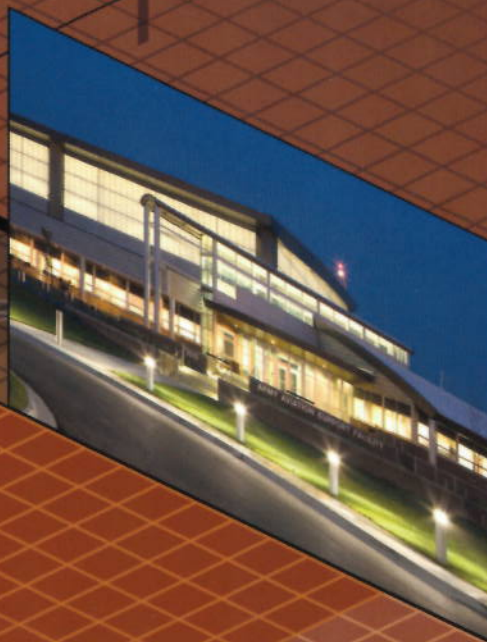


USAF

2008

architecture
sustainable design
interior design
landscape architecture
planning

design awards program





United States Air Force

2008 Design Awards Program

For over three decades,

the USAF Design Awards Program has been an effective means of recognizing outstanding contributions to the Air Force mission by design professionals around the world. This brochure of 2008 award winners highlights the teamwork of many professionals who enable the Air Force to maintain its reputation for design and facility excellence. Throughout this brochure you will find multiple design principles that allow the Air Force to provide its Airmen with quality facilities and installations, while responding to ever tighter budgets and increased energy conservation.

As the Air Force takes on new challenges in using our resources efficiently while reducing our impact on the environment, the USAF Design Awards Program stands as an effective means of measuring our successes, and recognizes those who stand out among the many design and construction professionals who contribute to our outstanding facilities. We continually look for innovative ways to streamline our design and construction process, and as we look to the future our challenge in the next decade will be using less energy and more recycled materials to ensure the Air Force and the Department of Defense builds responsibly.

Much more than just an opportunity to congratulate the winners for a job well done, the USAF Design Awards Program is a measuring stick we use to determine success, and is a tool we use to communicate our standards to the design and construction community. As we continually strive for superior and innovative facility designs, I congratulate the winners of the 2008 USAF Design Awards Program.



Delwyn R. Eulberg

DELWYN EULBERG, Maj Gen, USAF
The Civil Engineer
DCS/Installations & Logistics



2008

Design Awards Program

This Annual Report marks the 33rd anniversary of the United States Air Force Design Awards Program that was established in 1976 to recognize and promote design excellence. The Air Force sets no limits on the number or type of projects that can compete each year. There are seven project award categories. These include Planning Studies and Design Guides, Sustainable Design, Concept Design, Interior Design, Landscape Architecture, Facility Design, and Military Family Housing.

For each year's competition, an effort is made to secure jurors of the highest professional standards, blending progressive professionals who are knowledgeable of design trends in the private sector with exceptional design professionals currently in government service who understand military terminology and design standards.

The United States Air Force Design Awards Program is a viable and important program that has become institutionalized within the Air Force. It is widely recognized throughout the federal government and is supported by the enthusiastic participation of notable professionals in the private sector. The program is a proud recipient of the 2000 Federal Design Achievement Award, which recognizes exceptional design achievement from all sectors of the federal government.

Sustainable Design**Army Air Support Facility**

Buckley Air Force Base, Colorado

Concept Design**Aircraft Maintenance****Operations Center**

Laughlin Air Force Base, Texas

Air National Guard**Readiness Center Expansion**

Andrews Air Force Base, Maryland

Facility Design**Kindergarten**

Aviano Air Base, Italy

Systems Acquisition Management**& Support Complex**

Los Angeles Air Force Base, California

Air National Guard Readiness**Center Renovation & Addition**

Andrews Air Force Base, Maryland

honor awards**merit awards****Concept Design****Fitness Center Addition**

Schriever Air Force Base, Colorado

Vehicle Maintenance Complex

Nevada Air National Guard, Reno

TRANSCOM Consolidation

Scott Air Force Base, Illinois

Interior Design**High Tides Lounge**

Andersen Air Force Base, Guam

Western Range Operational Control Center

Vandenberg Air Force Base, California

Landscape Architecture**Barbeque Pavilion**

Vandenberg Air Force Base, California

Base Welcome Sign

Cheyenne Mountain Air Force Station,
Colorado

Facility Design**Housing Office**

Aviano Air Base, Italy

citation awards**Planning Studies and Design Guides****Common Battlefield Airmen Training Complex****Customer Concept Document**

Moody Air Force Base, Georgia

Sustainable Design**Dormitory**

Barksdale Air Force Base, Louisiana

Concept Design**Medical/Dental Clinic**

Tinker Air Force Base, Oklahoma

Middle School

Osan Air Base, Republic of Korea

Facility Design**Dormitory**

Wright-Patterson Air Force Base, Ohio

Communications Administration Building

Charleston Air Force Base, South Carolina

honor award sustainable design

Army Air Support Facility Buckley Air Force Base, Colorado

Design Organization: Coover-Clark Associates
Architect of Record: CH2M Hill
Using Command: National Guard Bureau
Host Command: Air Force Space Command
Design Agent: Colorado Army National Guard
Base Engineer Organization: 460th Civil Engineer Squadron

This new home of Colorado Army National Guard Aviation ties its styling to the craft of constructing and maintaining aircraft as well as the regional language of Colorado. Its natural xeriscape blends well with its long, crisp lines, dynamic composition of airfoil forms, high articulation of both traditional and modern materials while achieving Gold LEED® certification from the US Green Building Council. Roof forms appear to float above the crystal appearance of the vast hangar bay. A composite resin panel system highlights the main entry and insulated spandrel glazing units are used in the storefront window systems. With much more daylight than traditional designs, ninety-six percent of the facility's occupied spaces feature natural daylighting, saving over \$10,000 in lighting costs per year. Diffused natural light is introduced into the maintenance areas of the aircraft. Fresh air exchanges during winter months require 2,000,000 cubic feet of air to be heated and then discharged directly outside. But in this design, a heat exchanger inserted into the hangar's makeup air system pulls the heat from the air being exhausted and transfers it to the air being supplied to the hangar. This heat recovery system is 75% efficient, which equates to a savings of \$38,000 per year. Water-efficient landscaping and innovative irrigation helped achieve a savings of 85% over baseline case assumptions. The design also incorporates waterless urinals, low flow fixtures with motion sensing, and the recycling of aircraft wash water. Numerous finish materials are used that are rapidly renewable or contain a high level of recycled content.





