

CONSULTING ARCHITECTURAL/ENGINEERING SERVICES FOR

MULTI-PURPOSE HANGAR/OFFICE PROJECT

TRUCKEE TAHOE AIRPORT DISTRICT
TRUCKEE, CALIFORNIA



JUNE 29, 2017

**Mead
& Hunt**

M & H Architecture
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1 – TRANSMITTAL LETTER

Truckee Tahoe Airport District
Attention: Kevin Smith, General Manager
10356 Truckee Airport Road
Truckee, CA 96161

RE: The Truckee Tahoe Airport District Business Hangar 2

Dear Mr. Smith:

The replacement of Hangar 2 offers a unique opportunity for the airport to reestablish lost space as well as add critical aviation/community functions to your airport. We are excited to continue our efforts with you on Hangar 3, and the early planning studies for the Hangar 2 replacement. No other team is more prepared to work with you, your staff and your board in order to deliver a project that is vital to your on-going operations.

Our clients are constantly looking for new ways of achieving a competitive advantage by maximizing the use of their physical facilities by improving space utilization, marketability and energy efficiency. As a firm, Mead & Hunt focuses on creating environments that will stimulate creativity, enhance user group performance and meet your aesthetic and budgetary goals. This project will require an experienced firm to work with the Airport to help determine how to develop this project to best serve Truckee Tahoe Airport (TRK) and the Truckee community.

As a national aviation consulting firm, Mead & Hunt brings a strong background of hangar and aviation related experience. We have added **Ryan Group Architects** for local responsiveness and **VJS Lincoln (VJS)**, a national hangar developer and contractor, to our team. Both firms will bring additional expertise for developing a highly successful multi-purpose hangar in your mountain environment. The Mead & Hunt team brings the following strengths:

- **Expertise for multi-use hangars.** Mead & Hunt and VJS have unmatched experiences in a multitude of hangar projects. Beyond aircraft storage, other multi-use experiences include: waiting areas, a film studio, office spaces, meeting halls, maintenance facilities, GSE storage areas and training facilities. We are adept at delivering complex programs.
- **Full-service capabilities.** Mead & Hunt has the capabilities to provide all the necessary architectural, site, environmental and engineering needs for your project. Our project portfolios will allow you to draw upon a history of successful hangar projects.
- **Local partner.** Teaming with Ryan Group Architects to see that your project best reflects the local community and is designed to meet the rigorous Truckee weather conditions.
- **Master plan knowledge of the airport.** Our team has been working at TRK developing of the master plan, and understands how to best leverage the hangar as a total airport asset.
- **Sustainability.** Mead & Hunt is a leader in sustainability at airports. We have designed the nation's only Net-Zero, LEED platinum terminal. We understand how to make sustainability achievable through a cost-benefit analysis, and how to showcase it for public relations.

Our comprehensive design and engineering capabilities are enhanced by our natural inclination to seek balanced solutions regarding cost, schedule, quality and our ability to achieve them through the personal attention this project requires. We value our long-standing relationship with Truckee Tahoe Airport and look forward to the opportunity to discuss this project with you in greater detail.

Respectfully submitted,
Mead & Hunt, Inc.

Tim Dacey, Project Manager

TRANSMITTAL LETTER

FIRM DESCRIPTIONS



Office Locations

Mead & Hunt has 32 offices nationwide and will be serving the project primarily out of our California and Oregon offices, with support from our Colorado and Wisconsin offices.



Office Location

Ryan Group Architects will serve the project from their Truckee, California office.



Office Location

VJS will serve the project from their Wisconsin office.

MEAD & HUNT, INC

Mead & Hunt, an architectural and engineering firm, provides expertise in planning, design, architecture and engineering, serving markets nationwide. Skilled, diverse and deeply experienced, we are driven by our clients' success, because we measure our success by theirs. Mead & Hunt has more than 75 years in the aviation industry and has more than 500 employees. Our firm has built a long-standing reputation for designing cost-effective, visually pleasing and energy efficient airport facilities. An earnest consideration of maintenance and operations is a hallmark of our work. Our airport projects feature state-of-the-art design capable of meeting the ever-changing needs of the industry. With architectural and engineering services in-house, we take an integrated design approach. ■

RYAN GROUP ARCHITECTS

Ryan Group Architects, pursue quality in the design of place, with emphasis on sustaining natural environments. They have designed and managed a diverse range of projects, including airport facilities, resort facilities, mixed-use projects, schools, private homes, single and multi-family housing, office buildings, libraries, commercial retail spaces and corporation yards. A strong dedication to quality is evident in their buildings and client relationships. They strive to strike a balance between environmental concerns and budget; function and form. Resource-conscious design is important and the selection of materials and systems is a careful process that weighs performance, function, initial and long-term cost. Their familiarity with mountain architecture and the Tahoe/Truckee region allow their designs to successfully respond to climate and context. ■

VJS LINCOLN, INC. (VJS)

VJS is a general construction firm specializing in aviation related projects. VJS's primary markets include corporate flight groups, MRO's, terminal renovations and construction, aviation manufactured facilities, FBO's and charter operators. Focusing on providing state-of-the-art, operationally functional aviation facilities VJS and The Lincoln Company brought together the expertise of aviation specialists and the depth and resources of a \$100+ million construction firm under one roof. In 2007, the two firms created VJS Lincoln, Inc., for the sole purpose of constructing aviation facilities ■

TRANSMITTAL LETTER

SERVICES

As a full-service aviation consulting firm, Mead & Hunt offers the following aviation-related services:

Architecture

- Terminals and arrival/departure buildings
- Aircraft hangars
- Airport traffic control towers (ATCTs)
- Maintenance buildings
- Equipment specifications
- Security systems
- Telecommunications
- Aircraft rescue and firefighting (ARFF) facilities
- Fuel farms
- Parking garages

Program Management

- CIP development
- Project scheduling
- Coordination of multiple consultants, contractors and vendors
- Funding identification and procurement
- Federal, state and local agency coordination
- Grant management
- Project administration
- Value engineering

Business Services

- Rates and charges
- Passenger Facility Charge (PFC) application/administration
- Cost-benefit studies
- Business plans
- Benchmarking
- Performance surveys

Air Service Consulting

- Market analysis
- Airline service proposals
- US DOT Small Community Air Service Development Program grant applications
- Airline Travel Banks®
- Ticket lift studies

- US DOT airline report data analysis
- Passenger forecasting

Planning and Financial Studies

- Aviation system plans
- Master plans
- Airport layout plans
- Land-use planning and zoning
- User surveys
- Feasibility studies
- Part 150 noise studies
- Land acquisitions

Environmental Planning

- Environmental assessments
- Environmental impact statements
- Wetland mitigation
- Noise analyses
- Storm water/flood plain studies
- Air quality studies
- Historic eligibility studies
- Deicing analyses

Wildlife Hazard Management Services

- Wildlife hazard assessments, including monitoring and reporting
- Wildlife hazard management plan preparation and implementation
- Airport staff training
- Habitat modification planning
- Mitigation planning and design
- Project and design review services
- Agency coordination
- Community outreach and education

Pavement Design

- New construction and reconstruction projects
- Overlays
- Pavement recycling
- Sealcoats
- Life cycle cost analyses
- Drainage layers
- Pavement maintenance



Electrical Systems and Navigational Aids Design

- Airfield lighting
- Airfield signage
- Electrical vaults
- Instrument landing systems
- Approach lighting systems
- ATCT instrumentation and control
- NAVAIDs
- Airfield lighting control and monitoring systems (ALCMS)
- Existing airfield lighting systems analysis and inventory
- Security systems

Construction Administration

- Survey control and project layout
- Project administration
- Project scheduling
- Contract inspection
- In-house materials testing
- Change order preparation
- Pay requests and pay approvals
- Shop drawing review
- Project close out
- Construction newsletters



QUALIFICATIONS & CAPABILITIES

Mead & Hunt has built a long-standing reputation for designing cost-effective, visually pleasing and energy-efficient airport facilities. For more than 75 years, Mead & Hunt has been providing aviation services, including work on numerous aircraft hangar projects. Our team understands the importance of reliable facilities and systems. At the same time, with shrinking budgets and the always-present need to be cost-effective, our team understands that we must design facilities to meet budgets and reduce operational costs.

Our team brings the following qualifications to your project:

- Hangar experience ranging from single-bay shelters to long-span wide-body hangars.
- Professionals with experience on multiple hangar projects for all necessary disciplines required.
- Experts in aviation facility execution with airport projects across the country.
- Our seasoned team of experts which includes Tim Dacey, Brad Musinski, Erik Schroeder, Dave Dietz and Jon Faucher, and brings a proven track record of success for the Truckee Tahoe Airport District.

Our team takes an active approach to green building design through the Leadership in Energy and Environmental Design (LEED) program. As sustainable projects continue to increase in number throughout the US, we continue to expand our LEED qualifications. Many of our staff are LEED accredited including licensed architects and professional engineers. Together, they have been involved with other green building design programs, such as the Energy Star program and the Sustainable Project Rating Tool (SPiRit).

When designing airport buildings, Mead & Hunt works in tandem with our clients to develop a design that is both functional and aesthetically compatible with local themes and settings. ■

SPECIFIC RELEVANT EXPERIENCE

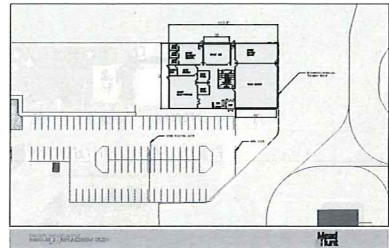
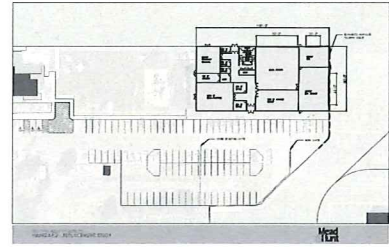


HANGAR 2 AND 3 TRUCKEE TAHOE AIRPORT DISTRICT – TRUCKEE, CA

Mead & Hunt has assisted the Truckee Tahoe Airport District with the preliminary planning for two separate hangar projects: Hangar 2 and Hangar 3.

The Hangar 2 project was an early concept level design to replace the recently lost Hangar 2. The replacement hangar was designed to accommodate a Pilatus PC-12. Accessory spaces include a pilot lounge, a passenger waiting area, flight school classrooms, a meeting room and kitchen, an Experimental Aircraft Hangar and meeting space, a GSE storage area, and associated bathrooms. Space planning and site studies were performed to evaluate the ability of the existing hangar 2 site to support this program.

