adm group

architecture.
design.
management.

AVIATION

Elevating Aviation Design with Innovation and Precision

At ADM Group, we excel in designing aircraft facilities that combine functionality, safety, and efficiency. Our expertise extends to a variety of hangar types, including maintenance, repair, and overhaul (MRO) facilities, corporate jet hangars, and military-grade aviation structures. We understand the unique demands of these environments and develop tailored solutions that optimize operational workflows, ensure safety, and protect valuable aviation assets.

Precision Engineering for Maximum Efficiency

Our aviation designs prioritize operational efficiency by incorporating optimized layouts that facilitate smooth aircraft movement, streamlined maintenance procedures, and enhanced safety protocols. Whether it's a large-scale MRO facility or a custom-built corporate hangar, we ensure every design element aligns with the specific operational needs of our clients.

Key Features of Our Aviation Designs:

- **Flexible Clear Span Structures** – Accommodating a wide range of aircraft sizes with adaptable space configurations
- **Advanced Maintenance and Repair Facilities** – Designed to support complex MRO operations efficiently
- **Integrated Support Spaces** – Incorporating workshops, administrative offices, and storage for seamless operations
- **Sustainable Design Practices** – Incorporating energy-efficient systems and eco-conscious materials to minimize environmental impact

Future-Ready Solutions for Growing Aviation Demands

Our aviation designs anticipate future facility needs by incorporating modular designs and scalable infrastructure that can adapt to evolving technologies and expanding fleets. From incorporating advanced fire suppression systems to ensuring compliance with FAA, NFPA, and other aviation safety standards, we deliver projects that meet the highest industry benchmarks.

Why Choose ADM Group for Your Aviation Project?

- **Expertise in Aviation Architecture** – Proven success in delivering high-performance facilities for diverse aviation clients
- **Tailored Design Solutions** – Customized designs that align with specific operational goals and budget requirements
- **Commitment to Safety and Compliance** – Ensuring adherence to stringent aviation and safety regulations

Take Your Aviation Project to New Heights

Partner with ADM Group to design a facility that enhances operational efficiency, safeguards aircraft, and meets the evolving demands of the aviation industry. Contact us today to learn more about how we can bring your vision to life.

Jeffrey Flemming, AIA
Principal | Director of Aviation
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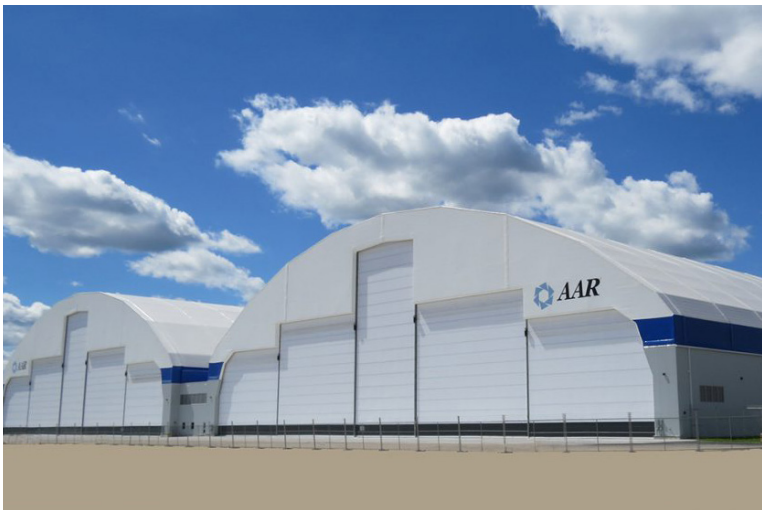
AAR Corp Maintenance Repair & Overhaul Facility

AAR Corp & Chicago Rockford International Airport
Rockford, Illinois



Creative facilities that inspire excellence and bring a community together.

The AAR facility's two insulated membrane-clad hangars each measure 300ft long with a 300ft clear span and 40ft sidewalls, culminating in a center height of 100ft. Each structure has five-panel, vertical-lift Assa Abloy Megadoors, with pivoting mullions, allowing for comfortable housing of aircraft as large as the Airbus A380. The hot-dip galvanized steel frame is clad with two-inch-thick Thermohall insulated fabric. Maintenance requirements are very low.

The vertical lifting Megadoors, with their exceptional seals, allow the facilities to be climate controlled cost effectively all year round. Complementing the curved membrane structures, the Megadoors' translucent fabric will also allow natural light in, creating a great work environment for the technicians, while minimizing lighting costs.

The new MRO facility, operated by AAR, is capable of servicing an Airbus 380 and Boeing 747 at the same time. The 200,000 square-foot facility is expected to operate 24 hours a day and will greatly expand the airport's infrastructure.

