

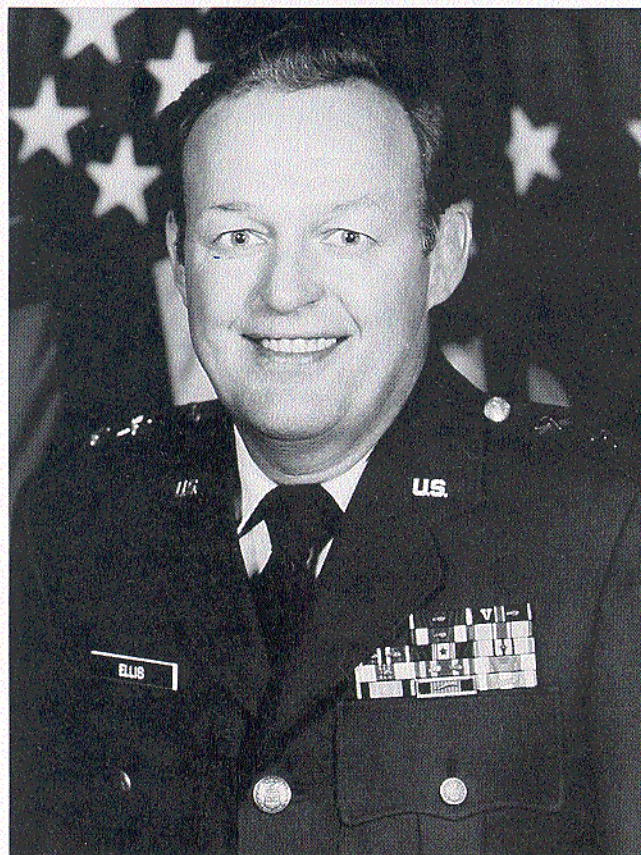


United States Air Force

# Design Awards Program

1987 Annual Report





## From the Director

Our 1987 award winners represent a cross-section of the kinds of service that we provide for our customers. Furthermore, these winners illustrate that we have the ability to excel in all aspects of Air Base development – comprehensive planning – Architecture – Engineering – and interior design. Now that we know how to excel, we need to increase our success. We need to achieve design excellence and customer satisfaction on each and every project. Our small operations and maintenance projects as well as our larger military construction projects are appropriate candidates for design excellence. I therefore challenge the design community to apply the highest professional standards of excellence so that we can substantially improve the quality of our architecture and the quality of life for Air Force people worldwide.

**GEORGE E. ELLIS,**  
Major General, USAF  
Director of Engineering and Services

**Front Cover: Officers Club Renovation**  
Holloman Air Force Base, New Mexico  
**Back Cover: Base Supply Warehouse/Administration**  
Truax Field, Wisconsin



# Background

Projects submitted for consideration in the annual United States Air Force Design Awards Programs are reviewed by a distinguished jury composed of two members of the American Institute of Architects, two members of the Society of American Military Engineers and one representative from the American Society of Civil Engineers. Awards were given in three categories – completed projects, concept projects, and urban design and planning. This is the first year that projects in the last category have been judged separately.

The Air Force sets no limitations on either the number or type of projects that can be recognized each year. Awards may be given for design excellence in a number of areas, including architecture, interior design, landscape design, energy conservation, civil and structural engineering, and urban design and planning. All projects are given equal consideration, whether designed by base civil engineering personnel, the design agent or an architectural-engineering firm.

This year's program marks the twelfth year for the USAF Design Awards Program which was established in 1976 to recognize and promote design excellence.

With the selection of the 1987 award-winning projects, the Air Force has honored over 70 completed projects, over 60 concept projects and three urban design and planning projects. These totals include eight projects which have received awards in both the concept project and completed project categories.

This report also recognizes two interior design projects which were selected by the Directorate of Engineering and Services, Headquarters United States Air Force, as representing outstanding contributions to the field of interior design by base civil engineering personnel. It is particularly noteworthy that four members of the design team for the renovation of the Officers Club at Holloman Air Force Base were military officers enrolled in the Air Force architect-intern development program and were working with Tactical Air Command's Design Team. This organization provided the opportunity for young intern architects to acquire the professional experience necessary to qualify for professional registration examination.