The Hangar 3 project sought to combine an aircraft storage and deicing hangar with a community center. This project intended to leverage the large indoor space of a hangar as a community asset, available as meeting space for large groups. In conjunction with Freshtracks, multiple outreach efforts were made to engage the community to establish the program. The hangar space was surrounded by meeting rooms, an industrial kitchen, restrooms and storage spaces. The hangar was also designed with aircraft support spaces including GSE storage, lav dump, wash rack and radiant-heat deicing. The aesthetics of the building were developed to be in concert with the TRK administration building and local character. ■





PLATINUM AVIATION FIXED-BASED OPERATOR HANGAR APPLETON INTERNATIONAL AIRPORT – APPLETON, WI

Located at the Appleton International Airport (ATW), Platinum Aviation is headquartered in a high-performance building that offers an exceptional FBO experience in northeastern Wisconsin. In concert with the airport's sustainable mission, Mead & Hunt designed a facility for Platinum Aviation that has gone beyond the LEED Platinum Certification it recently earned and has been designed as a Net Zero building exceeding 70 percent of current building code requirements. This is the nation's first net zero energy aviation building.

As part of the 8,000-square-foot project Mead & Hunt also provided architectural design and building engineering for two hangars, a maintenance hangar and a storage hangar. The maintenance hangar consists of a hangar, office, break room, shower and locker rooms, maintenance shops and parts storage. The storage hangar consists of a 30,000-square-foot corporate hangar. The storage hangar also includes a foam fire suppression system meeting the requirements of NFPA 409. Both hangars also employ similar sustainable design features to the General Aviation facility including accommodating photovoltaic panels and daylighting. The asymmetrical design of the south facing roof maximizes the efficiency of the photovoltaic panels. ■

Winner of the 2014 ACEC Wisconsin Engineering Excellence Grand Award



AVIATION EDUCATION HANGAR JACQUELINE COCHRAN REGIONAL AIRPORT – RIVERSIDE COUNTY, CA

The Aviation Education Center will include two hangars, designated as the Vocational Hangar and the Restoration Hangar. The Vocational Hangar will be used primarily by Palm Springs Air Museum volunteers to restore (and store) airplanes while allowing students and other interested parties to observe this process. Secure small offices and tool bays may be needed within this hangar to accommodate the activities that occur. Provisions will be incorporated that allow students and other interested parties to observe, and possibly participate in the aircraft restoration process. Hangar doors were sized to accommodate the largest aircraft requiring access to this facility.

The Aircraft Restoration Hangar will be used to disassemble, assemble, and service aircraft of various types. It will be used primarily by the Experimental Aircraft Association (EAA) and the Civil Air Patrol (CAP) for both teaching and ongoing service or maintenance purposes. Secure small offices, tool bays, and shop areas may be needed within this hangar to accommodate these activities. It is anticipated that shop type functions (welding, torch cutting, torch soldering, doping and spraying) may occur within this hangar and that a separate paint booth will be provided. It is anticipated that a two-hour separation will be provided between this hangar and the adjacent Vocational Hangar.

The exterior appearance of the both hangars were designed to be consistent with Riverside County's architectural design standards for the area. ■





**INTERNATIONAL AVIATION PROPERTIES
 CHICAGO EXECUTIVE AIRPORT – WHEELING, IL**

The building components for this project included a new pre-engineered metal building, a 160' wide x 150' deep hangar (24,000 square feet) that contains a 6,200 square foot single-story office/shop complex. The facility also includes a flight planning area, large conference room, executive and pilot office, lobby and a waiting area. Energy efficient features incorporated into the project include: an air rotation unit, fluorescent lighting and day lighting in the hangar. ■

**AVIATION DEVELOPERS & CONTRACTORS
 LODGING – GARY, IN**

The building components of this 19,687-square-foot project include a pre-engineered metal building, a masonry facade for a two story office area eight-inch concrete hangar floor slab, snow melting system in the apron, a 120' x 28' hangar door and a hangar heating system, which involved a specialized air rotation system. ■

**HAWKER BEECHCRAFT SERVICES MAINTENANCE & REPAIR
 OPERATIONS HANGAR
 INDIANAPOLIS INTERNATIONAL AIRPORT – INDIANAPOLIS, IN**

This maintenance, repair and overhaul facility is one of several new facilities Hawker Beechcraft is developing nationwide. The facility includes; a 40,000 square foot maintenance hangar, a 23,400 square foot shop and part storage area, 5,400 square foot of office administration space, a 6,500 square foot FBO terminal, and an 8,000 square foot limited spray paint booth. The complex offers Hawker Beechcraft aircraft owners unprecedented service and comfort for their aircraft maintenance needs. ■



**GENERAL AVIATION HANGAR, DEPARTMENT OF ADMINISTRATION
DANE COUNTY REGIONAL AIRPORT – MADISON, WI**

Mead & Hunt provided industrial engineering, architecture and engineering services for the Wisconsin Department of Administration aircraft storage and maintenance hangar. The facility was developed to replace an aging facility the State had been using for decades. The Wisconsin Department of Administration engaged the services of a builder to take on the role of constructor.

This joint venture partnership between Mead & Hunt, the State of Wisconsin, and the contractor led to the successful development of a new hangar facility. The governor's conference suite, executive conference center, lounge, and offices were combined together with the mixed use hangar to meet the various needs of state officials. In addition, Mead & Hunt managed all site work, including apron paving, utilities, roadways and landscaping. ■



AIRCRAFT MAINTENANCE SUPPORT COMPLEX GENERAL MITCHELL FIELD – MILWAUKEE, WI

This is the main line maintenance hangar for the 128th Air Refueling Wing. It is a 33,200 square foot hangar where all of the maintenance support shops were spread out among ten other facilities on the base. These inefficiencies led to adverse impacts on production time for maintenance. Mead & Hunt designed a 34,300 square foot aircraft maintenance addition to the existing hangar.

The updated shop complex includes: avionics, electrical and environmental, hydraulics, isochronical, jet engine maintenance and inspection, repair and reclamation and survival equipment. The consolidation of all related functions has created a much more cohesive and efficient working environment.

Mead & Hunt provided programming, schematic design, design development, contract document preparation and construction administration services. Extensive user input was obtained to develop the optimal functional layout and systems, given the budget and site constraints. ■



CLARITY ENTERTAINMENT DUGGY HANGAR REDDING MUNICIPAL AIRPORT – REDDING, CA

Clarity Entertainment decided to consolidate and expand its entertainment operations in Redding, California and relocate its Duggy children's show which features a fully functional DC-3 from Ohio to this new facility. Mead & Hunt in conjunction with VJS was selected as a design/build team to produce a multi-story hangar for the Duggy Aircraft and show. The show incorporates actual DC-3 flights as a part of the show resulting in a film studio that also doubles as a hanger.

This \$25 million dollar facility includes a 41,000 square foot hangar/studio space for the Duggy show stage set as well as additional space for a Gulf Stream G550, production studios with support areas and offices. The client requested a building image that reflected an Art Deco design period of the hangars of the 1930's from which the DC-3 originated. The total area for the facility is 70,000 square feet and is primarily intended to produce the Duggy show, but also provides a production area for lease. As a Group I hangar, it incorporates a NFPA 409 foam suppression system. ■



**REPAIR AIRCRAFT MAINTENANCE HANGAR (BUILDING 2305)
CALIFORNIA AIR NATIONAL GUARD – MARCH AIR RESERVE BASE**

Originally constructed in 1965, the aircraft maintenance hangar maintains and stores eight Primary Aircraft Authorized (PAA) MQ-1 Predator Reconnaissance Aircraft. To support this mission and meet DoD and local fire codes, the hangar's building systems required upgrade and repair. The scope of this project encompassed the complete renovation of the building, down to the existing structure, and included a new roof; siding; the alteration of administration, training, and support areas; new efficient heating and cooling systems; new HEF fire suppression system and supporting utilities; new energy-efficient high bay lighting; introduction of natural lighting; new fire alarm system; and a new high-performance hangar epoxy floor coating. Mead & Hunt was selected to provide design services in addition to the interior renovations included the offices, classrooms and rest rooms. The base is currently pursuing, LEED Silver registration. ■

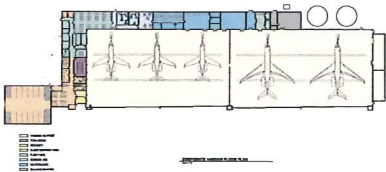
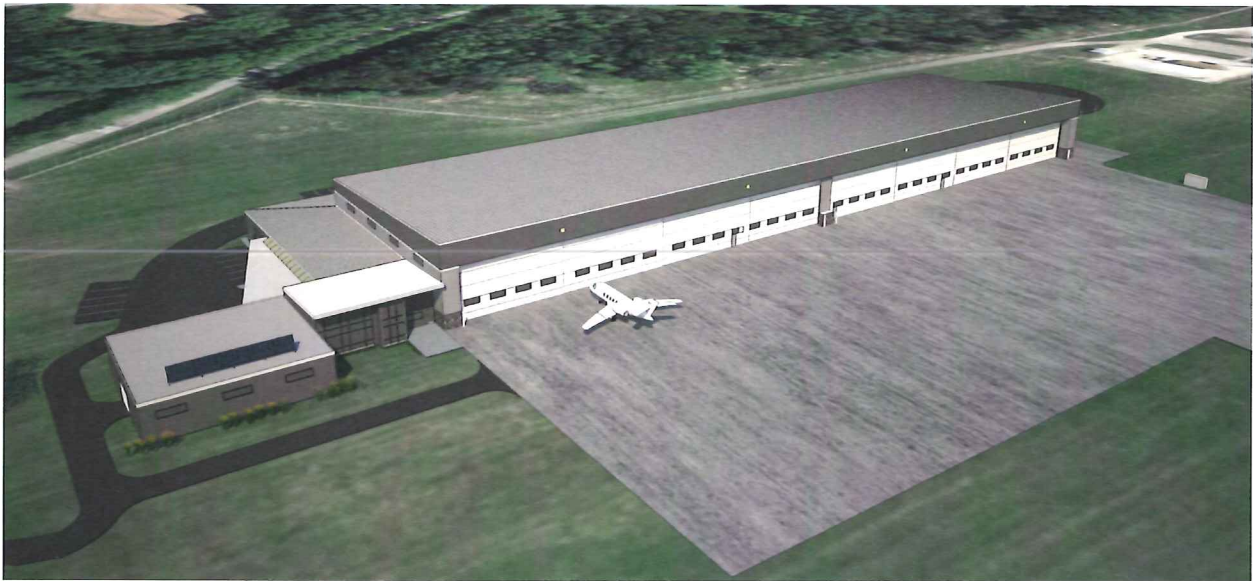


UPGRADE HANGARS SAWYER INTERNATIONAL AIRPORT – GWINN, MI

The project consisted of various improvements to multiple aircraft hangars at the Sawyer International Airport. The 400 series aircraft hangars were upgraded to the 600 series hangars. Improvements to hangars 400, 423, 424 and 425 consisted of refurbishing their existing bi-fold hangar doors. Lift cables, latches and seals were replaced. Constant-hold control stations were added to each of the hangar doors.