Jurors' Comments

Achieving 41 LEED® points is very impressive

Definitely an award winner — outstanding solution

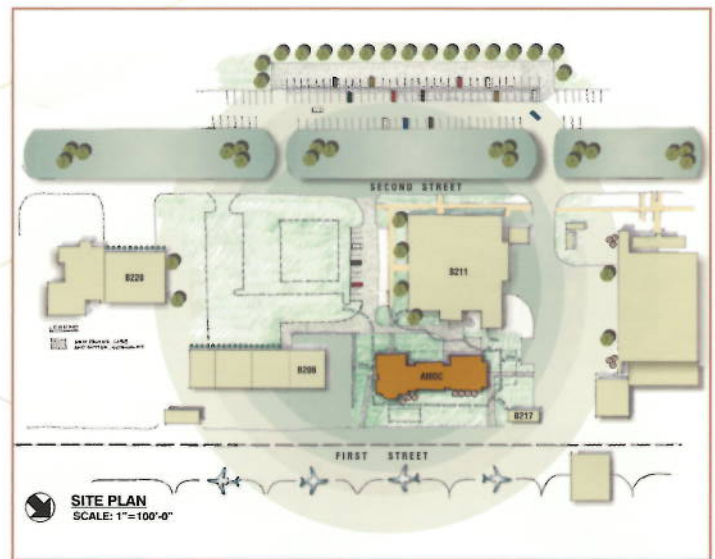
The design team set a high bar and exceeded it

honor award concept design

Aircraft Maintenance Operations Center Laughlin Air Force Base, Texas

Design Organization: Frankfurt-Short-Bruza Associates, P.C.
Using Command: Air Education & Training Command
Design Agent: Fort Worth District
 US Army Corps of Engineers
Base Engineer Organization: 47th Civil Engineer Squadron

This joint complex will facilitate day to day training operations, enhance command and control, reduce facility repair/maintenance costs, and improve aircraft maintenance scheduling and supervision. Consolidating aircraft maintenance supervisory functions currently spread throughout four facilities, the design positions distinct functional areas to provide the appropriate adjacencies necessary for efficient operation. Located immediately off the flight line, the facility is hemmed-in on its other three sides by existing buildings. After antiterrorism and force protection setbacks were applied, the constrained site forced the facility into a long narrow footprint. In the spirit of a traditional air traffic control tower, a similar form of sloped glazing and multi-faceted geometry was incorporated into the design. This successfully achieved the goal of allowing full view of the flight line and provided a distinctive building indicative of the building's function.





Jurors' Comments

Variety of forms, massing and materials provide an interesting and modern facility that reflects the internal ordering of spaces and occupants while reducing mass

Refreshing architectural character that should set a standard for the installation

Consolidates four separate operations in a creative, seamless way

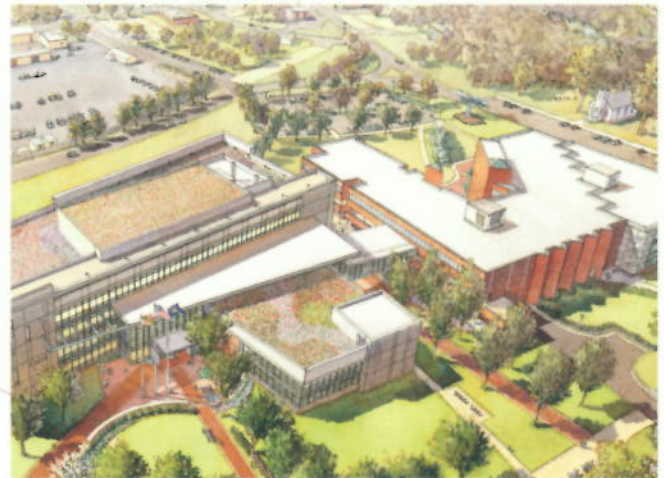
honor award concept design

Air National Guard Readiness Center Expansion

Andrews Air Force Base, Maryland

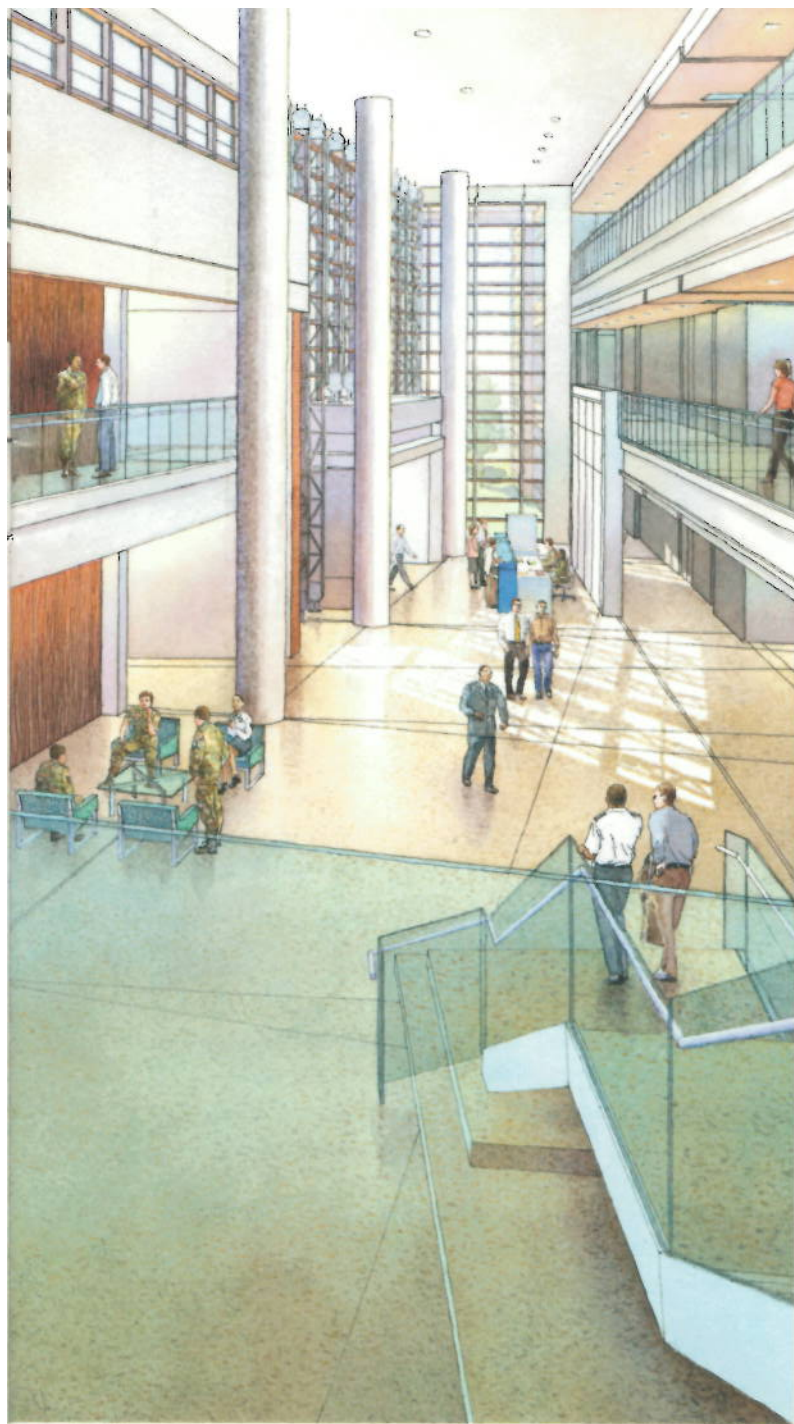
Design Organizations: CH2M Hill, DMJM Design & Gensler
Using Command: National Guard Bureau
Host Command: Air Force District of Washington
Design Agent: National Guard Bureau PARC-S Branch
Base Engineer Organization: ANG Readiness Center
Campus Facilities Office

This design creates a cohesive campus environment and provides a building with a strong architectural presence. The facility unifies its surroundings and embodies the cutting edge technology of the Air National Guard. Comparable to a modern corporate headquarters, the new addition offers modern flexible office space that can easily accommodate future growth and personnel reconfiguration. A prominent cantilevered element greets visitors as they first approach the building. As they follow along the west elevation, layers of the building are peeled back drawing you around the turn to the main entrance. An atrium serves as the primary circulation spine and ties the new facility to the existing Conaway Hall. The campus environment was achieved through the placement of various elements on the site and through the use



of compatible, consistent materials. The orientation of the new addition effectively ties it to the existing building while entry points are established at both ends. The material palette further emphasizes and ties together the new campus. The proud history and heritage of the Air National Guard is reflected in the architecture. The use of key architectural elements, such as the metal panel feature wall, cantilevered elements and the three-story atrium help to give the new Air National Guard Readiness Center Expansion its presence. Sustainability is very important to the Air National Guard. The design incorporated approaches that will achieve LEED® — NC certification through the use of appropriate materials, construction methods, sophisticated building controls programs, a green roof, low water consumption and xeriscape landscaping.