## 1987 USAF Design Awards Program Award Winners

### **Completed Project Honor Award**

Centralized Aircraft Support System  
Ellsworth Air Force Base, South Dakota

### **Completed Project Merit Awards**

Base Supply Warehouse/ Administration  
Truax Field, Wisconsin  
Aircraft Maintenance Hangar  
Portland International Airport, Oregon

### **Urban Design and Planning Honor Awards**

Base Comprehensive Plan  
Maxwell Air Force Base, Alabama  
Cadet Area Master Plan  
Air Force Academy, Colorado

### **Concept Project Honor Award**

Air Force One Maintenance Support Complex  
Andrews Air Force Base, Maryland

### **Concept Project Merit Awards**

B-1B Aircraft Maintenance Hangar  
Grand Forks Air Force Base, North Dakota  
Control Tower  
Davis Monthan Air Force Base, Arizona  
HC-130 Aircraft Maintenance Hangar  
Portland International Airport, Oregon

### **Interior Design Special Citations**

Cannon Hotel Renovation  
Ramstein Air Base, Germany  
Officers Club Renovation  
Holloman Air Force Base, New Mexico



# Honor Award

## Centralized Aircraft Support System Ellsworth Air Force Base, South Dakota

Architect: Corps of Engineers/Omaha District

The purpose of the new Centralized Aircraft Support System (CASS) is to test and service B-1B aircraft on the parking apron with liquid coolant, conditioned air, 400 Hertz electrical power and compressed air. The CASS was provided in conjunction with the Hydrant Refueling System, an underground refueling system.

The new system eliminates the requirements for large numbers of mobile service equipment which presented logistics problems, a clutter of equipment, risk of damage to the aircraft and risk of accidents. The CASS system also provides maintenance efficiencies and improves energy conservation.

The CASS is located beneath the aircraft aprons which serve 13 aircraft hangars and provide parking positions for 22 B-1B aircraft. The system consists of high pressure blowers, chillers, boilers, water coils, pumps, piping, generators, electrical transformers, air compressors, air dryers and equipment controls. Services are provided to the aircraft from vaults beneath the apron. These vaults are connected by an underground distribution system to centralized control buildings. Each vault is designed to support the weight of the aircraft, and the vault walls are designed to withstand lateral ground forces when the aircraft is parked next to the vault.

The control panels for electrical service are mounted on sliding frames which can be raised when the conditioned air or liquid coolant systems are in use. The supply hoses used to connect the systems to the aircraft retract into the vaults when not in use.

The conditioned air requirements consist of a range of air flows based on supply air temperature and the number of aircraft connected to the system. To conserve energy, the high pressure blower varies the amount of air delivered based on supply air temperature. Heat is provided only to maintain the air temperatures above a required minimum temperature. Cool-

ing is provided only to keep the air temperature below the required maximum temperature.

The liquid coolant is required to be delivered to the aircraft at a set flow and temperature and must be clean and without entrained gases. Stainless steel piping is used to enable the coolant to be pumped efficiently.

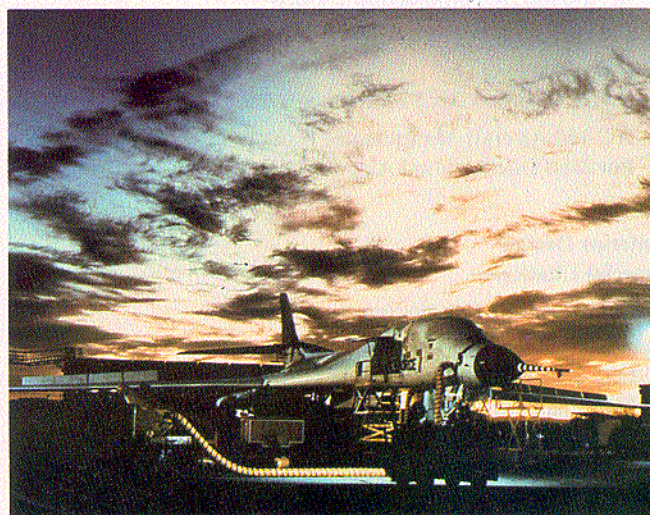
Two four-hundred horsepower motor generators provide the 230/400, volt, 400 Hertz power for the 22 aircraft service pits. These generators and the associated switchgear are located in the central CASS building. The electricity is supplied underground to electrical distribution centers located behind the ramps. Each distribution center serves three or four service pits.