Hangar 402 was completely refurbished. Interior improvements included replacing an existing multi-leaf horizontal sliding hangar door and door pocket with a new bi-fold hangar door. Additional improvements included new exterior insulated metal wall panels, windows and overhead door replacements, and a new roof system. Interior work incorporated new spray-applied insulation and thermal barrier, office and toilet room remodel, as well as an upgrade to the existing heating, ventilating and electrical systems.

Hangars 662, 663 and 666 were enhanced similar to one another. Existing hangar doors were refurbished, spray-applied insulation and thermal barrier over interior walls and ceilings were added, existing office areas were remodeled and new toilet rooms were installed. Electrical service and bay lighting was upgraded and new emergency generators were added. A new emergency generator was added to hangars 661, 664, 665 and 667. ■

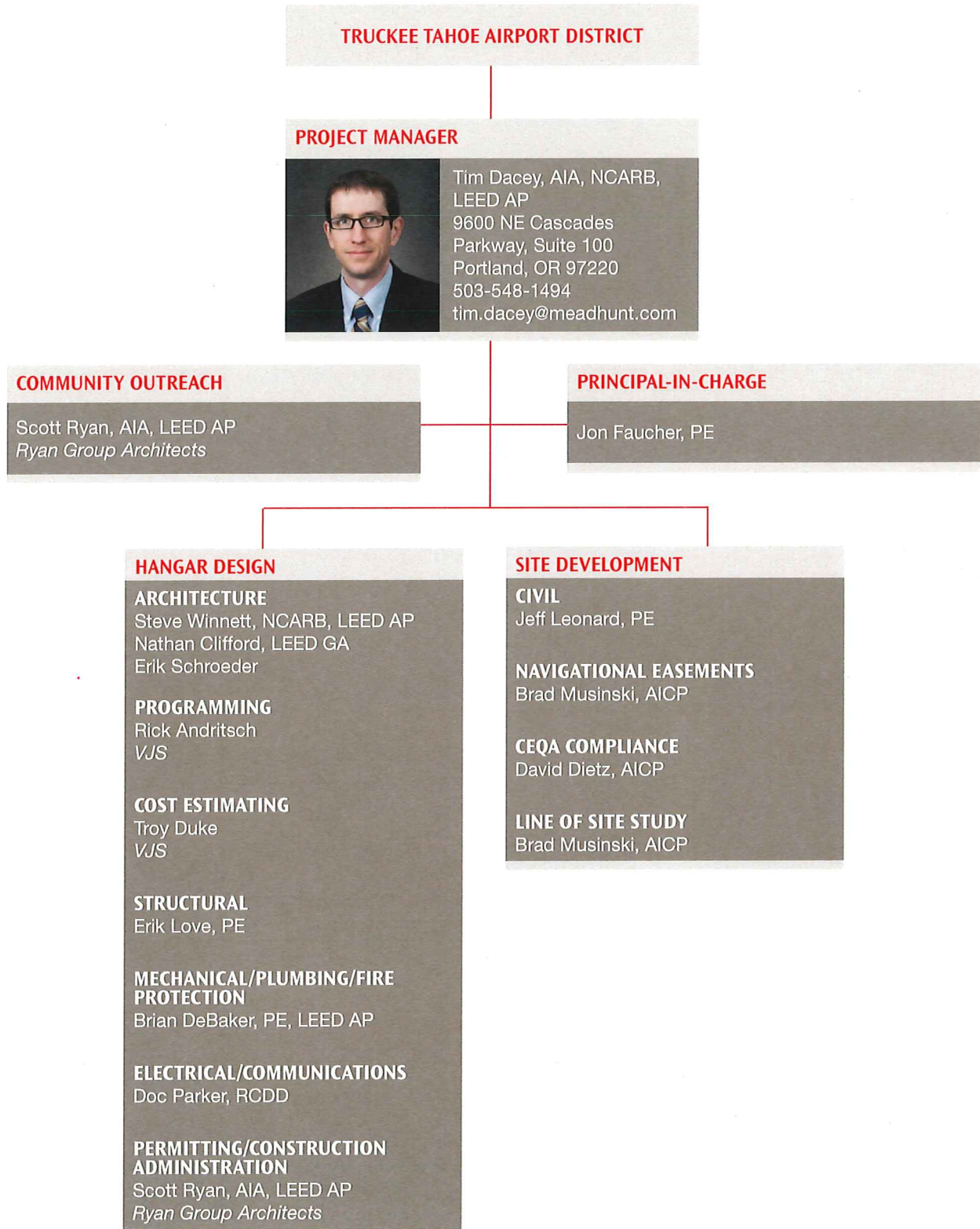


CATERPILLAR CORPORATE HANGAR PEORIA INTERNATIONAL AIRPORT – PEORIA, IL

In an effort to accommodate a growing need for aviation corporate services for both national and international flights. It became necessary to build a new corporate FBO to accommodate the new aircraft fleet. With Caterpillar's growing international presence, the need for long range and larger aircraft to fly internationally has become essential for their business growth. This new corporate hangar facility replaced the existing hangar. The 92,000 square-foot facility provides a hangar bay that accommodates four Global Express 6000's in a hangar bay of 130 feet by 490 feet. The hangar incorporates a reverse truss system which vertically supports two 232 foot Megadoor hangar doors. The hangar is also classified as a Group I hangar and includes a NFPA 409 foam suppression system and water tanks.

This hangar includes a variety of support functions for the aircraft including office areas, a commissary, maintenances shops and storage. The project included a 68,000 square feet hangar consisting of two bays with a clear span of 240 foot long by 140 feet deep, 8,000-square-foot office, 11,000-square-foot maintenance shops and offices, and a 30,000-square-foot garage for personal vehicles. Adjacent to the hangar bay are maintenance areas which include: a shipping and receiving area, tool and equipment storage, parts storage, paint booth, maintenance shop and maintenance support spaces. The corporate office facility includes a two story lobby and reception area, conference rooms, offices, and administrative support areas for all Caterpillar's flight operations. ■

ORGANIZATIONAL CHART



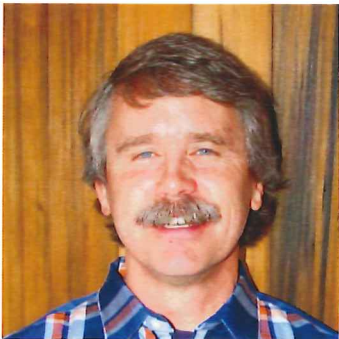
ORGANIZATIONAL CHART

STAFF QUALIFICATIONS AND EXPERIENCE



Education

- M Arch, University of Texas
- BS, Architecture, University of Virginia – minor in Urban Planning



Education

- MA, University of California, Berkeley
- BA, Architectural Design, Antioch College

TIM DACEY, AIA, NCARB, LEED AP PROJECT MANAGER

Tim Dacey leads the architectural practice for Mead & Hunt's west coast projects. Specializing in aviation architecture, he has completed airport projects in Oregon, Washington, California and Wyoming. Projects have included SRE facilities, maintenance facilities, OPS centers, ARFF stations, terminals, hangars, air traffic control towers and airfield support facilities.

Tim's familiarity with the West ADO has successfully guided multiple projects through the FAA eligibility and approval process.

He has 20 years of experience covering a broad range of project types. This diverse portfolio has resulted in an innovative approach to multi-disciplinary project delivery. Tim excels in integrating building systems, building performance and functional design at project onset. He also enjoys the early collaboration with user groups to deliver projects specific to user needs. Tim's many years as a project manager, lead designer and construction administrator give him the unique perspective and ability to deliver significant work that is on-time, on-budget and exceeds clients' expectations. He works well throughout each phase of the project to facilitate a collaborative effort and successful outcome. **Time Commitment:** Expected Effort 25%, Availability 30% ■

SCOTT RYAN, AIA, LEED AP COMMUNITY OUTREACH/PERMITTING/CONSTRUCTION ADMINISTRATION



Scott Ryan serves as principal to Ryan Group Architects. His areas of expertise include architectural programming, interior architecture, lighting and graphics. Scott's relevant project work includes:

- Truckee-Tahoe Airport Terminal Building, Design Competition Winner, 16,000 square feet
- Truckee-Tahoe Airport Terminal Building, Remodel, 3,000 square feet
- TTUSD Transportation and Operations Center, 23,000 square feet
- Trout Creek Recreation Center, Addition, 7,900 square feet
- Tahoe Donner Pharmacy and The Pharmacy Annex, 4,600 square feet
- Truckee Tahoe Community Foundation, 2,200 square feet
- Town of Truckee, Corporation Yard Master Planning
- Town of Truckee, Town Hall, Remodel, 12,500 square feet
- Town of Truckee, Police Department, Remodel, 8,000 square feet

Time Commitment: Design – Expected Effort Design 25%, Availability 40%; Construction Administration – Expected effort 75% during design, Availability 100% (with support staff) ■

JON FAUCHER, PE PRINCIPAL-IN-CHARGE

Jon Faucher is Mead & Hunt's west coast aviation services leader, and has overall responsibility for the staff and aviation services performed in the western United States as well as internationally. With more than 24 years of experience in project and program management, planning, design and construction administration at busy general aviation to large air carrier airports, Jon is one of our most knowledgeable aviation staff members. His program and grant management experience includes coordination with airport sponsors and the FAA for the development and management of airport capital improvement plans, grant applications and for the preparation and management of passenger facility charge programs. Jon has a thorough understanding of FAA guidelines, as well as 18 years of construction engineering and planning experience.