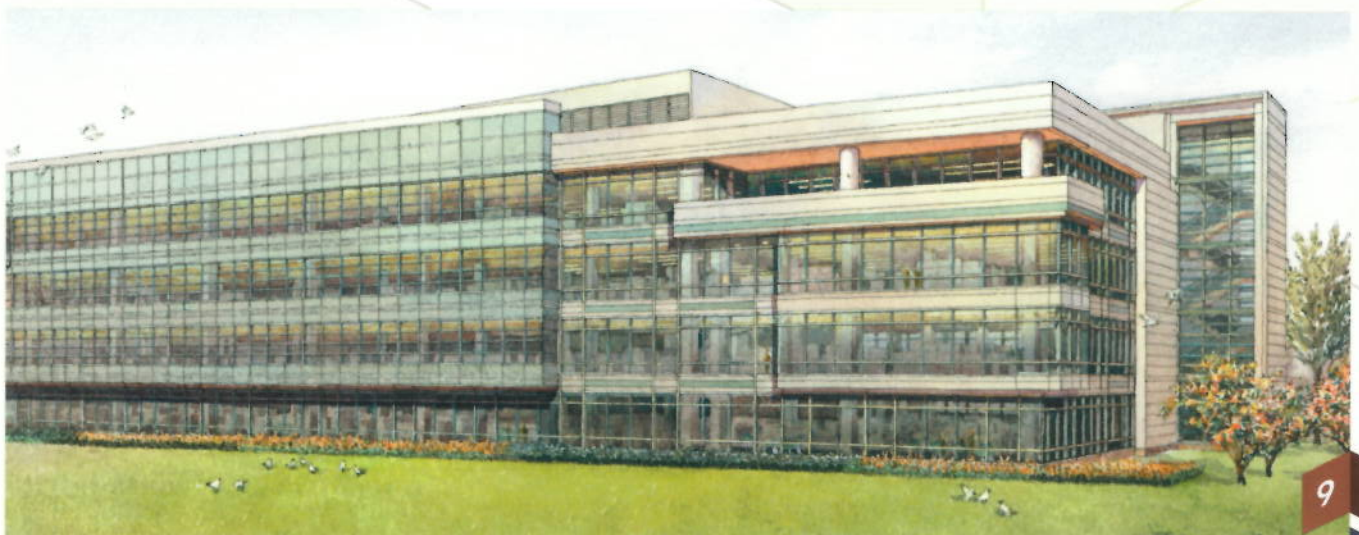


Jurors' Comments

Strong architectural presence is reflective of a technical and innovative Air Force

Layering of building elements provides an outstanding exterior appearance

Creates a dynamic, interesting and cohesive campus environment



honor award facility design

Kindergarten Aviano Air Base, Italy

Design Organization: Mitchell/Giurgola
Architects with OK Design Group

Using Command: United States Air Forces in Europe

Design Agent: NAVFAC Europe – Southwest Asia

Base Engineer Organization: 31st Civil Engineer Squadron

This kindergarten annex is an integral part of the adjacent elementary school, and a continuation of its architectural expression, while also providing an identifiable, appropriately scaled destination for the youngest children. Conceived as another increment of the main "school village" where the overall design was broken into function-based units, the kindergarten building is organized with classrooms on either side of a central corridor which receives daylight from clerestory windows above. Each of the rooms has an individually articulated entry from the outdoor playgrounds which creates a scale appropriate to young children and is similar in spirit to the articulated stair entries at the elementary school wings. While appropriately designed at a smaller scale, the kindergarten shares the larger school's design vocabulary of ocher stucco walls with white trimmed windows and red tile roofs.



The kindergarten plays a strong role of a unifying element in this area. While it is a small building with its landscaped play areas, it acts as a center piece for the surrounding larger structures. This is a small but powerful building; simple in plan but rich in detailing which gives it the power to unify the surrounding development beyond its fundamental use. Daylighting is a prime element incorporated into all spaces of the building. Tall windows shaded with wide overhangs allow daylight deep into the classrooms while minimizing direct sunlight. Reflected daylight is also brought into the corridor and the rear of the deeper classrooms from clerestory windows in the roof. Low-e glazing was used to reduce the heat gain. Occupancy sensors were used in all spaces for artificial lighting control. These specialty sensors are adjustable so as to allow artificial light operation only when there are low natural light levels.





Jurors' Comments

A tremendous achievement to work within a modest budget to create a facility that is visually pleasing and functionally efficient

This project clearly demonstrates that a modest budget does not mean the project must be routine and void of quality

Exceptional details and a super floor plan



honor award facility design

Systems Acquisition Management & Support Complex

Los Angeles Air Force Base, California

Design Organizations: Nadel Architects, ProLogis, and Kearney Real Estate Company

Using Command: Air Force Space Command

Base Engineer Organization: 61st Civil Engineer & Logistic Squadron

This project is the result of the first time in US history for a contractor to deliver a brand new military complex in exchange for government owned property. The new 49.5-acre SAMS campus is carved from the original 98-acre base campus, replacing 865,000 square feet of existing outdated facilities. The remaining site, plus two other remote parcels, went to the developer as compensation for design and construction of the new facilities. This new state-of-the-art office environment provides the flexibility to integrate future technologies, maximize operational efficiency, establishes a pedestrian-friendly environment, and is compatible with existing facilities. Additionally, the project had to be constructed on a tight time schedule within the value of the traded land. The heart of the campus is the central courtyard that functions as an outdoor gathering space that can accommodate over 1,000 people. The courtyard also facilitates pedestrian traffic throughout the campus without vehicular interference. The simple, bold design emphasizes clean lines and aerodynamic forms, creating a visual reference to space and flight. The four-story buildings appear as multiple structures, with exteriors broken into visually diverse components. The office areas feature raised floor systems with efficient under-floor air distribution, allowing maximum individual user control. Moveable open office systems maximize workspace flexibility. Direct and indirect lighting



coupled with a white exposed structure and deck delivers an airy, light, and creative environment. The Consolidated Club with its expansive sloped glass "prow" and the adjacent water feature create a dramatic ceremonial entry to the campus, and varied landscape treatments provide a rich visual experience for the enjoyment of staff and visitors. The large four-story cantilevered buildings feature impressive massing, streamlined vocabulary and angular geometry to present a unique juxtaposition to the forms of existing structures, and to both complement and contrast with surrounding buildings.



Jurors' Comments

Well-proportioned and nicely scaled

Technically efficient and extremely elegant

The material palette of metal panels and glass is particularly attractive

Very compatible with buildings adjacent to the installation



honor award facility design

Air National Guard Readiness Center Renovation & Addition Andrews Air Force Base, Maryland

Design Organization: Whitman, Requart Associates, LLP
Using Command: National Guard Bureau
Host Command: Air Force District of Washington
Design Agent: National Guard Bureau AQ
Base Engineer Organization: ANG Readiness Center
Campus Facilities Office

What began as a straightforward remodel of a 107,000 square foot office building expanded dramatically as a result of the events of September 11, 2001, resulting in the incorporation of a 35,000 square foot addition into the design. The addition dramatically improved flexibility of the open office environment, eliminated the most deteriorated northern walls of the existing exterior envelope, and reserved future expansion opportunities to the south. Central mechanical equipment was resized, and distribution rerouted and recalculated to serve the combined 143,000 square foot renovation/addition, all the while incorporating force protection measures. The original building, clad in dark masonry, was a foreboding presence on Andrews Air Force Base. The new addition provided a new opportunity to redefine the public image of the Center as having national prominence as a preparedness headquarters.

