking space located on the hangar apron as well as a new accessible concrete sidewalk from the apron to the entrance of the vestibule.

Construction Cost: \$150K • Date of Completion: 2012



to whom these presents shall come. Greeting

The Man per That Che State Board of Registration for Professional Engineers.

of the State of Mest Virginia, reposing special confidence in the Intelligence, Integrity and Discretion, of

Charles B. Branch

Does, in Punsuance of Authorany Vested in in

by law hereby certify that he having submitted satisfactory evidence of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER:

Registration Number

To Bold and use such title in the practice of his profession. subject to the conditions prescribed by law.



Cition under the hand and the Sect of the Board at the Capitol in the City of Charleston, this 18th day of February in the year of our Lord 2002 and of the State the One Flundred

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To all to behom these presents shall come Greeting

- Know We That One State Board of Registration for Professional Engineers

of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Bradley H. Casdorph

DOES IN PURSUANCE OF AUTHORITY VESTED IN IT

by law hereby certify that he having submitted satisfactory evidence of his ability and experience is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number

To Hold and use such title in the practice of his profession, subject to the conditions prescribed by law.



Givers under the hand of the Seal of the Bourd at the Capitol in the City of Charleston, This 29th day of December in the year of can Lord 2005 and of the State the One Handred Forty-Second

Members of the Board

Sens D. Timems J.

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Bhopen s sulfa William & Sieman



to whom these presents shall come. Greeting

That the State Meard of Brainfallon for Professional Engineers.

of the State of West Virginia, reposing special confidence in The Intelligence Integrity and Discretion of

Richard A. Colebank

Does, in Prusuance of Avanobary Vested in 13 by law; hereby certify that he having submitted satisfactory evidence of his ability and experience, is a

Registered Professional Engineer

Registration Mumber

(In Minlo) and use such title in the practice of his profession. subject to the conditions prescribed by law



Citizen under the hand and the Seal of the Board at the Capitol in the City of Charleston day of Feb in the year of our Lord One Thousand Nine Hundred and Eighty Eight and of the State the One Handred Twenty Fourth.

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Front Foldy

Korneth H. Means DI

Robert Shall



That The State Board of Registration for Frobessional Engineers of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Matthew T. Kchard

DOES IN PURSUANCE OF AUTHORITY VESTED IN IT

by law hereby certify that he having submitted satisfactory evidence of his ability and experience is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number

To Hold and use such title in the practice of his profession, subject to the conditions prescribed by law.



Givex under the hand of the Seal of the Board at the Capitol in the City of Charleston, This 17th day of August in the year of our Lord 2012 and of the State the One Hundred Torty-Ninth

Members of the Board

Lence & Timms J.

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Bhope J. Shipa William & viewen and



This Certifies that Reverse Dean Key of Baltimore in the State of Maryland, having successfully passed an examination before the Board of Architects of the State of West Virginia, and being otherwise qualified, is hereby authorized to practice Architecture in all its branches in the State of West Virginia.

Witness the signatures of the Bresident and Georetary of the Broard of Architects of West Virginia and the seal of said Board, this <u>26th</u> day of September 1090

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Secretari	for the same



Chall to whom these presents shall come. Greeting.

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Charles B. Luttrell

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REGISTERED PROFESSIONAL ENGINEER

Registration Number

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Simm under the hand and the Seal of the Board at the Capitol in the City of Charleston, this 28th day of July in the year of our Lord One Thousand Nine Hundred and Ninety-nine and of the State the One Hundred Thirty-sixth.

STATE BOARD OF REGISTRATION FOR PROPESSIONAL ENGINEERS

Herbely Huder of Jamy Trans Melly

CERTIFICATE OF Authorization

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

The West Virginia State Board of Registration for Professional Engineers having verified the person in responsible charge is registered in 11 est Virginia as a professional engineer for the noted firm, hereby certifies

> ALPHA ASSOCIATES, INC. C00012-00

Engineer in Responsible Charge: RICHARD A COLEBANK - WV PE 010346

has complied with section \$30-13-17 of the West Virginia Code governing the issuance of a Certificate of Authorization. The Board hereby notifies you of its certification with issuance of this Certification of Authorization for the period of:

January 1, 2018 - December 31, 2019

providing for the practice of engineering services in the State of West Virginia.

IF YOU ARE REQUIRED TO REGISTER WITH THE SECRETARY OF STATES OFFICE.
PLEASE SUBMIT THIS CERTIFICATE WITH YOUR APPLICATION.

IN TESTIMONY WHEREOF, THE WEST VIRGINIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS HAS ISSUED THIS COAUNDER ITS SEAL AND SIGNED BY THE PRESIDENT OF SAID BOARD

BEJARD PRESIDENT



REFERENCES

Every aspect and detail of your planning, coordination, and

completed projects have been exceptional and outstanding in every

regard.

Robert Hammel, Former Director Morgantown Municipal Airport

Bob Hammel, Former Director Morgantown Municipal Airport

208 Maplewood Estates Scott Depot, WV 25560 304-550-2960

Damien Davis, City Engineer City of Morgantown

389 Spruce Street Morgantown, WV 26505 304-284-7412

Don Reinke, Former Executive Director Mon County Development Authority

PO Box 188 Morgantown, WV 26507 304-296-6684

Matt DiGiulian
Federal Aviation Administration

176 Airport Circle Room 101 Beaver, WV 25813 304-252-6216 "Alpha Associates have a proven record of customer satisfaction and successful client delivery with our organization. We would be confident in our recommendation in support of Alpha."

J. Paul Walden West Virginia University