Project Owner Reference:
AAR Corp & Chicago Rockford International Airport

Construction Completion: 2018

Project Budget: $40.0MM

General Contractor:
Scandroli Construction

Delivery Method: CM@Risk

ADM Group Personnel:
Jeffrey Flemming Principal, Senior Designer

Chicago Rockford International Airport | Passenger Terminal

Chicago Rockford International Airport
Rockford, Illinois

Essential facilities that inspire excellence.

To ensure uninterrupted flight and passenger operations, we carefully planned this project in multiple phases. This phased approach allowed us to expand the terminal building by 50% while completely restructuring the circulation process to optimize passenger flow. As a result, we not only increased capacity at each boarding gate but also resolved a wide range of circulation inefficiencies that previously impacted the terminal's functionality.

A key improvement involved relocating the TSA checkpoint to the main level, enhancing both passenger convenience and maintaining rigorous safety and security standards throughout the concourse. Additionally, the baggage claim area was significantly expanded, doubling the number of baggage belts and allowing for efficient indoor distribution of luggage, improving both operational efficiency and passenger experience.

The project was executed over several years to strategically leverage the multi-year federal grant process, ensuring that we maximized federal investment for terminal enhancements. The initiative was launched after an in-depth master plan was conducted, which identified critical deficiencies within the existing, fully operational passenger terminal. This comprehensive approach allowed us to address these issues while maintaining seamless operations and significantly improving the terminal's overall capacity and functionality.

Project Owner Reference:
Chicago Rockford International Airport

Construction Completion: 2020

Project Budget: $28.0MM

ADM Group Personnel/Roles:
Jeff Flemming Principal, Senior Designer

General Contractor:
Scandroli Construction

Delivery Method: CM@Risk

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Cutter Aviation

Deer Valley Airport
Phoenix, Arizona

Essential facilities that inspire excellence.

Spanning a total of 64,774 square feet on a 2.6-acre site, these hangars serve as a vital asset for aircraft storage and maintenance, tailored to accommodate a variety of aviation needs.

Design Features:

Hangar Doors: Each hangar is equipped with 140-foot wide doors that operate as counterbalanced single units, allowing for a full opening time of just 45 seconds.

Climate Control: All hangars are conditioned, ensuring optimal temperature and humidity levels for aircraft safety and maintenance. Additionally, high-volume-low-speed (HVLS) fans provide enhanced cooling and air circulation.

Flooring and Walls: The hangars feature pristine white epoxy floors and walls, designed to reflect light and create a clean, bright environment. This not only improves visibility and safety but also simplifies maintenance and upkeep.

Safety and Fire Suppression: Safety is a top priority in the design of these hangars. A state-of-the-art SFFF (Super Low-Expansion Foam Fire Fighting) system will be installed, providing effective fire suppression capabilities tailored to the needs of aviation operations.

The new hangars at Deer Valley Airport elevate the operational efficiency of Cutter Aviation, providing an innovative and safe environment for aircraft storage and maintenance. Designed with quality and functionality in mind, these hangars represent a significant investment in the future of aviation services at Deer Valley Airport, accommodating the needs of a diverse range of aircraft while ensuring a superior experience for all users.

Project Owner Reference: Cutter Aviation

Construction Completion: 2023

Project Budget: $12.95MM

General Contractor: GCON

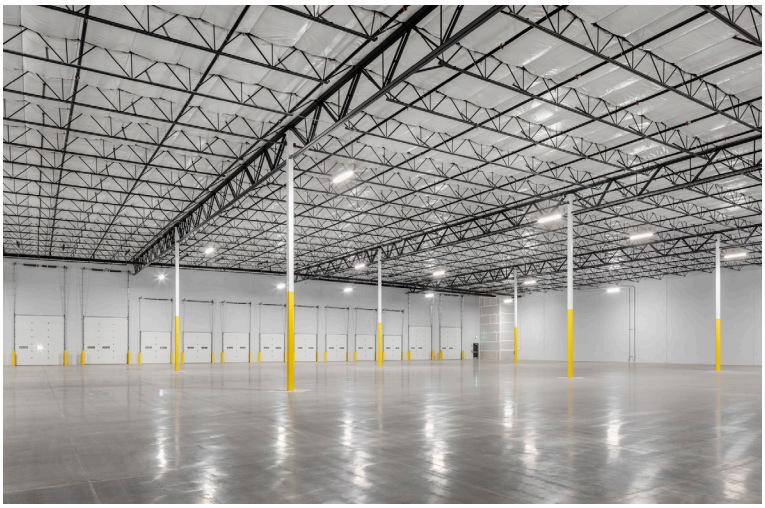
Delivery Method: Design/Build

ADM Group Personnel:

Jeffrey Flemming	Principal-in-Charge
Scott Waltenburg	Principal | Director of Design
Glen Klipfel	Project Manager
John Saunders	QA/QC Specialist

SkyBridge Arizona Buildings 106 & 107

Mesa SkyBridge
Mesa, Arizona



Essential facilities that inspire excellence.