The most significant sustainable aspect of this project was salvaging the existing building itself. Numerous upgrades were necessary to improve the building envelope and increase the efficiency of mechanical systems, but these improvements flow seamlessly from the renovated portion through the addition. An innovative space planning module, more flexible floor plate, stronger primary circulation path and revised core design all contribute to the rebirth and long-term efficiency of the building.



Two 761 ton-hour ice storage tanks were installed to augment the total cooling demand of the building. The chiller was reduced in size by over 100 tons by incorporating thermal storage into the mechanical system design. This approach shifts energy usage to off-peak electrical demand periods. The direct-indirect light fixtures are controlled by ceiling mounted motion sensors. Suitable for video display terminal applications, a lower lighting level satisfies illumination requirements due to improvement in the quality of light while reducing energy consumption. Extensive natural daylighting was also incorporated in the addition. Reflective tinted glass was used throughout the building to reduce radiant heat gain and cooling loads. The glass also has a low U-value to minimize heat loss during the heating season. A light colored roof also contributes to reduced energy consumption.





Jurors' Comments

Exceptional architecture — clean and crisp

The modern character of the addition works well with the red brick of the original facility

The simple palette of glass and metal sets a high standard for future additions



merit award concept design

Fitness Center Addition

Schriever Air Force Base, Colorado

Design Organization: HBA

Using Command: Air Force Space Command

Design Agent: Omaha District US Army Corps of Engineers

Base Engineering Organization: 50th Civil Engineer Squadron

This addition to the existing fitness center includes a dividable gym, a group exercise area, weight training areas, a cardio area, an elevated running track, locker and shower facilities, administrative facilities, and support spaces. Transparency, connectivity, and flexibility are three key components used to attract customers to an efficient and user-friendly facility. Transparency permits ease of operations and use for both the operators and customers. Operators can view the majority of the activities occurring within the facility from the control desk, and the customers are able to view most of what the facility has to offer. The connectivity of functional areas stimulates team support and customer moral throughout. Flexibility



is the most important issue of the three, allowing multiple functions to occur within a single space while accommodating changing requirements. The current floor plan can easily be expanded to incorporate an aquatics center at a future date. Translucent wall panels in various locations and horizontal shading louvers at the entry minimize solar gain and glare while providing much higher insulation values than traditional glazing. The exterior materials effectively stitch the facilities together with a common thread of material and color creating a visual balance of old and new. The orientation of the facility maximizes views of the mountains to the west and helps to incorporate daylighting throughout.



Jurors' Comments

Very nice design — looks like it belongs in Colorado

Appropriate detailing with outstanding elevations

Met all customer requirements and raised the standard for all renovation/addition projects



Vehicle Maintenance Complex

Nevada Air National Guard, Reno

Design Organization: Hershenow Klippenstein Architects
Using Command: National Guard Bureau
Design Agent: US Property & Fiscal Office for Nevada
Base Engineering Organization: 152nd Civil Engineer Squadron

This new Vehicle Maintenance Facility provides an efficient environment for users and customers. The facility will be well-integrated into the existing Nevada Air National Guard master plan which promotes quality architecture, outdoor spaces and pedestrian friendly base development. Designed for maximum functionality and flexibility, the project will also be very sustainable and energy efficient. Natural daylighting is a major part of this goal, with clerestory lighting in the main corridor used to introduce natural daylighting for all users. Offices and training spaces are orientated to maximize exterior windows and views. Even maintenance spaces are provided with natural daylighting through windows in doors and clerestory windows. The base is very small in terms of site acreage, making compliance with antiterrorism and force protection standoff requirements challenging. The innovative site design utilizes exterior circulation spaces as part of the standoff distances to allow the building to fit the site. Due to the required location of this project at the airport entry, the "back" of the facility had to be as attractive as the "front". Spaces have been designed for dual use and are highly flexible. The refueler bay can be



used as an interior wash rack during winter months, and the paint bay can be used for vehicle storage and light maintenance when painting operations are not occurring. The exterior wash bay is covered and can be used as a supplemental maintenance bay/staging area in good weather. The design solution replaces what is typically a very industrial facility with a very attractive design which is oriented towards the "town square" center of the base.

Jurors' Comments

Demonstrates that an industrial facility can achieve high-quality design while satisfying functional requirements

Incorporates multiple sustainable and energy-efficient design elements with natural daylighting throughout

Low-maintenance exterior materials, appropriate colors and façade design provide interest and articulation of space while being in context with surrounding facilities



merit award concept design

TRANSCOM Consolidation

Scott Air Force Base, Illinois

Design Organization: CH2M Hill with KZF Design

Using Command: Air Mobility Command

Design Agent: Louisville District US Army Corps of Engineers

Base Engineering Organization: 375th Civil Engineer Squadron

Strategically located in the Downtown District of the base, this new facility helps to develop a corporate pedestrian campus for the area while providing a connector between the two major US Transportation Command facilities. The facility's open plan maximizes flexibility to accommodate frequent mission changes and maintains highly secure operational requirements. The plan also maximizes the use of shared space to eliminate duplication. Meeting two different levels of security requirements while satisfying functional relationships created significant complexity in creating efficient shared space. The first floor contains the primary shared components and those tenants that have the most interaction with outside visitors. Because of the frequent reconfiguration, the maximization of flexible open office space was incorporated to minimize the use of hard wall offices. The shared conferencing areas were placed in a central core allowing the workspace to be easily reconfigured. The design successfully integrates the needs of multiple users



and functions in a secure, 24/7 facility located on a challenging and significant site. Meeting these complex mission needs while blending architecturally with the adjacent headquarters building and the surrounding campus environment are the key elements of this design.

Jurors' Comments

Appears innovative yet highly compatible with Scott Air Force Base

Well-organized floor plans and a very unique design solution

Creative use of sloping and flat roofs to reduce building mass while adding interest

Good integration of multiple components into a cohesive facility



merit award interior design

High Tides Lounge Andersen Air Force Base, Guam

Design Organization: Provido Tan Architects, Incorporated
Using Command: Pacific Air Forces
Base Engineering Organization: 36th Civil Engineer Squadron

This renovation and expansion project features a new dance floor area with a wider stage and higher ceiling. Centered on a common bar separating two themed areas, the lounge accommodates a variety of activities, such as dancing, pool and dart games, karaoke singing, and TV viewing. The two areas as defined by the floor plan and the décor to simultaneously focus on two different audiences. The dance section was designed with a "Contemporary Spanish" theme in reference to Guam's Spanish colonial heritage. A collage of brightly colored cracked mosaic tiles, curves and angle patterns accent both floors and walls to convey a sense of high energy. The cocktail lounge was designed with a "Modern Tropical" theme with more abstract motifs. This more subdued environment is expressed with more sophisticated and abstract undertones, with a backlit wainscot highlighting a curvilinear "wavy" wall pattern. Softer finish treatments such as carpeting, vinyl wall covering, and upholstered lounge seating add to the relaxed lounge atmosphere. The open high ceiling that is common to both themed areas creates a feeling of openness while joining the two areas together, and the bar and main foyer are an eclectic mix of the two themes.