Jon has served as project manager for some of our most complex projects requiring coordination with multiple agencies and stakeholders. As the principal-in-charge for your projects, Jon will see that appropriate staff and resources are available to Truckee Tahoe Airport to meet your project schedule. **Time Commitment:** Expected Effort – 10%, Availability 20% ■

STEVE WINNETT, NCARB, LEED AP ARCHITECTURE

Steve Winnett is a senior project architect with more than 27 years of architectural experience with a broad range of project types including aviation, mixed-use, healthcare, educational and retail buildings. Aviation projects have included terminals, hangars, SRE facilities, and maintenance facilities. Steve has completed projects in Alaska, Arizona, California, Colorado, Iowa, Montana, Nevada, Oregon and Washington leading to a strong ability to juggle client needs with complex jurisdictional requirements. Steve's commitment to producing high quality projects with technical expertise and thorough execution makes him an ideal leader for various types of aviation and military projects at Mead & Hunt. **Time Commitment:** Expected Effort – 50%, Availability 50% ■



Education

- BS, Construction Administration, University of Wisconsin
-



Education

- B Arch, Washington State University
- BS, Architectural Studies, Washington State University



**NATHAN CLIFFORD, LEED GA
ARCHITECTURE**

Nathan Clifford graduated with a master's from the School of Architecture at Portland State University (PSU). Since joining Mead & Hunt, Nathan has worked on multiple aviation projects, including terminals, hangars, baggage handling systems, GA terminals and FBO's. Nathan completed the initial concept study for Hangar 2. **Time Commitment:** Expected Effort – 60%, Availability 80% ■

Education

- MA, Architecture, Portland State University
- BS, Architecture, Portland State University



**ERIK SCHROEDER
ARCHITECTURE**

Before working with Mead & Hunt, Erik Schroeder worked with two highly-acclaimed design firms in Portland, as well as started his own firm, focusing on renovation and remodel work and design-build projects. Erik's current responsibilities include: design conceptualization and presentation, CAD-BIM drafting, and preparation of construction documents.

Time Commitment: Expected Effort – 40%, Availability 50% ■

Education

- M. Architecture, University of Oregon, Portland
- BS, Psychology, University of Washington



**RICK ANDRITSCH
PROGRAMMING**



Rick Andritsch has 24 years of construction experience involved in various types of projects and delivery systems. Through these experiences, Rick has gained extensive knowledge in pre-development, pre-construction, pre-referendum and phasing. Rick is able to guide clients through the often arduous approval process for local, state and federal projects. His career has included project field supervision, project management and project executive roles with a special emphasis on pre-construction, referendum and real estate development. Relevant project experience includes: Hawker Beechcraft, Indianapolis, IN; International Aviation Properties, Wheeling, IL; Rite Hite, Milwaukee, WI; MidairUSA, Melbourne, FL; HondaJet - Dealership Facility, Aurora, IL and White Lodging, Gary, IN.

Time Commitment: Expected Effort – 30%, Availability 60% ■

Education

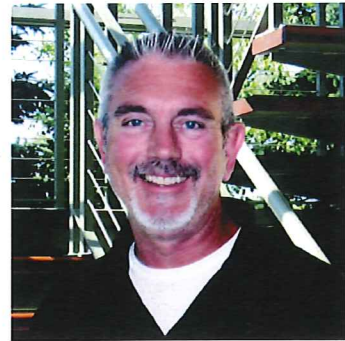
- BS, Business Economics, University of Wisconsin-Milwaukee
- Masters of Business Administration, Keller Graduate School of Management

TROY DUKE
COST ESTIMATING



Troy Duke has 28 years of construction experience, and has served as a superintendent for VJS Construction Services for 18 years. Prior to joining VJS Construction Services, Troy was a masonry and carpentry specialist with the US Army for ten years. Relevant project experience includes: Hawker Beechcraft Services, Indianapolis, IN; International Aviation Properties, Wheeling, IL; Rite Hite, Milwaukee, WI; Atlantic Aviation, Cleveland, OH and HondaJet - Dealership Facility, Aurora, IL.

Time Commitment: Expected Effort – 20%, Availability 60% ■



Education

- Southern Nevada Vocational Technical Center

ERIC LOVE, PE, SE, NCEES
STRUCTURAL

Eric Love has 20 years of experience in design and management of structural projects. His design experience includes work with steel, concrete, masonry, wood and load-bearing light gauge steel building structures. His diverse portfolio includes structural design and project management for infrastructure, hydroelectric, solar, educational, industrial, residential and forensic structural projects. As part of his project management experience, Eric has overseen small and large projects from conception to completion for both structurally-focused projects and multi-discipline projects. Eric has prepared fee estimates, design-build qualifications, technical investigation, assessment reports and project specifications, in addition to structural design, calculations and drawings. Eric has also acquired extensive field experience performing structural observations and solving problems during construction, in addition to performing various construction administration tasks. **Time Commitment:** Expected Effort – 40%, Availability 50% ■



Education

- BS, Civil Engineering, California State University – Sacramento

BRIAN DEBAKER, PE, LEED AP
MECHANICAL/PLUMBING/FIRE PROTECTION

Brian DeBaker is an experienced mechanical engineer with over 25 years of experience in HVAC design and construction project management. He has extensive design experience including preparing bid documents, load calculations, duct and piping layout, equipment selection, trade design coordination, writing specifications, cost estimating and reviewing submittals. Brian's project background includes aviation, cultural, educational, health care, industrial, laboratory, military, office and retail sectors. **Time Commitment:** Expected Effort – 40%, Availability 50% ■



Education

- BS, Mechanical Engineering, University of Wisconsin-Madison



Education

- BA, Technical Theater, Lawrence University, Appleton, Wisconsin



Education

- BS, Civil and Environmental Engineering, University of Wisconsin – Madison

**RICHARD (DOC) PARKER, RCDD
ELECTRICAL/COMMUNICATIONS**

Richard (Doc) Parker has more than 17 years of communications infrastructure design and project management experience on a variety of project types. He has a strong design methodology and extensive practical knowledge of installation practices which give him a unique end-to-end perspective on projects of all sizes. Doc's design talents include cabling infrastructure, access control and surveillance systems, AV and sound systems and technology space planning. **Time Commitment:** Expected Effort – 25%, Availability – 30% ■

**JEFF LEONARD, PE
CIVIL**

Jeff Leonard has more than 16 years of experience in infrastructure and airport improvement design projects and construction administration. He has been Project Manager/Engineer-of-Record for the majority of our most complex California pavement projects. What sets Jeff apart is his eagerness to understand project goals and determine obstacles early in the design phase so these elements can be factored into the schedule. This approach followed by proactive decision-making and sound engineering judgment allows for the design process to move forward in a timely manner. His track record for accurate, clear and concise plans and specifications has resulted in a list of successfully completed and well-recognized projects. Jeff excels at deriving innovative phasing schedules and CSPPs for complex, multi-year projects that balance cost effectiveness and constructability while minimizing operational impacts. Jeff communicates the importance of job site safety. Being part of the design team and providing the construction administration support and day-to-day observation has allowed him to develop the expertise to create constructible designs which illustrate the intent of the design for a Contractor to build. Jeff's experience includes multiple EMAS installations, approach lighting systems and NAVAID design, runway relocations, shifts, and extensions, hangar development, and drainage system improvements. Jeff keeps the communication flowing throughout the team, FAA, clients, airport stakeholders, and the surrounding community to ensure everyone is aware and up-to-date with the project progression. **Time Commitment:** Expected Effort – 35%, Availability – 35% ■

BRAD MUSINSKI, AICP
NAVIGATIONAL EASEMENTS/LINE OF SITE STUDY

Brad Musinski is accomplished in preparing airport master plans, airport layout plans and noise impact evaluations. His airport planning experience spans a wide range of airport types, from commercial service airports to busy metropolitan general aviation airports. He has contributed to projects from the pre-planning stages through construction and implementation. Brad is responsible for conducting technical research and analyses, designing aviation related facilities, technical report writing and preparing airport noise contours for airport planning projects and airport environmental projects. He has experience in commercial apron layouts, and building/hangar developments. Brad has significant experience preparing heliport plans and airspace plans for FAA approval. Brad is experienced in using the FAA's Integrated Noise Model for preparing airport noise contours for airport master plans and airport land use compatibility plans. Brad is responsible for a wide range of aviation planning efforts especially with regard to activity forecasts, noise analysis and runway alternatives. **Time Commitment:** Expected Effort – 30%, Availability – 35% ■

DAVID DIETZ, AICP
CEQA COMPLIANCE

David Dietz has more than 35 years of planning experience as an airport consultant, an environmental planning manager for a major hub airport and a public planner with local and state agencies. His work in aviation planning has included preparation of over 50 airport master plans, over 100 airport layout plans (ALPs), numerous environmental documents (including over 75 categorical exclusion submittals) under both the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA), and noise/compatibility plans for over 40 Airports. David's experience includes planning and environmental projects at military joint-use facilities in the western United States and western Pacific. **Time Commitment:** Expected Effort – 30%, Availability – 45% ■



Education

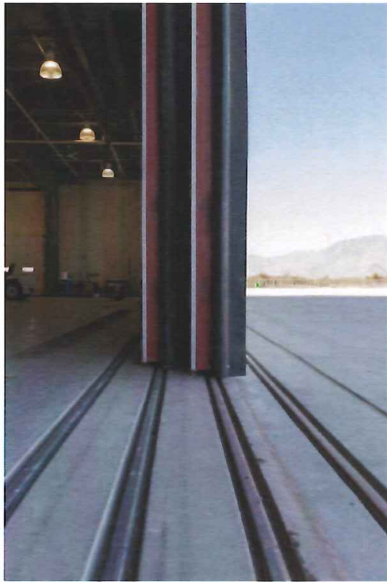
- BS, Urban and Regional Planning, Michigan State University



Education

- Masters in City and Regional Planning, Harvard University
- BA, Public Service/Political Science, University of California – Davis

PROJECT ADMINISTRATION



PROJECT APPROACH

The Mead & Hunt team understands the complex decisions involved from planning to design to execution of an airport hangar. Both Mead & Hunt and VJS have a strong portfolio of hangars, including projects delivered together. As this building is on vital ramp-front property, our approach is to work with the airport to deliver a structure that accommodates the current program and that can be repurposed for other aviation uses in the future. At the same time, we seek to minimize future energy, operations and maintenance costs.