The start air system is sized to start three aircraft engines at one time. Each of the three six-hundred horsepower compressors in the system has inter- and after-coolers, refrigerant type air dryers and a closed-loop water cooling system. The start air system also is used to provide for the bleed air requirements of the aircraft. The start air pits house the hoses and the regulator. A connector for the hand air tools also is located in the pit.

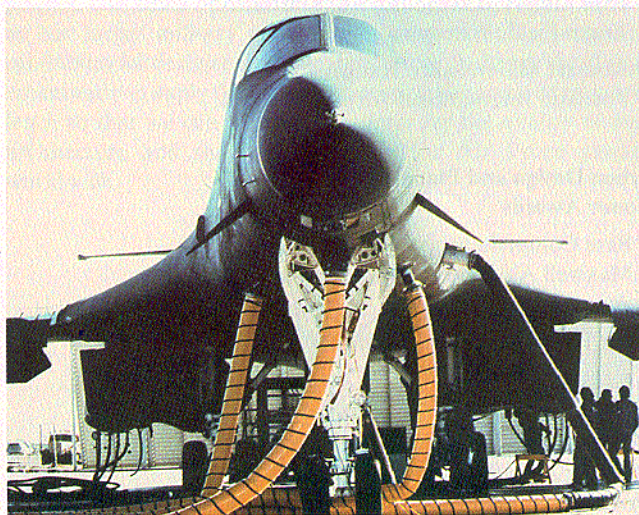
Use of the Centralized Aircraft Support System for testing and servicing the B-1B aircraft has virtually eliminated the need for mobile ground support equipment. The system also has reduced the manpower, time and costs required to complete these operations.

The major command expects to realize significant manpower and dollar savings by using the CASS and anticipates that similar systems will be constructed at other Air Force bases in the future.

*AFRCE/Command: Strategic Air Command  
Base Engineering: 28th Civil Engineering Squadron  
Design Agent: Corps of Engineers/Omaha District*