SkyBridge Arizona is the nation's first and only air cargo hub that houses both Mexican and U.S. Customs, creating a seamless and efficient process for cross-border shipments. Strategically located at Phoenix-Mesa Gateway Airport in Mesa, Arizona, SkyBridge serves as a premier destination for industries such as automotive parts, food processing, and e-commerce, offering a streamlined platform for international trade and commerce.

This expansive 363.5-acre mixed-use development features a cutting-edge joint U.S.-Mexico Customs inspection facility, designed to simplify and accelerate cargo movement to Mexico and other international markets. The development also includes:

- **1.35 million square feet** of aeronautical development, supporting aviation-related operations and logistics.
- **2.19 million square feet** of non-aeronautical development, offering a range of facilities for industrial, office, and commercial uses.
- **270,000 square feet** of commercial development, designed to accommodate retail, hospitality, and other supportive services.

ADM Group led the Master Plan for SkyBridge Arizona, a comprehensive, yearlong collaborative effort involving SkyBridge Arizona, AECOM, and ADM Group. The Master Plan established a cohesive vision for the site's development, ensuring a balance between aeronautical and non-aeronautical uses while maintaining flexibility for future growth.

Project Owner Reference:
Mesa SkyBridge, LLC
Will Moseley
602.508.3565

Construction Completion: 10-Year Development Plan

Project Budget: $400.0MM

General Contractor: Graycor Construction Company

Delivery Method: CM@Risk

ADM Group Personnel:

Ben Barcon	Principal in Charge
Nina Sheriff	Principal | Director of Design
Jeffrey Flemming	Director | Project Architect
Brian Crawford	Job Captain

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SkyBridge Arizona Buildings 108 & 109

Mesa SkyBridge
Mesa, Arizona

Essential facilities that inspire excellence.

The project consists of a single-story industrial warehouse shell building with a height of 44 feet and a total interior space of 250,150 square feet. It is located on Lot 108 at the northeast corner of East Velocity Way and South Downwind Circle, within the Phoenix-Mesa Gateway Airport in Mesa, Arizona.

The shell building is designated for group-use warehouse purposes and is planned to be divided into three tenant spaces in the future. Constructed using concrete tilt-up wall panels, the building features three prominent storefront entrances. The roof is a hybrid structure combining steel and wood, and the interior space will remain unconditioned.

The exterior façade mirrors the aesthetic of the adjacent Lot 106 building, incorporating multi-height, undulating tilt-up concrete panels that are patterned and painted in a similar color palette. Full-height glass slots will separate sections of the façade, adding depth and rhythm to the undulating panels. Blue metal-paneled fin walls, paired with horizontal canopies, will define the entry points while breaking up the length of the façade with deep shadows for visual interest.

The site is designed to include clear and easily navigable access roads, ample parking, attractive landscaping, and well-placed retention areas to enhance functionality and aesthetics.

Project Owner Reference:
Mesa SkyBridge, LLC
Will Moseley
602.508.3565

Construction Completion: Fall, 2023

Project Budget: $400.0MM

General Contractor: Graycor Construction Company

Delivery Method: CM@Risk

ADM Group Personnel:

Jeffrey Flemming	Principal-in-Charge | Project Architect
Scott Waltenburg	Principal | Director of Design
Glen Klipfel	Job Captain

Aviation Maintenance Education Center

Rock Valley College
Rockford, Illinois

Essential facilities that inspire excellence.

The 40,000-square-foot classroom and laboratory facility at Chicago Rockford International Airport is a state-of-the-art replacement for the original 9,800-square-foot Falcon Road hangar, which housed Rock Valley College's (RVC) Aviation Maintenance Technology Program since 1968. The new facility significantly enhances the program's capacity, allowing the college to triple its annual graduates, from approximately 50 to over 150, addressing the growing demand for skilled aviation maintenance professionals.

To streamline the construction process and meet project deadlines, the project was issued in multiple phases. The first phase included the construction of the building shell, which was provided by a metal building supplier. While the shell was under construction, the design team concurrently developed the interior build-out documents, ensuring seamless project progression. The project was ultimately completed by two separate contractors, which required extensive coordination and communication from the design team to maintain alignment, meet the construction schedule, and stay within budget.

The new facility not only expands educational opportunities for students but also strengthens the region's workforce, positioning Rock Valley College as a leader in aviation maintenance education and contributing to the economic vitality of the surrounding area.

"We are proud that the college and regional entities have the vision to provide leadership in creating win-win opportunities like this. Education and job creation are critical components in transforming our region, and through this program expansion, we are accomplishing both."

-Mike Mastroianni, President of Rock Valley College.

Project Owner Reference:
Rock Valley College

Construction Completion: 2015

Project Budget: $5.69MM

General Contractor: Scandroli Construction

Delivery Method: Design-Bid-Build

ADM Group Personnel:
Jeffrey Flemming Principal | Project Architect

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