A multi-use facility requires an approach that considers not only the purpose of each type of use, but also how those uses could potentially impact one another. To get the most value out of this project, energy and effort need to be invested in stakeholder outreach and collaboration, while also understanding the code and cost implications of the facility's primary function as a hangar.

To efficiently accomplish this goal with the necessary collaboration, our approach has six distinct phases, with the following critical elements:

Phase 1 – Planning/Programming

- Community outreach
- Site study
- Environmental clearance
- Authority(s) having jurisdiction outreach and criteria establishment
- Stakeholder commitment
- Preliminary plans and renderings

Phase 2 – Design Development

- Design development documents
- Cost analysis and estimating
- Value engineering and established budget
- Quality assurance

Phase 3 – Land Use

- Application packages for CEQA, CLUP and FAA review
- Plan review with building department

Phase 4 – Construction Drawings 90%

- Complete drawings and specifications to 90%
- Final plan and budget verification

Phase 5 – Construction Drawings 100%

- Final stamped drawings and specifications
- Set submitted for permitting
- Set submitted for bidding

Phase 6 – Construction Administration

- Local architectural support of day-to-day construction observation, submittals and RFIs
- Support of airport's project manager
- Project close-out

Programming and Stakeholder/Community Outreach

Constructing a hangar with multiple tenants provides an exciting opportunity to serve many of the airport's users. This hangar can also assist in your community outreach efforts. The project approach will see that your programmatic needs are served with a suitable return on investment. It will be critical to establish the true goals and priorities of the hangar early in the project.

Along with Ryan Group Architects, we will also engage the stakeholders to make sure the project is indeed an asset for your aviation community and the greater Truckee Tahoe area. Considerations will include:

Program: How does the building layout allow for both aircraft and gathering uses.

Aesthetics: How can this hangar help to reflect and reinforce the local architectural and airfield character.

Construction: How can we design this hangar to take advantage of the local contractor skill set and to withstand the Sierra mountain environmental considerations.

Site Study

We will use Mead & Hunt's master planning knowledge to site this hangar not only for its own best efficiency, but for the greater good of current and future uses at THK. Future plans including the expansion of the airport park area and the potential taxiway adjustments will be taken into account. Long-term utility, ramp and taxiway investments need to be scrutinized against the total project cost. Mead & Hunt designs all aspects of projects for airports, and our team works hand-in-hand to make sure the end result of every project will work in harmony with all airport uses.

CEQA

Prior to construction of the hangar, the District will need to consider the potential environmental effects of its construction and use under the California Environmental Quality Act (CEQA). While this building will not be identical to the building it replaces, we believe that it qualifies for a Class 2 Categorical Exemption as a replacement structure. The CEQA Guidelines (§15302) state that "replacement or reconstruction of a commercial struc-





ture with a new structure of substantially the same size, purpose, and capacity” qualifies as exempt from CEQA review unless unusual circumstances apply. If this path is chosen, a one-page Notice of Exemption would be prepared. This notice would then be filed with the Nevada County Clerk’s office where it will be posted for 30 days. A more conservative approach would be to prepare a Negative Declaration of Mitigated Negative Declaration. This would require completing an Initial Study of Environmental Effects which would be reviewed at a noticed public hearing. Nevada County development codes appear to allow replacement of an existing structure with a similar structure with an Administrative Development Permit as long as the new structure is less than 50% or 2,500 square feet larger than the existing structure. Based upon our current project knowledge, we do not expect your hangar to qualify for this administrative process. Therefore, Nevada County will be the lead agency for CEQA processing. We recommend that TTAD lobby Nevada County to use the Class 2 Categorical Exemption. TTAD can point to the fact that the structure will be housing uses that are already on the Airport. However, the major increase in the structure size may make that unacceptable to Nevada County. We can assist TTAD in expediting Nevada County’s CEQA review.

Federal Aviation Administration (FAA)

To be fully compliant with FAA requirements, we anticipate the District will need to provide the agency with:

- A Categorical Exclusion Submission (CATEX)
- An Obstruction Evaluation Submittal
- A updated Airport Layout Plan (ALP)

Given that this project is mainly replacement of a collapsed structure, we suggest that the District initially ask FAA staff whether they would accept a “letter” CATEX. This would simply be an e-mail describing why the project should qualify for a CATEX. However the FAA may require that a standard 20+ page CATEX be prepared. We can support TTAD regardless which level of documentation the FAA requires.

Normal FAA procedure is to require an obstruction evaluation as a precondition of approval of an ALP amendment for an on-airport structure. We have prepared obstruction evaluation submittals for prior TTAD projects. We would only require a site plan and building elevations to complete the submittal. There is greater certainty on the process that will be needed to arrange for an update to the ALP. Based upon recent actions we believe that the FAA will accept a “pen and ink” revision to the ALP. This is a quick and relatively low-cost process that TTAD has used before. FAA approval can normally be obtained in days rather than the months required for a standard revision.

Jurisdictional Review

Mead & Hunt understands all the necessary FAA review required for a successful project, including airspace review and NEPA documentation requirements. We can also perform the previously mentioned CEQA documentation, as required. Ryan Group Architects is familiar with the local jurisdictions and permitting processes required. Early in the project we will establish a complete list of permits and applications required and meet with the Authorities Having Jurisdiction at design onset to identify any potential issues. This will keep the project moving forward efficiently without last minute changes or redesign.

Stakeholder Approval

Once programming, site studies, alternate studies and preliminary estimates have been performed, it is critical to obtain stakeholder approval and proceed with a preferred alternate. We will meet with you and your stakeholders early to make sure a design emerges that ties user criteria to a budget that is backed by the value of the facility.

Design

By establishing a sound program that meets all the stakeholder requirements and previously vetting out the cost-benefit results of different building and system alternates, we are able to produce design documents that are concise and efficient. As we have all engineering and architectural disciplines in house, and have worked together on numerous hangar projects, our team has demonstrated our ability to deliver the integrated architectural and engineer efforts your hangar requires. We understand how to produce construction documents that result in competitive bidding by qualified contractors. We will also collaborate with the Ryan Group Architects to see that the building is designed to perform in snow country.

Cost Analysis and Estimates

A successful design must be delivered on budget. We perform a cost estimate during planning and at each design phase to validate design goals against funding realities. Past hangar experience allows us to begin this process with proven cost-effective strategies and data. Our partner, VJS is an aviation specialty general construction firm. There is exceptional value to having a hangar contractor/developer as part of the team. VJS will be involved throughout the project to produce estimates, validate the value of alternate options, and to scrutinize the design for cost-effective, efficient detailing.



Quality Assurance/Quality Control

We perform internal quality control reviews of the documents when they reach design stage before delivering them to the owner for review. Reviewers include architects, engineers and construction administration personnel who are experienced, but not actively involved in the project, to provide a candid assessment.

Construction Administration

Our construction administration will be led by our local partner, Ryan Group Architects. This allows you to have a team that is local and responsive to keep construction moving as efficiently as possible. Ryan Group Architects and Mead & Hunt will work hand-in-hand with the selected contractor to facilitate an efficient construction period, minimize impacts to other airport operations and meet all the criteria of the design documents.

A pre-construction meeting will kick-off the construction effort by gathering the primary contractors to establish points of contact, set ground rules and protocols and affirm expectations.

Although additional team members will become engaged during the construction phase, it is extremely important to maintain the involvement of the original design team for critical tasks to see that the design intent is implemented.

For processing of contractor submittals, we require initial review and coordination by the general contractor, submission through a single point of contact, and review by the original design team. We utilize an electronic submittal and review tools whenever possible to expedite this process. Periodic inspections by original design team members are performed at critical stages for each discipline. Beyond those, a part- or full-time field representative provides local, daily representation and observations and helps expedite resolution of problems in the field.



Closeout documentation is often coming from contractors at the end of a project. Some methods we have used to expedite a response, in addition to holding final payment, include sending reminder summaries of the various contract requirements as project closeout approaches; inspection of record documents status throughout construction; and establishing specific pay items and amounts in the Schedule of Values for the various closeout items.

We can also provide Warranty Period Inspections, typically at about ten months after substantial completion, to help you identify any items the contractor should address under warranty.

Schedule

All of the above needs to be done on a schedule that works for Truckee Tahoe Airport District. As the loss of the previous hangar 2 has left you with a deficiency of storage and meeting space, we understand you are anxious to proceed. We are prepared to initiate the project immediately in order to deliver completed construction documents and permits. The biggest hurdle to maintaining a schedule is to validate the program, budget and alternates early in the design, obtain CEQA approval, and to be prepared to break ground within the Truckee construction period. Once made, these decisions will help the team to proceed efficiently keeping the project on track. Once selected, our project manager will work with you to establish a schedule that works for all stakeholders. ■

REFERENCES

Mike Kirchner

Director of Engineering
Dane County Regional Airport
608-246-3393
Similar Project: General Aviation Hangar

Randy Blad

Hawker Beechcraft
316-676-8614
Similar Project: Maintenance and Repair Operations Hangar

Anna Rodriguez

Regional Manager, 4th District
Riverside County – Economic Development Agency
760-863-2537
Similar Project: Jacqueline Cochran Municipal Airport Educational Hangar

Abe Weber

Airport Director
Appleton International Airport
920-832-5268
Similar Project: Outagamie County Regional Airport Hangar

Randy Dohs

Chief Pilot
Gateway Plastics
262-242-2020
Similar Project: Vojet Hangar and Surveying

Rod Dinger

Airport Manager
Redding Municipal Airport
530-224-4321
Similar Project: Clarity Multi-Use Hangar ■





vjsLincoln, Inc.

General Aviation Contractor

vjslincoln.com

Hawker Beechcraft
SERVICES

Summary of Qualifications

August 10, 2017





vjsLincoln, Inc.
General Aviation Contractor

*We are General Aviation Experts
Who Help Your Business Take Flight.*

For more and more business leaders, general aviation facilities provide a base of operation for flexible and cost-effective air travel. Successful design and construction solutions integrate the logistics of aircraft maintenance and individual client support facilities.