Jurors' Comments

Project incorporated great use of contemporary materials to meet the programming concept

Division of spaces is nicely done with floor and wall finishes and lighting

Project reflects creativeness working with restrictions of a renovation project



merit award interior design

Western Range Operational Control Center Vandenberg Air Force Base, California

Design Organization: The Benham Companies
Using Command: Air Force Space Command
Design Agent: Sacramento District
US Army Corps of Engineers
Base Engineering Organization: 30th Civil Engineer Squadron

This facility provides a new state-of-the-art nerve center for command and control of all missile launches from Vandenberg Air Force Base. High-security requirements have been incorporated with the latest technology that has resulted in a facility that is far from the traditional "fortress" look that this type of building can sometimes elicit. Windows have been located on the second floor, and the interior corridors have been situated at the perimeters of the building with higher classified activities located in the interior core of the building. The 1st floor corridors have been surfaced with fluted masonry veneer to add interest and texture, as well as contrast to the solid walls. The second floor corridors use undulating ceiling designs that further add interest and movement to what would normally be a straightforward ordinary



space. There are two lobbies, on the west side is the employees entrance, and on the south side is the main entry, which have a 24-hour staffed security kiosk that tastefully blends in with the interior without becoming an overtly prominent feature. The main control center can be easily separated into three different control centers that each have the capability of being simultaneously monitored from the VIP area. The auditorium also incorporates state-of-the-art technologies, while punctuating the creative use of lighting and ceiling designs. Interior as well as exterior finishes have been selected to incorporate integrally colored components, reducing the need for frequent maintenance, as well as reflecting the mission style of Central California in color usage.



Jurors' Comments

Innovative ceiling treatment in corridors

Lobby entry creates a clean open space with a good selection of interior finishes

Auditorium incorporates industry standards, creates good space for the function

merit award landscape architecture

Barbeque Pavilion

Vandenberg Air Force Base, California

Design Organization: The Environmental Collaborative
Using Command: Air Force Space Command
Base Engineering Organization: 30th Civil Engineer Squadron

This multi-purpose facility can support a variety of official functions as it also provides a transitional space between the adjacent Western Region Operational Control Center and a nearby natural area. Carefully selected to avoid environmentally sensitive wetlands, the site for the pavilion takes full advantage of the extensively-used hiking trails located in the wooded areas of the launch complex. Furthermore, it incorporates the existing natural environment by using the surrounding dense tree grove as a protective windbreak. The resulting design is open, bright, and inviting. The translucent roof canopy is cantilevered over a curved masonry wall to protect users from harsh winds while allowing plenty of warm sunshine to penetrate. The use of key architectural elements borrowed from the adjacent control facility results in a design that is compatible with the surrounding launch complex. The use of plant materials that are both drought and deer resistant helps create a smooth transition from the launch complex to the adjacent natural area. The new pavilion offers many seating options to suit the mood of the individual users allowing maximum flexibility. The design addresses the needs of large groups for both formal and informal outdoor gatherings while providing small, intimate seating areas for use by small groups or individuals seeking a pleasant, relaxing outdoor environment.



Jurors' Comments

Great use of compatible materials

Well-lit with an exceptional nighttime presence

Successfully provides a multi-purpose outdoor facility that supports a variety of activities

Ties in well with existing architectural character of the area



merit award landscape architecture

Base Welcome Sign

Cheyenne Mountain Air Force Station, Colorado

Design Organization: 721st Mission

Support Group Engineering Flight

Using Command: Air Force Space Command

The unique character of Cheyenne Mountain Air Force Station is reflected in this innovative base welcome sign. The design incorporates a positive aspect of the installation's overall image and promotes an excellent use of natural indigenous materials. The most unique design feature was the use of an existing 100 ton granite boulder as the background for the Air Force symbol and base name. The boulder was found on site and used in its native condition and location, which allowed for minimal clearing of vegetation and brush. Additional native landscaping, consisting of trees and shrubs enhance the site as well as promote a xeriscape design concept. The proximity and angle of the boulder make the sign readily visible as visitors approach the main gate. The boulder was tastefully modified by adding the Air Force symbol and base name with minimal impact on the surrounding natural environment. The physical characteristics of the welcome sign are an elegant and effective integration of the natural and built environments.



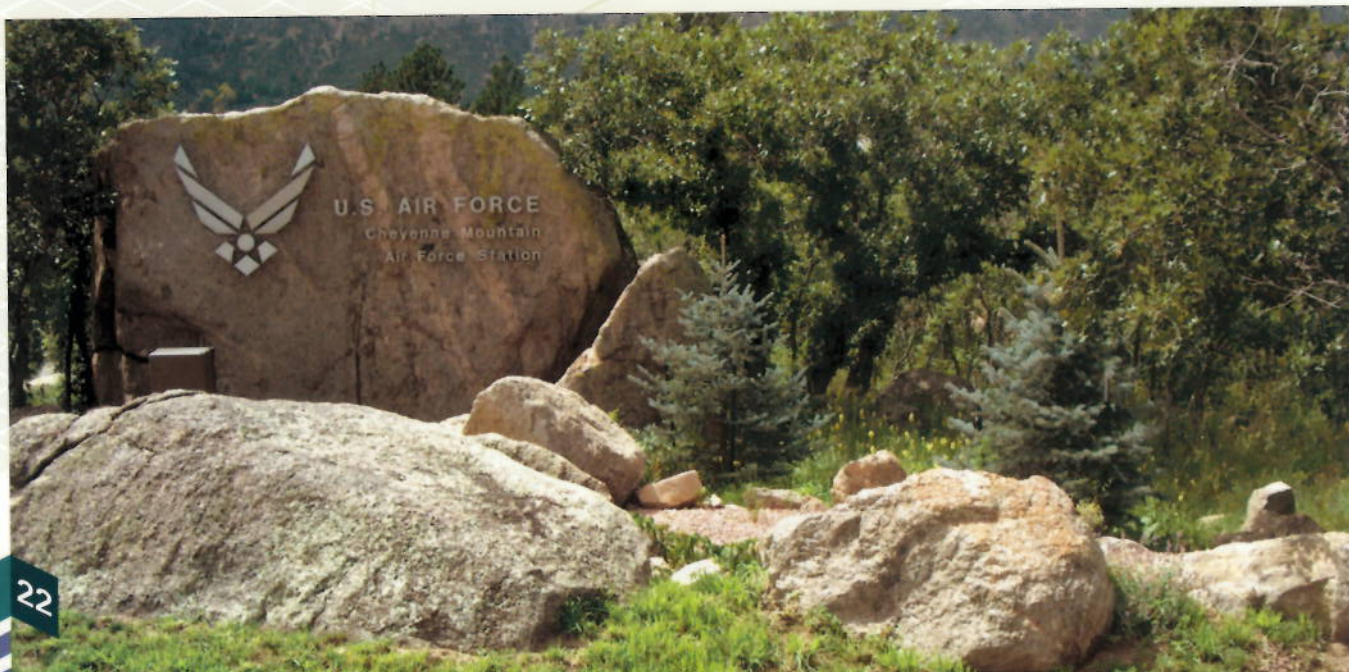
Jurors' Comments

Good use of indigenous sub-alpine plant materials

Great use of natural resources for a base requirement

Design is not overwhelming

Blends well with the natural environment



merit award facility design

Housing Office Aviano Air Base, Italy

Design Organization: The OK Design Group, s.r.l.