CONVENTIONAL SUPPORT OPERATIONS

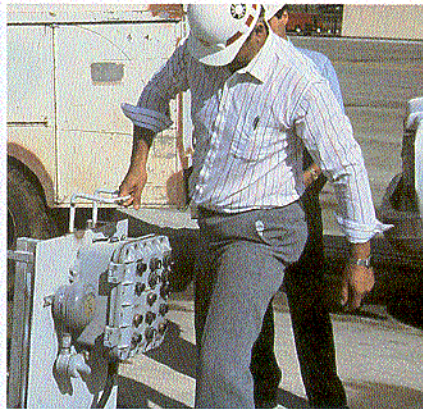


CENTRALIZED AIRCRAFT SUPPORT SYSTEM





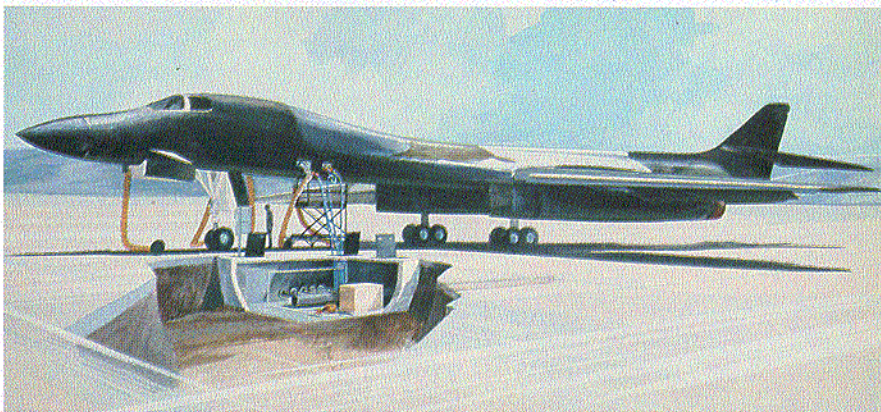
OPENING CONTROL PANEL



LIFTING CONTROL PANEL



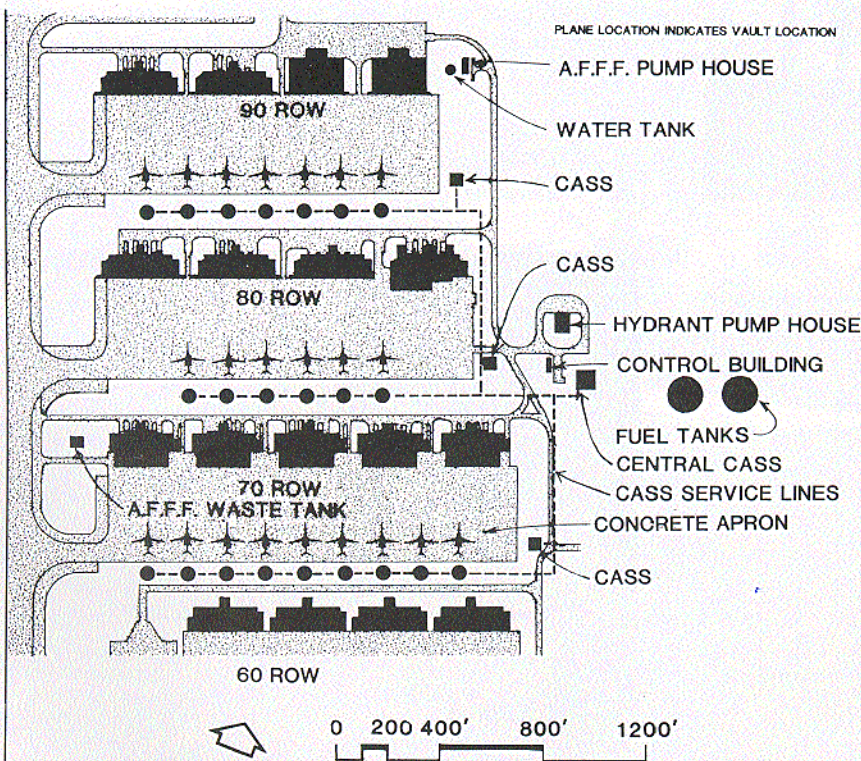
SETTING CONTROL PANEL



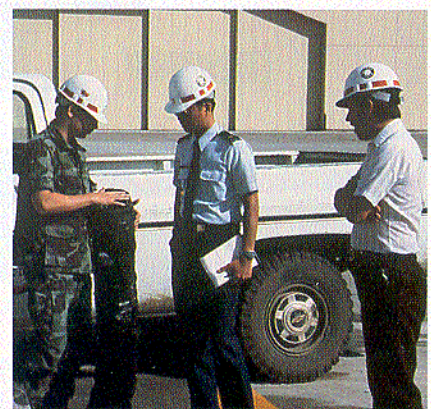
SECTION THROUGH UNDERGROUND VAULT



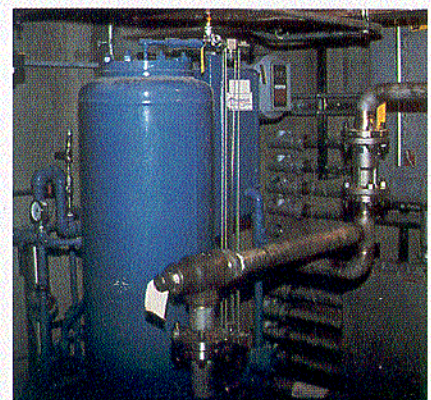
LIQUID COOLANT LINE



SITE PLAN



CONDITIONED AIR HOSE



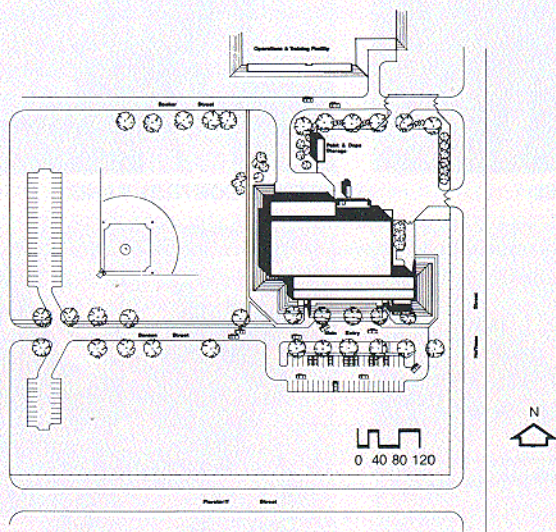
EQUIPMENT INSIDE VAULT



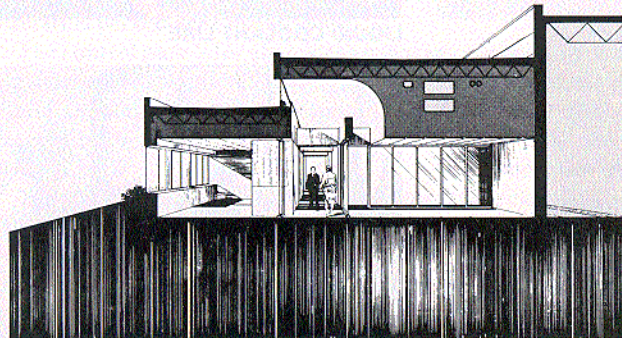
# Merit Award

## Base Supply Warehouse/Administration Truax Field, Wisconsin

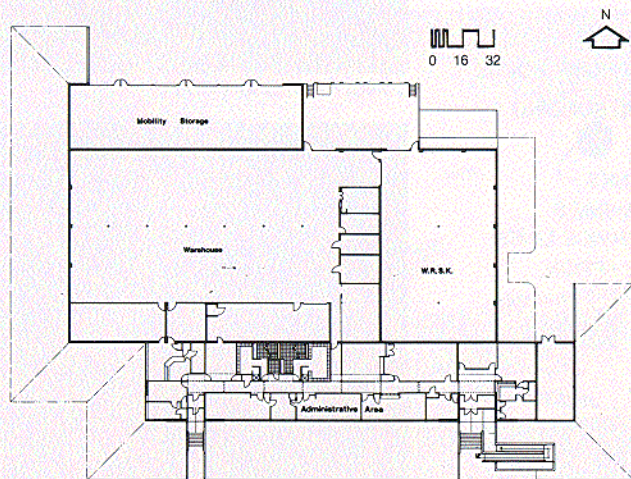
Architect: Flad & Associates



SITE PLAN



SECTION THROUGH ADMINISTRATION



FLOOR PLAN

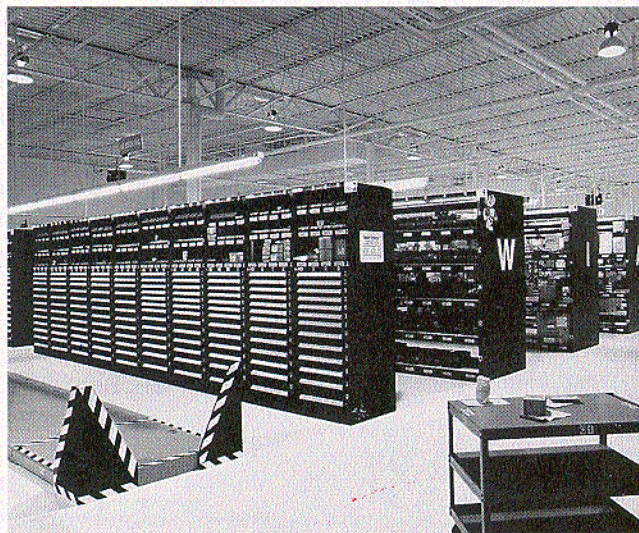
A simple, but elegant, design has been achieved despite a spartan design program and a tight budget. The facility is composed of two basic plan elements: the administrative offices and the warehouse. The warehouse is zoned into three independent areas which have direct access to the loading dock and to the administrative offices. The offices and support spaces are organized along a central circulation spine with the building entrances at each end.

The raised clearstory windows above the central corridor serve as a graceful transition between the different heights of the offices and the warehouse, introduce daylighting into the interior office areas and provide additional height for the mechanical spine.

Acrylic stucco was selected as the exterior skin for economy and for compatibility with nearby buildings. A carefully proportioned grid pattern and blue accent stripes relieve the mass of the warehouse walls.