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Section 1.0 - Firm Overview



VJS Lincoln, Inc.
 W233 N2847 Roundy Circle West
 Pewaukee, WI 53072
 Ph: 262-542-9000 Fax: 262-542-1371
 www.vjslincoln.com
 Contact Person: Rick Andritsch, Chief Executive Officer

vjsLincoln, Inc.
General Aviation Contractor

FIRM HISTORY

VJS Lincoln, Inc. is an aviation specialty design-build construction firm. The Lincoln Company created over 24 years ago, constructed only hangars and related structures exclusively. Primary markets included corporate flight groups, FBO's and charter operators. The focus now provides state-of-the-art, operationally functional aviation facilities on active airports.

In 2006, to better meet the needs of it's growing client base, The Lincoln Company became a specialty division of a much larger construction firm – VJS Construction Services. VJS is a 70 year old, 150 employees, \$100+ million Construction Company. VJS and The Lincoln Company brought together the expertise of aviation specialists and the depth and resources of a \$100+ million construction firm under one roof. In 2007, the two firms created VJS Lincoln, Inc., for the sole purpose of constructing aviation and related facilities globally. The company is located in Pewaukee, Wisconsin.

VJS Lincoln, Inc. is experienced in turn-key, design-build projects for the following corporate groups:

Midair USA

Melbourne International Airport
 Temporary Hangar
 Two Hangars / Shop and Office Complex

Atlantic Aviation

Various locations throughout of the United States
 Remodel / Addition / Construction of New Facilities for FBO's
 Chicago - Midway International Airport Hangar / Office Complex

International Aviation Properties

Chicago Executive Airport
 Hangar / Shop and Office Complex

HondaJet

Aurora Municipal Airport
 Showroom / Hangar / Office Complex

Hawker Beechcraft

Indianapolis International Airport
 MRO / FBO / Office Complex

Richland Airport

Richland Center, WI
 Box Hangar

Sterling Aviation

General Mitchell International Airport
 Hangar Door Repair

Signature Flight Support

General Mitchell International Airport
 Hangar Rehab

White Lodging Services

Gary Chicago International Airport
 Hangar/Office Complex

Signature Flight Support

Lambert - St. Louis International Airport
 Hangar Repair

Signature Flight Support

General Mitchell International Airport
 Hangar Repair

ASIG

General Mitchell International Airport
 Hangar Door Repair

Draupnir, LLC

Kenosha Regional Airport
 Hangar Remodel

Flightstar

Willard Airport
 Epoxy Floor System

Rite Hite Corporate Hangar

Milwaukee, WI
 Hangar Rehab

Waukegan International Airport

Waukegan, IL
 Four projects, two separate clients





Section 2.0 - Proposed Team



Rick Andritsch
Chief Executive Officer

vjsLincoln, Inc.

General Aviation Contractor

Rick Andritsch has 25 years of construction experience involved in various types of projects and delivery systems. Through these experiences, Rick has gained extensive knowledge in pre-development, preconstruction and phasing. Rick is able to guide clients through the often arduous approval process for local, state and federal projects. His career has included project field supervision, project management and project executive roles with a special emphasis on preconstruction, and real estate development.

Rick has been involved with the AGC of America for 14 years. He has served on several committees, chaired the Business Development Forum (formerly the Marketing Committee), was past Vice-Chair of the National Building Division, and is currently the National Building Division Chair and serving his second year on the National Board of Directors.

Education

University of Wisconsin-Milwaukee
B.S. Business Economics

1996 Keller Graduate School of Management
Masters of Business Administration

Contact Information

262-446-6446 (w)
262-303-4612 (c)
randritsch@vjscs.com



Hawker Beechcraft

Professional Societies/Activities

- Rogers Memorial Hospital - Board of Directors
- YMCA of Waukesha - Board of Directors
- YMCA Waukesha County - Association Board of Directors
- National AGC – Past Building Division Chair
- National AGC – Chair of the Public/Private Industry Advisory Council
- CommonBond Communities - Advisory Board

Relevant Project Experience

- White Wing Hangar | Kenosha, WI
- Hangar 8 | Wheeling, IL
- Vojet | Milwaukee, WI
- Hawker Beechcraft | Indianapolis, IN
- International Aviation Properties | Wheeling, IL
- Rite Hite | Milwaukee, WI
- MidairUSA | Melbourne, FL
- White Lodging | Gary, IN
- Truckee Airport Hangar | Truckee, CA
- Waukegan Airport | Waukegan, IL



White Lodging



Jake Jorgensen
Project Manager

vjsLincoln, Inc.

General Aviation Contractor

Jake graduated from Iowa State University with a degree in Construction Engineering. Jake started as an Intern for VJS in 2007. He assists project teams with project management aspects of the project. Jake's work ethic and enthusiasm has proved him to be a great asset for VJS both now and into the future.

Education

Iowa State University
B.S. Construction Engineering

OSHA 10 and 30 Hour Certification

OSHA Telehandler/Forklift Certification

Construction Quality Management for Contractors
Certification #784

Excavation Competent Person Certification

CPR/First Aid Certified

Contact Information

262-446-6434(w)
414-303-4621 (c)
jjorgensen@vjscs.com



Professional Societies/Activities

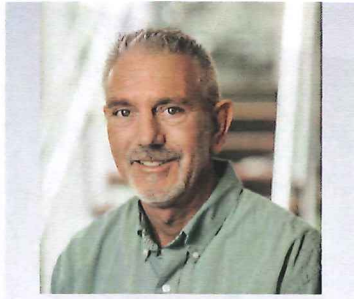
AGC Construction Leadership Council National Steering Committee
Incoming Vice Chair

AGC Education and Research Foundation National Board

Relevant Project Experience

White Wing Hangar | Kenosha, WI
Hangar 8 | Wheeling, ILI
Vojet | Milwaukee, WI
Rite Hite | Milwaukee, WI
Maine Veterans' Homes | Augusta, ME
Dickson Hollow Senior Living | Menomonee Falls, WI
Saint John's On The Lake | Milwaukee, WI
Trinity Pines | Lake Mills, WI
Mount Mary University | Milwaukee, WI
Whitnall High School | Greenfield, WI
Oak Creek-Franklin High School Athletic Fields | Oak Creek, WI
Huntington National Bank | 31 locations, WI, MI
Red River Army Depot, Maneuver System, Sustainment Center |
Texarkana, TX
NREL Research Support Facility | Golden, CO





Troy Duke
Superintendent

vjsLincoln, Inc.

General Aviation Contractor

Troy has over 29 years of construction experience and has served as a superintendent for VJS for 18 years. Prior to joining VJS, he was a masonry and carpentry specialist with the U.S. Army for 10 years. Troy's astute attention to detail, strong leadership and excellent communication skills have enabled him to become one of our top Superintendents.

Education

Southern Nevada Vocational Technical Center

U.S. Army Construction Engineering Course

Four-Year Carpentry Apprenticeship Program

Associated General Contractors of Milwaukee
Supervisory Training Program - all courses

Supervisory Leadership Series Classes

The Wisconsin Department of Natural Resources
Construction Erosion Control Workshop

Contact Information

414-303-4610 (c)
tduke@vjscs.com



Atlantic Aviation

Relevant Project Experience

White Wing Hangar | Kenosha, WI

Hangar 8 | Wheeling, IL

Vojet | Milwaukee, WI

Rite Hite | Milwaukee, WI

Atlantic Aviation | Cleveland, OH

International Aviation Properties | Wheeling, IL

Hawker Beechcraft | Indianapolis, IN

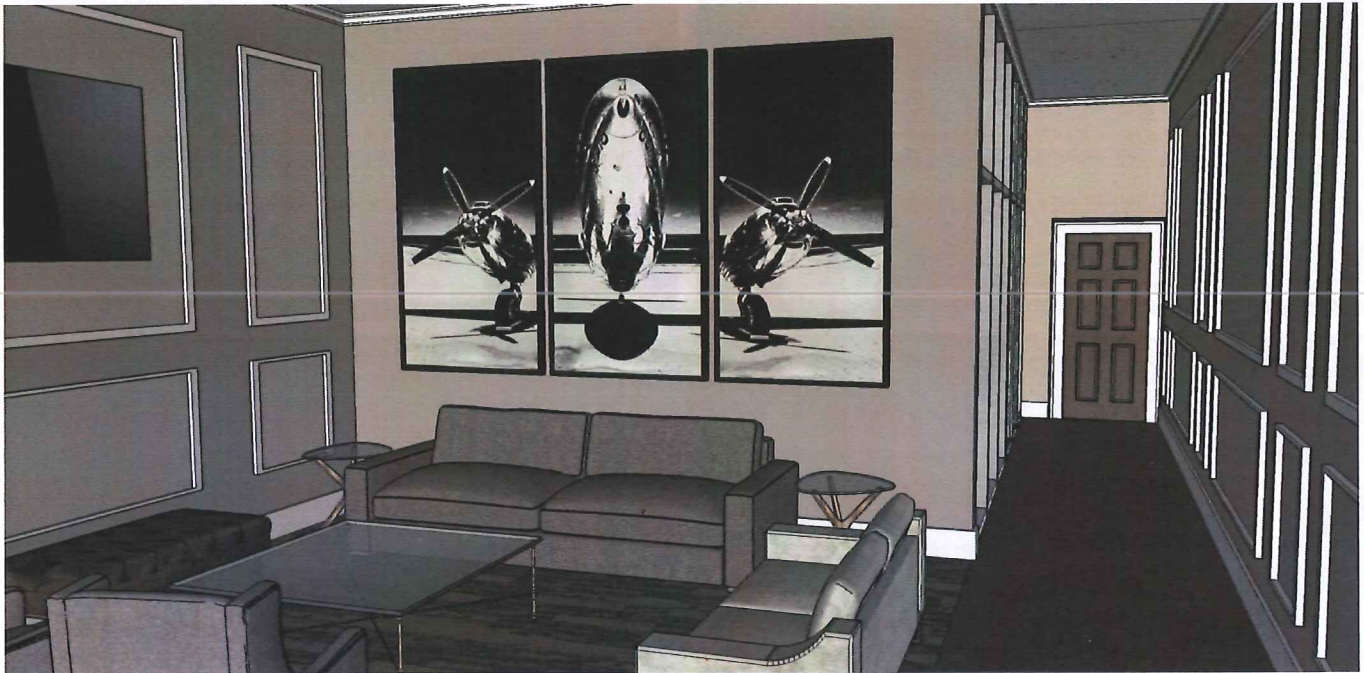


Hawker Beechcraft



Section 3.0 - Project Experience

HANGAR 8
CHICAGO EXECUTIVE AIRPORT
WHEELING, IL



Cost: \$500,000

Start Date: October 2017

Completion Date: December 2018

Contact Information: Lisa Head

Architect: VJS Construction Services

Building Components:

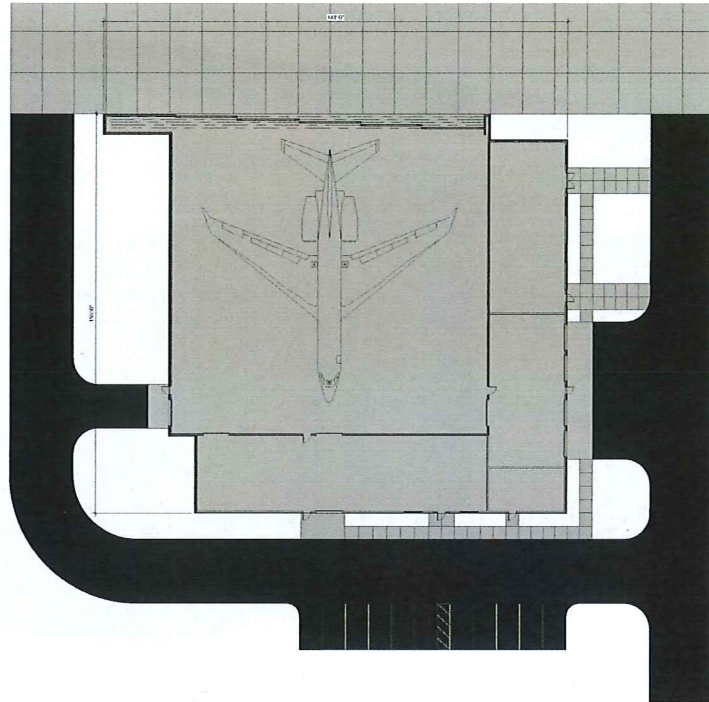
- 6,000 square feet
- Renovation of office and shop spaces
- New fans in hangar
- New insulation
- New vision glass from office to hangar areas

Unique Components:

- Class A office space
- Design/build



WHITE WING HANGAR KENOSHA AIRPORT KENOSHA, WI



CONCEPTUAL FLOOR PLAN
1/8" = 1'-0"

KENOSHA REGIONAL AIRPORT (ENW)
CONCEPTUAL HANGAR FLOOR PLAN
JULY 25, 2017

GRAPHIC-01 **Mead & Hunt**

Cost: \$6,000,000

Start Date: May 2018

Completion Date: December 2018

Contact Information: Steve Hawkins, 847-937-5132

Architect: Mead & Hunt

- New pre-engineered metal building
- 125' wide x 125' deep hangar
- 15,000 square feet, 6,000 square foot single-story office/shop complex
- Flight planning area
- Large conference area
- Executive and pilot offices
- Lobby and waiting area
- Energy efficient features include: in-floor radiant heat, LED lighting, day lighting in the hangar, hangar doors, and radiant snow melting system

Unique Components:

- Class A office space
- Glass doors from lobby looking into hangar
- Attached 4 car garage
- Foam fire suppression
- Design/build

Self-Performed Work: Concrete and Carpentry

**VOJET AVIATION, LLC
GENERAL MITCHELL INTERNATIONAL AIRPORT
MILWAUKEE, WI**



Cost: \$9,000,000

Start Date: August 2017

Completion Date: June 2018

Architect: Mead & Hunt

Building Components:

- New pre-cast building
- 194' wide x 134' deep hangar
- 26,000 square feet, 10,000 square foot single-story office/shop complex
- Flight planning area
- Large conference area
- Executive and pilot offices
- Lobby and waiting area
- Energy efficient features include: in-floor radiant heat, LED lighting, day lighting in the hangar, and radiant snow melting system

Unique Components:

- Class A office space
- Glass doors from lobby looking into hangar
- Attached 8 car garage
- Design/build

Self-Performed Work: Concrete and Carpentry



PRIVATE HANGAR WAUKEGAN INTERNATIONAL AIRPORT WAUKEGAN, IL



Cost: \$2,400,000

Start Date: January 2015

Completion Date: June 2015

Contact Information: Confidential Client

Architect: Mead & Hunt – Design Build working for VJS Lincoln, Inc.

Building Components:

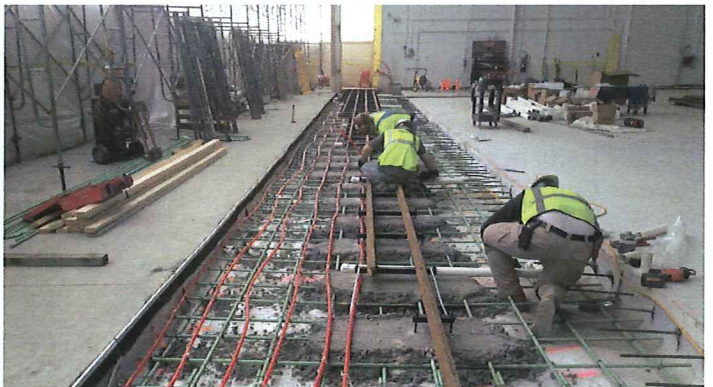
- Remodeling hangar and replacing rolling doors with new rolling doors
- Interior renovations
- Added windows

Unique Components:

- Moved a set of doors to stack on the other side of the hangar to accommodate plane
- Removed all concrete from the old rails
- Installed new foundation system for rails and hydronic heating which will never freeze
- Reinstalled rails which go through the door from side B and can also roll into A or one to the other. This now allows free width of hangar to accommodate plane through fire wall from A to B allowing maximum width of both doors by moving when the door stacks

Unique Components:

- Two hangars, phased project
- Design/build



PRIVATE HANGAR WAUKEGAN INTERNATIONAL AIRPORT WAUKEGAN, IL



Cost: \$2,000,000

Start Date: October 2014

Completion Date: March 2015

Contact Information: Confidential Client

Architect: Mead & Hunt – Design Build working for VJS Lincoln, Inc.

Building Components:

- Remodeled hangar and replaced rolling doors with Megadoors (vertical fabric doors) with minor remodeling

Unique Components:

- Vertical fabric door
- Removed existing rolling door along with rails and concrete on east side of the hangar
- Reinforced roof system
- Installed new portal frame system
- Installed three panel fabric door system to maximize height of hangar to accommodate plane

Unique Components:

- Two hangars, phased project
- Design/build



**RITE HITE (WIND DAMAGE REPAIRS)
GENERAL MITCHELL INTERNATIONAL AIRPORT
MILWAUKEE, WI**



Cost: \$650,000

Completion Date: July 2016/2017

Contact Information: Brad Kentopp

Rite Hite, 414-460-7670

Architect: Mead & Hunt

Building Components: This hangar consists of the following new components:

- 2 new Schweiss metal bi-fold doors
- Super Saver interior insulated roof system
- Epoxy floor
- Roofing work
- New approaches
- Interior storage areas
- Windows
- HVAC system rework
- Paint, inside and out

Unique Components:

- Wind damage to two doors
- Interior and exterior renovated to look new
- Revised portal frames, same size as structure to accommodate new door
- Design/build

Self-Performed Work: Demolition, Concrete and Carpentry



**RITE HITE
GENERAL MITCHELL INTERNATIONAL AIRPORT
MILWAUKEE, WI**



Cost: \$575,000

Completion Date: July 2013

Contact Information: Brad Kentopp

Rite Hite, 414-460-7670

Architect: Mead & Hunt

Building Components: This hangar consists of the following new components:

- Wilson Hangar Door
- Super Saver interior insulated roof system
- Epoxy floor
- 3 ph power
- Office, lounge and bathroom
- Interior storage areas
- Windows
- HVAC system
- Paint, inside and out

Unique Components:

- 60 year old hangar
- Interior and exterior renovated to look new
- New portal frame, same size as structure to accommodate new door
- Underground fuel systems
- Design/build

Self-Performed Work: Demolition, Concrete and Carpentry



INTERNATIONAL AVIATION PROPERTIES CHICAGO EXECUTIVE AIRPORT WHEELING, IL



Cost: \$4,350,000

Start Date: September 2010

Completion Date: May 2011

Contact Information: Stone Bridge Group, LLC

Mr. Reed Woods, 918-749-9700

Architect: Engberg Anderson

Building Components:

- New pre-engineered metal building
- 160' wide x 150' deep hangar (24,000 square feet)
- 6,200 square foot single-story office/shop complex
- Flight planning area
- Large conference room
- Executive and pilot offices
- Lobby and waiting area
- Energy efficient features include: an air rotation unit, fluorescent lighting, and day lighting in the hangar

Unique Components:

- Class A office space
- Glass doors from lobby looking into hangar
- Design/build



HAWKER BEECHCRAFT SERVICES - MAINTENANCE & REPAIR OPERATIONS HANGAR INDIANAPOLIS INTERNATIONAL AIRPORT INDIANAPOLIS, IN



Cost: \$14,200,000

Start Date: October 2008

Completion Date: July 2009

Contact Information: Hawker Beechcraft Services

Mr. Randy Blad, 316-676-8614

Architect: Engberg Anderson

Building Components:

- 40,000 square foot maintenance hangar
- 23,400 square foot shop and part storage area
- 5,400 square foot of office/ administration space
- 6,500 square foot FBO terminal
- 8,000 square foot limited spray paint booth
- Complex offers Hawker Beechcraft aircraft owners unprecedented service and comfort for their aircraft maintenance needs

Unique Components:

- New maintenance facility and FBO
- Unique security features were integrated to isolate public from private charters
- Foam fire suppression system
- Underground water retention system
- Hangar within hangar for paint booth, 2 sets of doors within hangar for booth
- Design/build

Self-Performed Work: Carpentry



**WHITE LODGING
GARY CHICAGO INTERNATIONAL AIRPORT
GARY, IN**



Cost: \$2,300,000

Start Date: November 2006

Completion Date: June 2007

Contact Information: Mr. Carl Hren (former construction manager), 773-578-2275

Architect: Design Organization Inc.