Using Command: United States Air Forces in Europe

Design Agent: NAVFAC Europe – Southwest Asia

Base Engineer Organization: 31st Civil Engineer Squadron

As one of the first facilities visited by newly-arrived personnel and their families at Aviano Air Base, this building helps to introduce newcomers to their new environment and helps them to become familiar with the social, cultural and traditional characteristics of the region. The design solution was to recreate the architectural language of regional domestic housing instead of an impersonal institutional office building. The entrance court references the front garden of area homes and also serves as a playground for children. A pergola leads the visitors from the entrance porch to the main entrance door through a series of spaces that culminate in a framed view of the mountains from the entrance hall. The building configuration offers a symbolic hug to visitors and opens to a series of visual points of interest until they arrive in the reception/waiting area where they transition to the counseling offices. The interior functions were developed in a simple and linear way to minimize both horizontal and vertical circulation. The two towers effectively screen mechanical equipment from view and help define the entrance court. Antiterrorism/force protection concerns were addressed by locating the majority of the glass adjacent to the entrance court. The windows looking into the entrance court provide natural daylighting, outstanding views and a point of reference from anywhere in the building. The designers utilized their direct knowledge of the historical and artistic characteristics of this region of Italy through the use of traditional design elements, the rhythm of solids and voids, human scale, breaking up volumes into more articulated assemblies, and the hierarchy of the entrance area.



Jurors' Comments

Provides a friendly and inviting "front door" to newcomers to the base

Blends well into the regional architectural fabric

Towers used to hide mechanical units are very ingenious

citation award planning studies & design guides

Common Battlefield Airmen Training Complex Customer Concept Document

Moody Air Force Base, Georgia

Design Organization: Transsystems

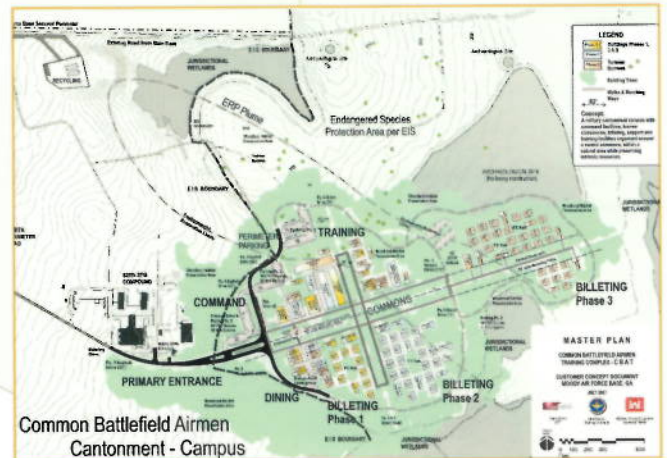
Host Command: Air Combat Command

Using Command: Air Education & Training Command

Design Agent: Savannah District US Army Corps of Engineers

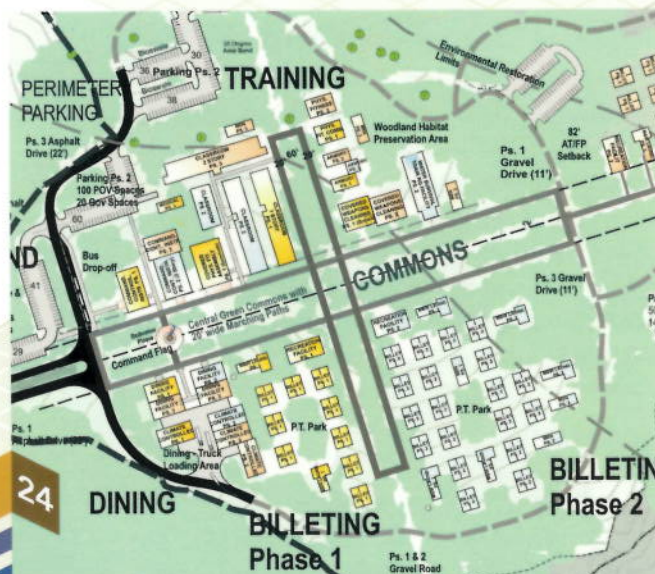
Base Engineering Organization: 347th Civil Engineer Squadron

This plan illustrates the potential to maximize land utilization on a site that was initially considered constrained due to archaeological concerns, the presence of endangered species, an environmental restoration plume, significant wetlands, and its location close to a firing range. The planning team used overlay methodology using current GIS data and the base Environmental Impact Statement to provide thorough identification of the existing site constraints. The project team innovatively turned these constraints into opportunities, achieving a viable and sustainable campus. The initial focus defined sustainable buildable areas and then planned the sustainable campus within those areas. The constraints which were at first seen as being only negative resulted in establishing a base-line starting point. The planning team quickly incorporated the latest environmental data multiple overlays using



Common Battlefield Airmen
Cantonment - Campus

quick drawing techniques, and proceeded to define the sustainable buildable areas incorporating LEED® site design principles. The planning team quickly transferred this into a site plan that integrated three extensive development phases while consolidating antiterrorism/force protection standoffs. The ability for the planning methodology to easily respond to changes in criteria was proven when a larger archaeological site and a newly identified Endangered Species Habitat Protection Area were identified after the initial planning exercise. This resulted in an alternative entry proposal for the training campus. Due to the intensive planning, the CBAT will be constructed within a constrained site that will not appear constrained. The livable, pedestrian campus integrates with its unique ecosystem while providing ample organized green space.



Jurors' Comments

Comprehensive study with thorough analysis of environmental and physical constraints

Transformed perceived constraints into opportunities

Design and plan fosters camaraderie and an effective training environment

"Out-of-box thinking" — leveraged GIS technology to analyze site through a layered process

citation award sustainable design

Dormitory

Barksdale Air Force Base, Louisiana

Design Organization: Transystems

Using Command: Air Combat Command

Design Agent: NAVFAC Southeast

Base Engineering Organization: 2nd Civil Engineer Squadron

This new dormitory is one of the first in the Air Force to meet LEED® Silver certification requirements, incorporating sustainable features to earn 37 credits in the LEED® rating system. Not only does the design meet the latest space and configuration standards, it also is a very efficient facility that will save tons of operating costs over its lifespan. The dormitory is located in a park-like setting with natural areas interspersed around modern living facilities. The design utilizes precast autoclave aerated concrete construction to provide higher STC ratings and thermal performance than normally achieved. The sound mitigation is a benefit for the occupants because of the B-52 flight operations that occur within one mile of the building. The orientation of the building on the site and the site's sensitive development are major factors in achieving the project's sustainability goals. This included limiting impervious paved areas, reducing storm water runoff, and the reduction in the heat island effect. The building configuration and plan were developed to make best use of prevailing winds. By choosing an exterior circulation system for the building, natural cross ventilation can occur in each living module. Other sustainable features include the maximizing of daylighting, low flow shower heads, xeriscape landscaping, and a high reflectance roof system. All of the proposed flooring options for this facility are readily available with high recycled content and are easily recycled themselves. The interior finishes for this facility are highly durable and low maintenance materials appropriate for a facility with high-volume/high-abuse traffic. The use of environmentally friendly "sustainable" products was used wherever appropriately feasible.