The mechanical systems are designed for energy efficiency, operational simplicity, ease of maintenance and local availability of parts and service. The systems have the capability to respond to variations in building occupancy and patterns of use in an appropriate and economical manner. The HVAC system utilizes a central hot water heating system with unit heaters in the warehouse area and separate air handling units in the office areas. Energy conservation features include night set down, temperature setback, morning pickup, economizer cycles using outside air, and high efficiency fan motors.

*AFRC/ Design Agent: Air National Guard Support Center  
Command: National Guard Bureau  
Base Engineering: 115th Civil Engineering Squadron*



WAREHOUSE INTERIOR



# Honor Award

# Merit Award



EXTERIOR LOOKING NORTHWEST



ADMINISTRATION INTERIOR



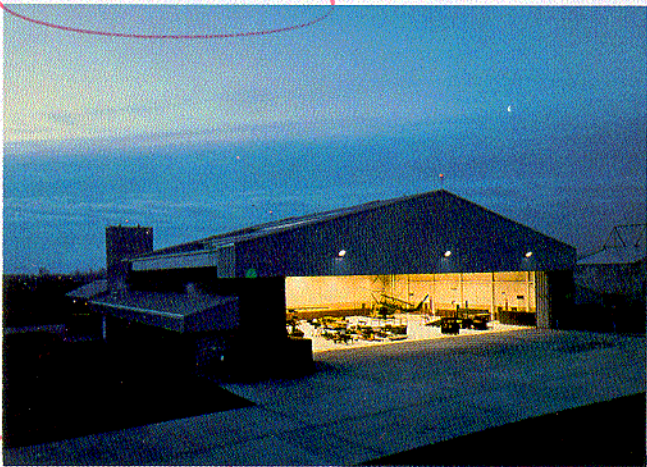
# Merit Award

## Aircraft Maintenance Hangar Portland International Airport, Oregon

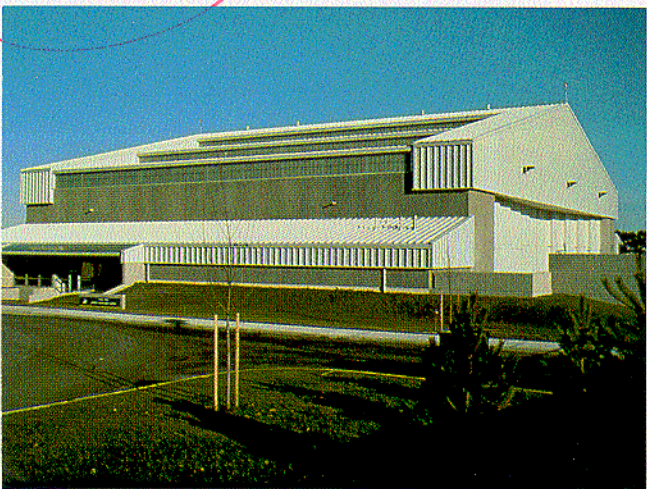
Architect: Miller Cook Architects



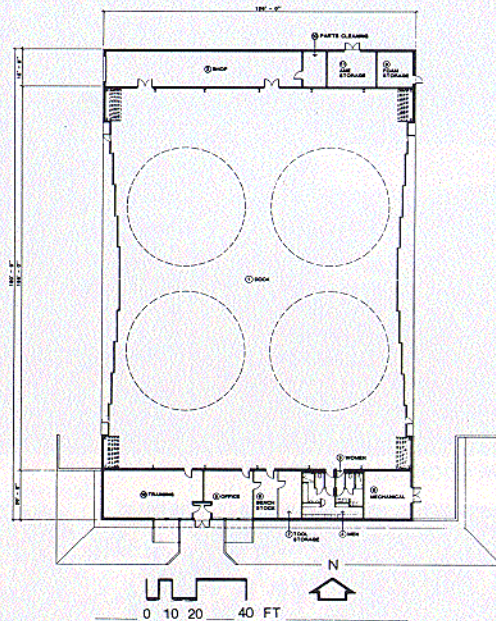
EXTERIOR LOOKING WEST



HANGAR INTERIOR



EXTERIOR LOOKING NORTH



FLOOR PLAN

This new aircraft maintenance hangar is an attractive addition to several new facilities recently constructed as part of a new Air Force Reserve complex in Portland, Oregon. The siting of the building is consistent with the comprehensive master plan and the building form and finish materials are compatible with the complex design criteria.

