



**Architecture
Engineering &
Consulting**

Federal Design Expertise

Bomber Agile Common Hangar (BACH)

Tinker AFB, OK | \$282M (est.) | USACE Tulsa District

BACH is a prototype design intended to provide the USAF with flexibility to support multiple weapons platforms: a facility that can be configured with slight modifications at any location, while maintaining a common superstructure and primary sections. BACH is a "first of its kind" hangar which has the size and capacity to accommodate four B-52s, four B-21s, two C-17s, four KC-135s, or twenty-four F-16s simultaneously for depot maintenance without "trapping" aircraft in flow. The facility will also include a composite staging room on each side of the hangar bay for hydraulics and kitting.

MQ-9 Ground Control Station & Operations and Command Center Facilities

Creech AFB, NV | \$52.5M | USACE Los Angeles District

The Design-Build delivery of these twin buildings provided a two-story MQ-9 operations and command center and a two-story MQ-9 ground control station used for remotely piloted aircraft in theater from home station. Each of the facilities included a 30,868 SF SCIF area designed in accordance with ICD/ICS 705 and 7,593 SF of non-secure space. Both buildings achieved verification by the Green Building Initiative as Compliant with the Federal Guiding Principles. Each facility consists of one large mass briefing room, various smaller briefing rooms, mission planning areas, weapons and tactics, an intelligence and security office, data center, and flight commander offices.



B-52 Allied Support 2-Dock Hangar & ALC Ramp

Tinker AFB, OK | \$44.9M | USACE Tulsa District

The 72,460 SF two-bay aircraft hangar is a general programmed depot maintenance hangar consisting of one main building of two hangar docks within a single-bay to provide maintenance for the B-52 program at Tinker AFB. The hangar docks have been programmed to be flexible and have a configuration that allows for the aircraft to be "crabbed" in. The apron and aircraft parking concrete constitute approximately 36,500 SY of rigid pavement.



KC-46A 2-Bay Depot Maintenance Hangar

Tinker AFB, OK | \$63.9M | USACE Tulsa District

This general programmed depot maintenance hangar supports the KC-46A Pegasus aircraft, consisting of one main building that is divided into two components: an 80,700 SF two-dock hangar bay and a 40,604 SF two-story lean-to. The typical activity in these docks will be similar in nature, including general depot maintenance of an aircraft and performing maintenance procedures for the KC-46A program at Tinker AFB. The hangar docks were programmed to be flexible for the changing requirements associated with this type of operation, including flexibility for either a 'nose-in' first or 'tail-in' first configuration.

KC-46A Fuel Maintenance Hangar

Tinker AFB, OK | \$72.6M | USACE Tulsa District

Designed specifically for the repair and maintenance of the fueling systems of the KC-46A Pegasus aircraft, this project consists of one main building that is divided into two components: the hangar docks and the lean-to. The hangar dock area is approximately 81,800 SF and consists of two docks within two bays, which are separated from each other to provide optimal flexibility of the facility allowing for either a 'nose-in' first or 'tail-in' first configuration. The lean-to is approximately 6,640 SF and consists of a single-story, including administrative spaces to support the dock personnel, large gathering spaces, and building infrastructure.



C-130J Tension Membrane Hangar

Air Station Barbers Point, Kapolei, HI | \$49M (est.) | US Coast Guard

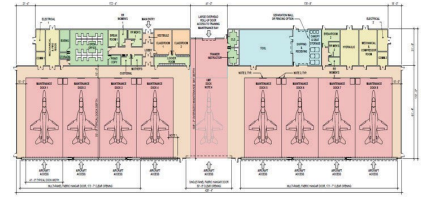
Using Alternative Construction Methods, this project included the 35% design and DB RFP for a 25,000 SF, one-bay Tension Membrane Hangar to support the maintenance of the USCG's C-130J aircraft. The hangar itself is seismically isolated and equipped with a motorized door, leading to storage and maintenance bays. An additional PEMB alongside the hangar will provide administrative offices and conference space. Options in the DB RFP include an additional 25,000 SF hangar and a 20,000 SF extension of the hangar to provide additional maintenance functionality, which could include avionics, electrical, engine, hydraulic, paint, and/or machine shops.