Jurors' Comments

Project incorporates significant LEED® design elements and captures 37 credit points, gains significant energy savings while implementing a bright open design with natural daylighting

Clearly demonstrates that LEED® certification can be realized within budget

Incorporates architectural compatibility while adapting standard dorm layout configuration



citation award concept design

Medical/Dental Clinic

Tinker Air Force Base, Oklahoma

Design Organization: Sherlock, Smith and Adams, Inc.
Using Command: Air Force Materiel Command
Design Agent: Tulsa District US Army Corps of Engineers
Base Engineering Organization:
72nd Civil Engineer Directorate

This medical/dental clinic will provide outpatient health care that is patient friendly, efficient, provides flexibility for functional changes, and incorporates energy efficient and environmentally sensitive design. The topography of the site, which was initially viewed as a challenge, ultimately provided the solution to many of the other design issues. By utilizing the slope of the site, a third floor could be added to obtain the necessary square footage within the limited footprint without increasing the mass of the facility. This allows the clinic to be organized into a non-patient ground floor level, and two levels of clinic and ancillary spaces. This topography also helps to hide the service yard and exterior mechanical plant components from view and provides views of the nearby park and pond, and the airfield beyond. The project design is organized around a two-and-one-half story central space with glass on all sides. Patients can see most destinations from the entry point, and the high-volume clinics and ancillary services



are located nearest to the entrance to minimize circulation. The plan limits patient penetration by placing exam rooms and treatment areas closest to the patient waiting areas, followed by support areas. Physicians' offices are remotely located from the waiting areas. The importance of the central lobby area as an organizational element of the design is expressed in the opening of this volume spatially with generous height, daylight from four sides and handsome detailing. The two-and-one-half story high ceiling provides pleasing architectural proportions. The wood-paneled walls provide warmth and an overall feeling of quality that reflects appropriately on the quality of medical care available for the patients.



Jurors' Comments

Project shows good circulation and attention to traffic patterns

The lobby space is a great open area that connects the outside with the inside

Renderings show a good use of materials to add interest and texture to a large lobby

Mobiles add color and liveliness in the atrium

citation award concept design

Middle School

Osan Air Base, Republic of Korea

Design Organization: Thomas J. Davis/Jung Il Associated

Using Command: Pacific Air Forces

Design Agent: Far East District US Army Corps of Engineers

Base Engineering Organization: 51st Civil Engineer Squadron

This new Middle School, located on one of the Air Force's most densely developed installations, will provide space for up to 350 students and is essential to relieve current overcrowding and provide properly sized and configured facilities. This project was designed in conjunction with a separate but related project to provide a two-story addition to the adjacent High School. The site for the new buildings was very limited and the configuration of the buildable area clearly influenced the footprints of the major buildings. One of the most unique features of the design is the parking structure which has multiple uses. The first level provides parking for commissary patrons. The second and third levels are for school and local dormitory resident parking. A student pick-up and drop-off point is also located in the parking structure and a pedestrian bridge provides convenient and safe access across a busy boulevard to the school campus. The rooftop level features basketball, volleyball, and tennis courts replacing those in the way of construction while at the same time providing additional facilities for the Osan Air Base community. The buildings were configured to fit the site restrictions. The Middle School's modified "L" shape plan allows for interior access to all rooms and separate access to classroom and assembly wings. This will allow for separate use of the gym and multi-purpose rooms during evenings and weekends. A common fire lane and bus queue with controlled access is provided between the new Middle School and the existing High School. The lane will have a



textured surface to act as a "commons area" for students and faculty when not in use by buses and provides convenient access to the athletic facilities to the north. Functionality, adaptive siting, multi-use planning, effective adjacencies, building massing, and architectural compatibility all combine to produce a project that will be a welcome addition to the school as well as the community at large.

Jurors' Comments

Faced with a constrained and densely developed site, this project places numerous facilities and additions in a campus-like configuration

Project utilizes a multi-level parking garage with recreational courts on the roof to make best use of limited site area

Exteriors are consistent with established surrounding school facilities

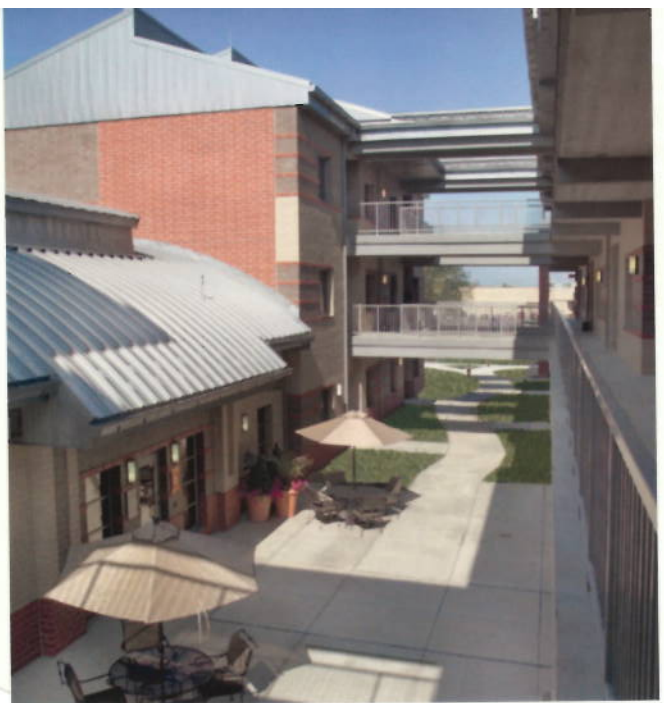
citation award facility design

Dormitory

Wright Patterson Air Force Base, Ohio

Design Organization: Burgess & Niple, Inc.
Using Command: Air Force Materiel Command
Design Agent: Louisville District US Army Corps of Engineers
Base Engineering Organization:
88th Civil Engineer Directorate

This dormitory complex is comprised of two separate buildings connected by balconies, creating a visually pleasing and pleasant community courtyard. The meandering walkways and plantings with soft groundcover underscore this quiet yet much used community space. A sense of quiet seclusion and openness is created in the courtyard by the careful location of upper floor cantilevered walkways, curving ground floor walks and landscaping. The use of precast concrete planks on upper floors and cantilevered walkways above the ground floor allow the courtyard to be free of columns. The configuration of the balconies allows the complex to be served by only two stair towers, reducing cost and simplifying circulation. The position of the low rise community structure on the south elevation allows sunlight to penetrate the courtyard space throughout the day. The curvilinear roof at each stairwell, red brick kneewalls and end walls, light colored brick at the first and second floors and the intermittent dark brick banding allow this dorm to draw visual elements from the adjacent dormitories while retaining its own identity. The mass of the building has been effectively broken down to a community level and a human scale.



Jurors' Comments

Visually organized by the horizontal bands of masonry

Nice detailing and very creative use of color

Very innovative exterior to go with the recommendations of the Air Force Unaccompanied Housing Guide

citation award facility design

Communications Administration Building Charleston Air Force Base, South Carolina

Design Organization: McKellar Associates
Using Command: Air Mobility Command
Base Engineering Organization:
437th Civil Engineer Squadron

This exceptional renovation project converted an old dormitory into a modern office building. Renovating a 1950's era structure that was designed for a very specific use into an administration facility was a significant design concern. While the structural system and bay size worked well for a dormitory, it was a challenge to work the user's program into the existing structure. The original circulation of a central corridor was kept and expanded into open office space where the program would allow. Due to the nature of the functions of individual user groups, many separate and distinct offices were required. Antiterrorism/force protection requirements added another challenge of how to produce a user-friendly building and still maintain the required level of protection. A series of pilasters on the long elevations give the building a sense of verticality and the use of decorative pre-cast medallions provide architectural detail and interest on the long elevations. Finally, the judicious use of curtainwall glazing provides an abundance of natural daylight and lends stature to the building's entrances. Although designed for a specific tenant, this new renovation is patterned after a nearby administrative facility that was also converted from an old dormitory. This transformation of a nondescript structure into an attractive, fully functional and integrated facility is a great example of sustainability and facility reuse.