The stepped roof form with clearstory windows reduces the volume of the building, provides relief to an otherwise extensive roof area and introduces natural light throughout the interior. The roof overhangs control sunlight penetration during the summer and provides protection at the building entries.

The pan and batten steel roofing provides continuity of color and material with other buildings in the complex and provides a durable, low-maintenance finish. The same material is used as vertical skin for the upper walls of the hangar. Precast concrete and textured cast-in-place concrete are used throughout as a massive, durable materials for the earth berm retaining walls and on the high, vertical surfaces for sound attenuation.

Extensive use of concrete sandwich panels, earth berms, acoustical sandwich panels for the roof and walls, double glazed windows and suspended acoustical ceilings reduce the decibel levels within the offices to the 45-50 db range and permit normal conversations.

AFRCE: Western Region

Host Command: National Guard Bureau

Using Command: Air Force Reserve

Base Engineering: 142nd Civil Engineering Squadron

Design Agent: United States Property and Fiscal Office/ Oregon

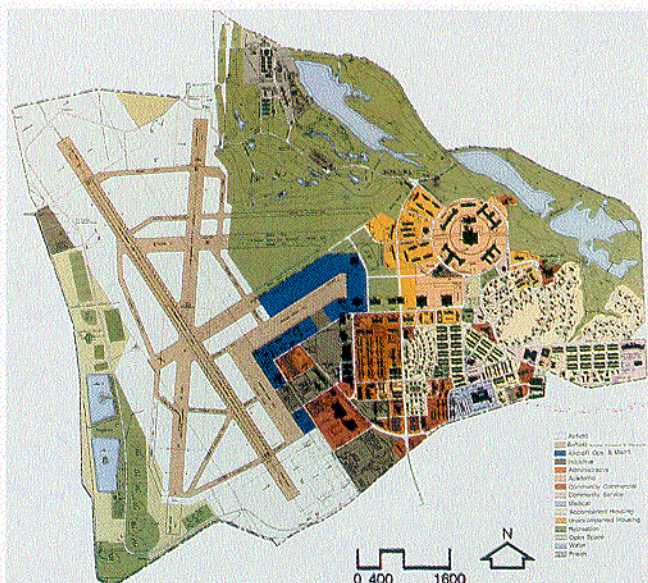


hour traffic congestion and identifies parking requirements, future road construction and the need to upgrade all signals, signs and markings.

The landscape development plan formulates the process to maintain and enhance the existing character of the base landscaping. Design elements are identified which will have the greater impacts on creating a cohesive landscape character and an attractive visual impression for the base. These elements include edges, entrances, backgrounds, circulation corridors and visual districts.

This Base Comprehensive Plan will provide the managers of base development with a viable framework for identifying facility requirements and for programming, siting and designing future facilities. Additional component plans which are typically part of the BCP process will be integrated with these four component plans as they are completed.

*AFRCE: Eastern Region*  
*Command: Air University*  
*Base Engineering: 3800th Civil Engineering Squadron*



## FUTURE LAND USE PLAN



# Honor Award

## Cadet Area Master Plan Air Force Academy, Colorado

Architect/Planner: Skidmore, Owings & Merrill

The United States Air Force Academy is one of the few major educational institutions to have been totally programmed, planned, designed and built in one comprehensive effort. Although the basic mission of the Academy has remained virtually unchanged since its founding in 1954, both our society and the Academy have undergone tremendous changes and growth. The enrollment has increased from an initial authorized strength of 2,520 cadets to the present enrollment of up to 4,650 cadets. Women cadets were added to the enrollment in 1975. During this same period, there has been tremendous pressure to adapt and expand the Academy facilities to respond to the technological changes and to support new educational, leadership and athletic programs.