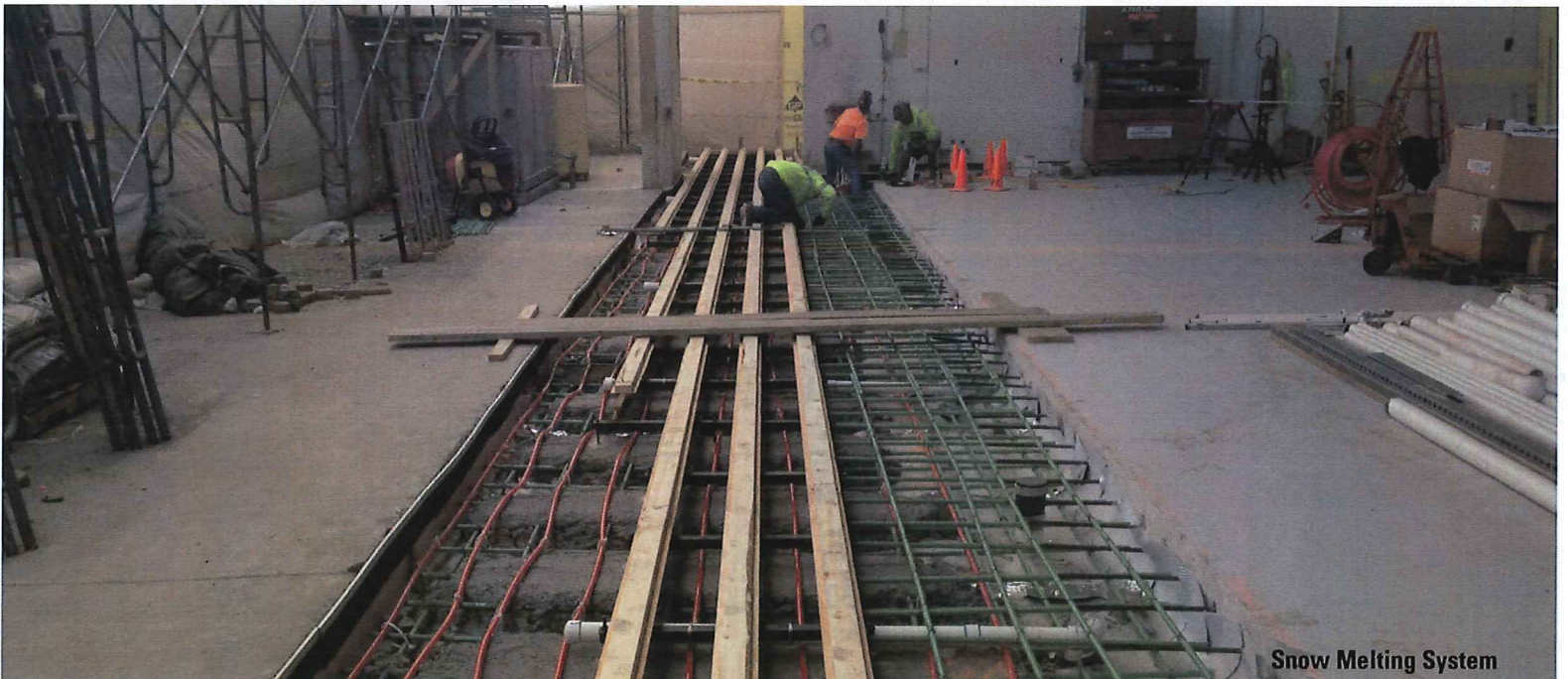
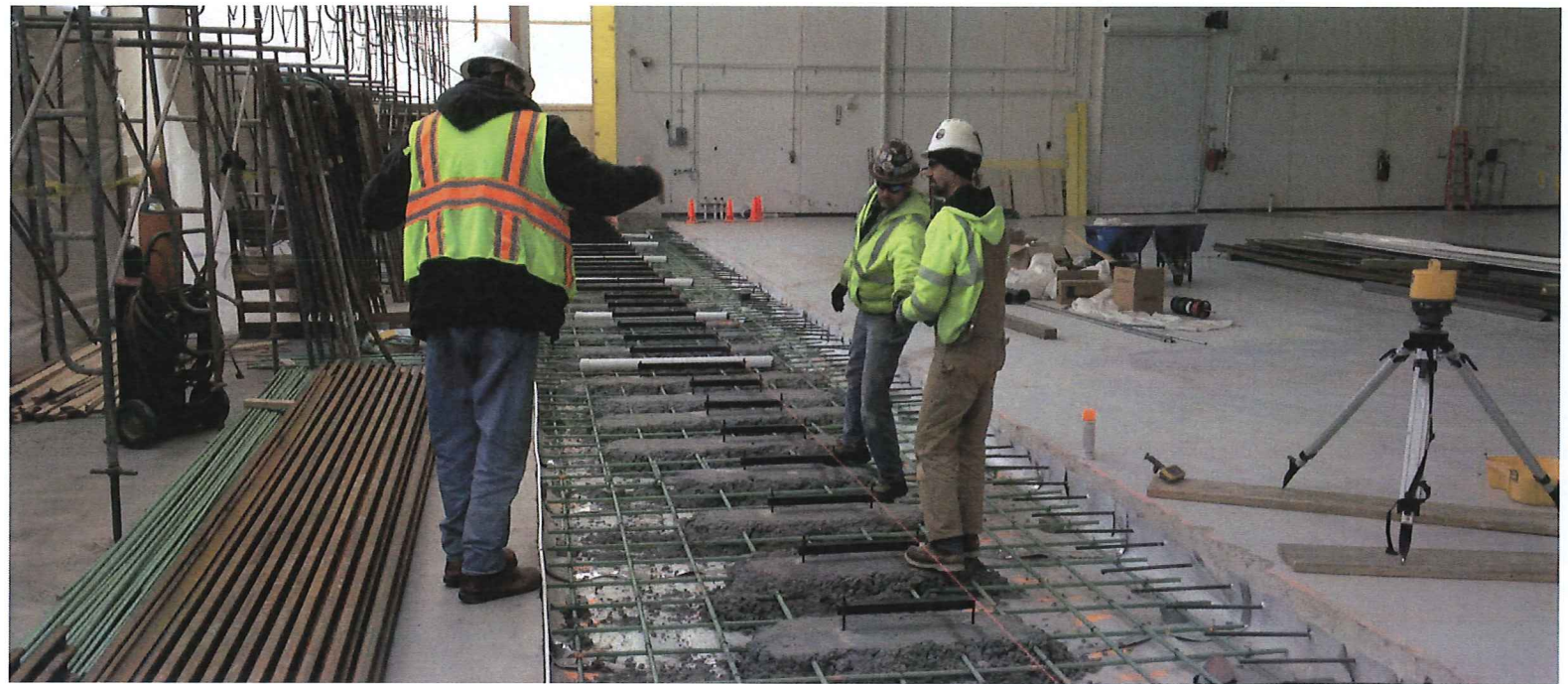
Building Components:

- 19,867 square feet
- Pre-engineered metal building
- Masonry facade for a two story office area
- 8" concrete hangar floor slab
- Snow melting system in the apron
- 120' x 28' hangar door
- Hangar heating system is a specialized air rotation system





Section 4.0 - Lessons Learned



Snow Melting System

Our lessons learned include:

- Constructibility of metal building steel frames, paneling, insulating, and steel supports for different hangar doors
- Constructibility and pros and cons of different hangar door systems
 - Pros/cons (functionality, cold weather, expansion – contraction, emergency power operation, wind loads, etc.)
 - Vertical fabric doors systems (Megadoors)
 - Aluminum bi-fold door systems (Wilson)
 - Steel bi-fold door systems (Schweiss)
 - Steel hydraulic door systems (Schweiss or similar manufacturer)
 - Rolling door systems (Norco)
- Constructibility of snow melt system and options
- Mechanical system options and pros and cons
- Floor flatness and floor drain locations to facility jacking and maintenance of aircraft
- Floor type options
- Permanent fall protection
- Lighting options
- Daylighting options
- Pilot and maintenance staff needs
- Vehicle access and tug access
- Estimating detail and open book process with budgets (see last project example)



Section 5.0 - Schedule

ID	Task Name	Start	Finish	Duration	2017												2018					2019				
					A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
1	Design - Bid - Build Approach	Mon 8/14/17	Thu 5/16/19	450 days																						
2	Award Process	Mon 8/14/17	Mon 9/25/17	30 days																						
3	Design Development/Programing	Tue 9/26/17	Fri 1/5/18	70 days																						
4	Owner Review/Approval of DD Drawings	Mon 1/8/18	Fri 2/2/18	20 days																						
5	Construction Documents	Mon 2/5/18	Fri 5/11/18	70 days																						
6	Owner Review/Approval of 100% Drawings	Mon 5/14/18	Mon 6/11/18	20 days																						
7	Bidding & Contractor Award	Tue 6/12/18	Tue 7/10/18	20 days																						
8	Pre-Order Metal Building and Hangar Door/Lead Times	Wed 7/11/18	Tue 10/30/18	16 wks																						
9	Construction	Wed 10/3/18	Thu 5/16/19	8 mons																						
10	Design-Build Approach	Mon 8/14/17	Thu 1/10/19	360 days																						
11	Award Process	Mon 8/14/17	Mon 9/25/17	30 days																						
12	Design Development/Programing	Tue 9/26/17	Fri 1/5/18	70 days																						
13	Owner Review/Approval of DD Drawings	Mon 1/8/18	Fri 2/2/18	20 days																						
14	Bid Metal Building, HVAC, Hangar Doors, Earthwork, Utilities	Mon 2/5/18	Fri 3/2/18	20 days																						
15	Pre-Order Metal Building and Hangar Door/Lead Times	Mon 3/5/18	Mon 6/25/18	16 wks																						
16	Construction Documents	Mon 2/5/18	Fri 5/11/18	70 days																						
17	Owner Review/Approval of 100% Drawings	Mon 5/14/18	Fri 5/25/18	10 days																						
18	Subcontractor Bidding	Tue 5/29/18	Mon 6/25/18	20 days																						
19	Construction	Tue 5/29/18	Wed 12/26/18	7.5 mons																						

This schedule is intended to illustrate durations and relationships between activities;
VJS Lincoln reserves the rights to adjust the schedule accordingly during the course of the project.

vjs Lincoln, Inc.

General Aviation Contractor

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