Jurors' Comments

Miraculous transformation — superb renovation job

This project is a shining example of how a 1950's era dormitory was converted into a clean, crisp and well designed work space

Photography / Artist

Rendering Credits

Listed in Order

pages 4-5	Carol Coover-Clark
pages 6-7	Frankfurt-Short-Bruza Associates, P.C.
pages 8-9	John Wang
pages 10-11	Shannon Buckley
pages 12-13	David Jacobson
pages 14-15	Michael Dersin
pages 16	Joseph Calabrese/Henry F. Pierce
page 17	Vance Fox Photography
page 18	NEW4D/KZF Design
page 19	Jun H. Abaya
page 20	Ken Chen Photography/Victoria Ham-Hainsworth
page 21	Ken Chen Photography/Victoria Ham-Hainsworth
page 22	K. Chalifour
page 23	M.Padilla/S.Buckley
page 24	Forest Michael/Loraine Mickelson/Mayur Patel
page 25	Ruben Rivas Jr.
page 26	Gary Mellenbruch/Muir Stewart
page 27	Sammy Penaso
page 28	Burgess Niple, Inc.
page 29	Rion Rizzo

Jury Members

Planning, Urban Design, Landscape Architecture

Mr. Chuck Cyr (Chair)
USAF Civil Engineer Career Program
Randolph Air Force Base, Texas
Planner

Mr. Jeff White
Air Force Center for Engineering
and the Environment
San Antonio, Texas
Landscape Architect

Mr. Emil Moncivais, FAICP, AIA
Public Works Department
City of San Antonio, Texas
Planner

Interior Design

Ms. Linda Mracek, IIDA (Chair)
Aviar Design
Tucson, Arizona
Interior Designer

Ms. Sandra W. Warner, IIDA
Air Force Center for Engineering
and the Environment
Brooks City-Base, Texas
Interior Designer

Architecture and Engineering

Col Sal Nodjomian, USAF
Director of Engineering
Office of the Air Force Civil Engineer
Washington, DC
Engineer

Mr. Robert Haddix
Air Force Center for Environmental Excellence
Brooks City-Base, Texas
Architect

Mr. Gary Lynn, FAIA
Jacobs Carter Burgess, Inc.
San Antonio, Texas
Architect

Mr. Michael Panczykowski, AIA
Pond & Company
Jacksonville, Florida
Architect

Acknowledgments

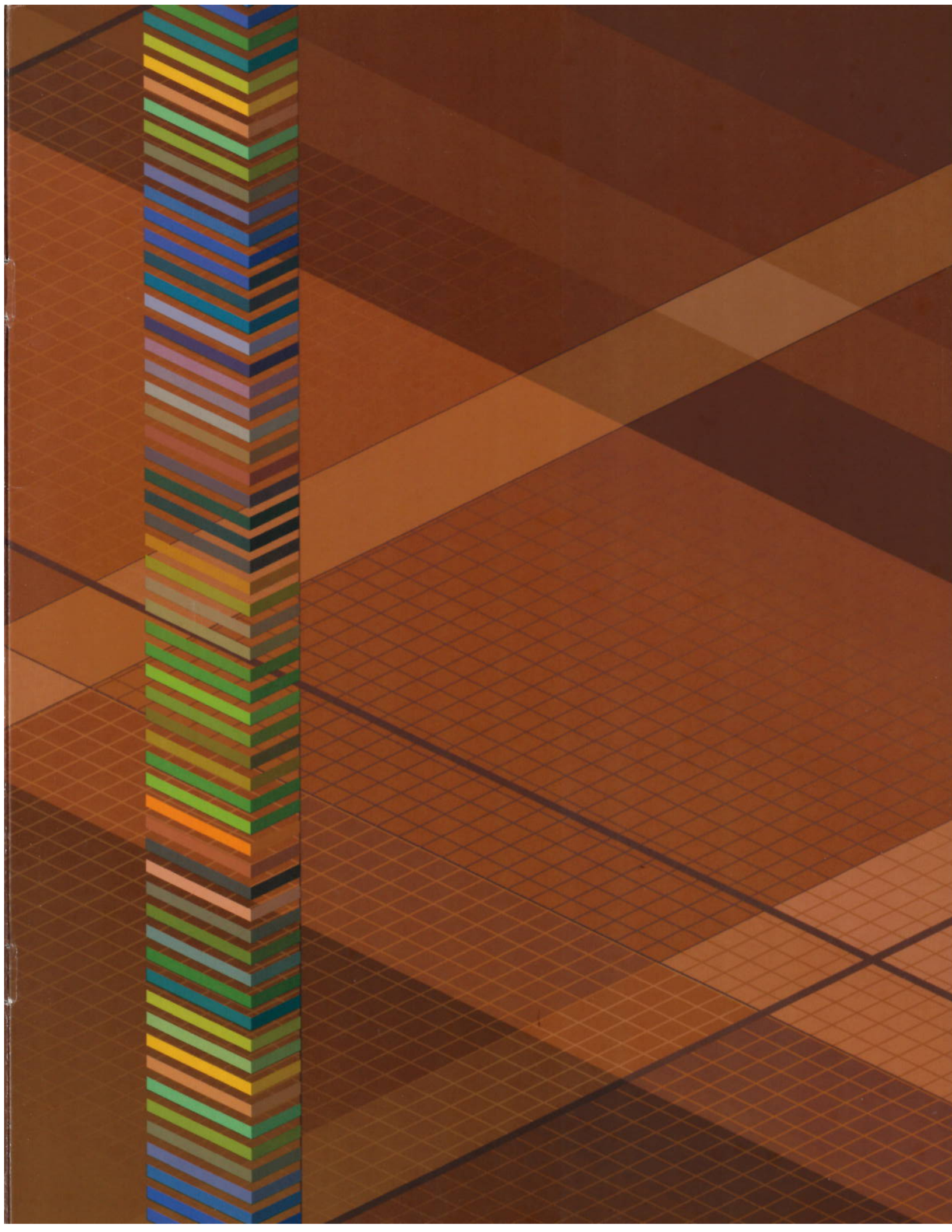
The Civil Engineer
Major General Delwyn Eulberg

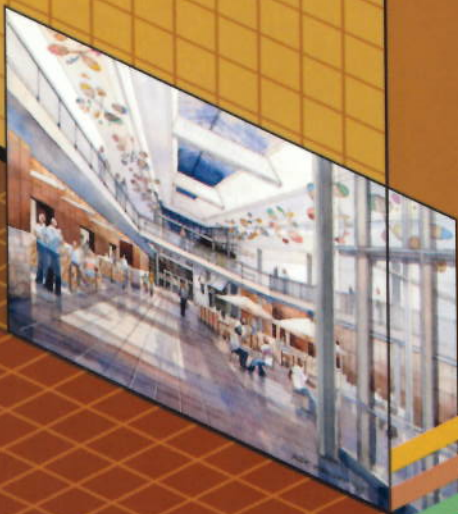
**The Air Force Center for Engineering
and the Environment prepared this
Annual Report.**

Director
Dennis Firman

Graphic Design
HOK Visual Communications
Houston, TX

**United States Air Force Design Awards
Program Manager and Editor**
David M. Duncan, R.A.





United States Air Force
Design Awards Program
The Air Force Civil Engineer
Air Force Center for
Engineering and the
Environment
www.afcee.brooks.af.mil
DSN 240.3547
210.536.3547