T-7A Maintenance Hangar & Unit Maintenance Trainer PCR

Sheppard AFB, TX | \$57M (est.) | USACE Tulsa District

This Planning Charrette Report (PCR) documents the validation process for the new T-7A Maintenance Hangar & Unit Maintenance Trainer (UMT) located at Sheppard AFB, TX. The proposed 46,500 SF facility is a one-story, steel-framed structure to perform all essential maintenance of 112 aircraft and specialized service for the T-7A aircraft. The hangar and UMT feature administrative offices, tool rooms, communications room, training/break rooms, and high-bay lab spaces to service up to eight T-7A aircraft daily.



50-Agent Border Patrol Station

Niagara Falls, NY | \$48.2M | US Customs & Border Protection

The multi-facility complex includes a 21,400 SF administrative and operations center that includes private offices, conference rooms, detention, vehicle sally port, breakroom, gear storage, Muster Room, fitness room, male/female locker room and showers, dog kennels along with support spaces for mechanical, electrical, and telecommunications equipment. Additionally, there is a 5,760 SF vehicle maintenance facility equipped with multiple maintenance bays, vehicle wash bay, and support spaces; a 16,400 SF, single-story enclosed parking garage; and 5,328 SF of covered storage for facility generators and boat storage. The facility was designed to comply with Guiding Principles for Sustainable Federal Buildings.



P239 EA-18G Facility Improvements Hangar Addition

NAS Whidbey Island, WA | \$25.5M | NAVFAC Northwest

The project expanded 14,509 SF and modernized Hangar 10 to accommodate six EA-18G aircraft and three EA-18G squadrons. The 95,231 SF hangar provides maintenance bays for six EA-18G aircraft, maintenance shops, maintenance administration, and squadron tactics and administration use. The hangar addition is an adapted design of a Type I maintenance hangar, as defined by UFC 4-211-01N, and is used for carrier aircraft. Building systems include mass notification, public address, fire alarm and communications. Sitework included earthwork, demolition of the existing concrete apron and aircraft parking apron pavement.

P251B Hangar 6 Extension & Hangar 9 Modernization

NAS Whidbey Island, WA | \$52.8M | NAVFAC Northwest

The existing 190,000 SF Hangar 6 was reconfigured to accommodate four P-8A squadrons and modernized existing building systems, including the complete removal and replacement of the mechanical and electrical systems, the installation of new fire protection systems including AFFF systems in the hangar bay. Hangar 6 also included new construction of a 7,000 SF addition to two existing maintenance bays to accommodate P-8A aircraft. The Hangar 9 temporary expansion (approximately 7,777 SF) allowed the facility to fully enclose P-3C aircraft during the construction period and provided clear space requirements needed to accommodate the aircraft.



CH-47 Beddown

Anchas Air Base, Egypt | \$50M (est.) | USACE Middle East District

The charrette and schematic design of the CH-47 Beddown facilities at Anchas Air Force Base, Egypt is in support of the Foreign Military Sales (FMS) program where 12 new tandem-rotor helicopters will be based. Project includes design of a maintenance hangar, pilot house, kitchen and dining facility; design plans for modification or renovation of a maintenance hangar, squadron building, Non-commissioned officer (NCO) housing, Aviation Ground Support Equipment (AGSE), control tower, flight maintenance apron, airfield lighting; as well as specific roadway repair and any utilities associated with the new facilities, modifications, or renovations.



P211 Replace Aircraft Maintenance Hangar

NAS Key West, FL | \$67.2M | NAVFAC Southeast

The project includes the design and construction of a two module, Type I aircraft maintenance hangar in support of F-5 and F-18 aircraft. The new facility will contain high-bay space, a bridge crane, shops and maintenance space, as well as operation, training, and administrative spaces. The project will place 45,000 SF of new airfield pavement for aircraft ingress and egress to hangar and operational storage. Demolition of the existing hangar facility is also part of the project.



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