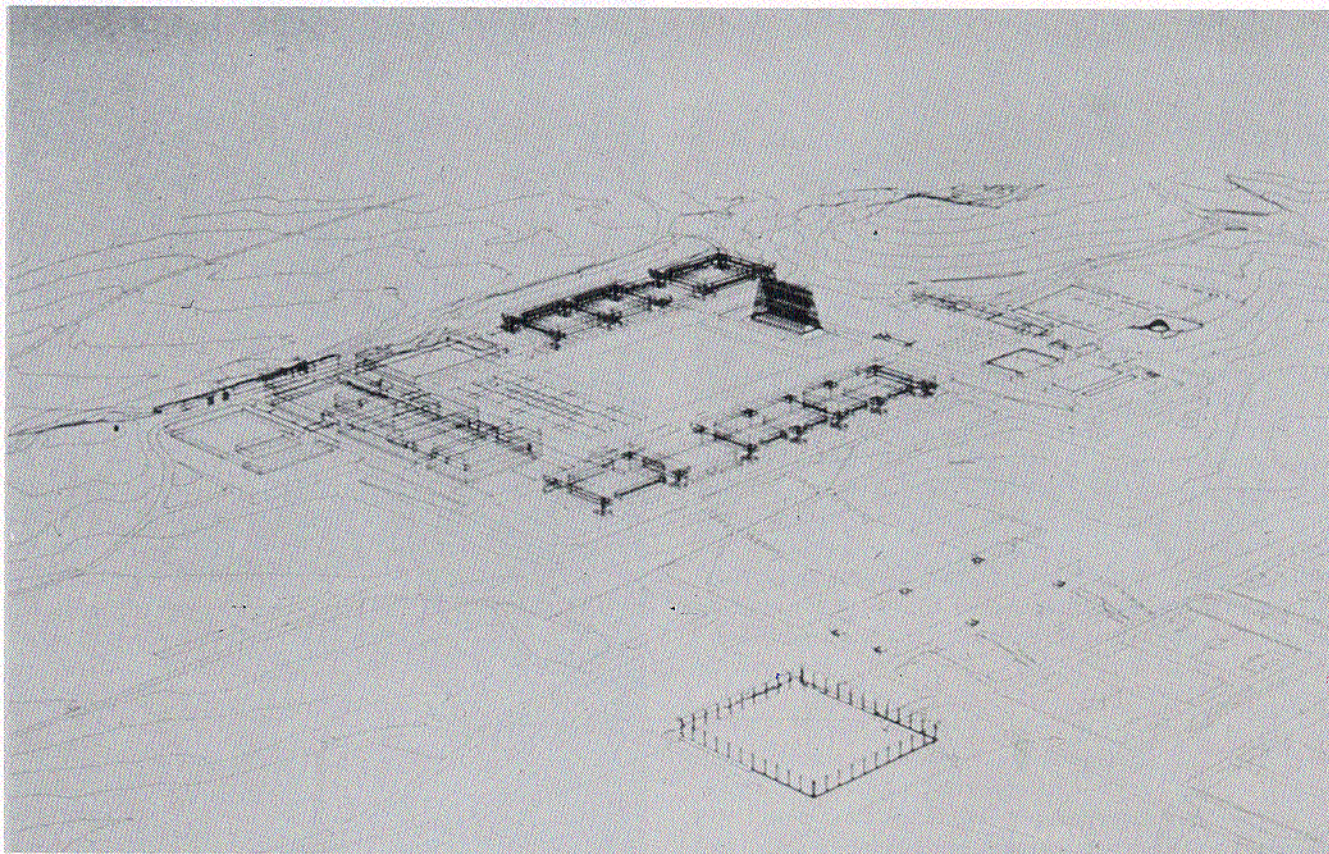
As the potential for change increased, it became imperative to control and direct new developments toward becoming positive and compatible additions to the planned unity, function and beauty of the Academy. The development of a new comprehensive plan for the Cadet Area is a major step in achieving this goal. Although the entire base eventually will be planned, the Cadet Area plan represented the most critical need due to impending projects which would have major impacts on the visual and functional qualities of the complex.

The Cadet Area master plan studied the organizations, objectives, functions, scheduling and existing facilities for educating future Air Force leaders. The study included an inventory of existing space and an evaluation of space criteria, space utilization and occupancy standards to determine space deficiencies. The master plan is structured to ensure a logical and efficient sequence of development over time. Spatial reorganizations were identified and projects were defined that range in scope from minor renovations to major new facilities.

The master plan also identifies long-term, unforeseen growth and change. Land areas immediately adjacent to the Cadet Area are identified and conserved as resources for future growth and expansion. Another important component to the master plan was the development of architectural guidelines which identify important design and planning philosophies and which provide a framework for future design.

*Command: Air Force Academy*

*Base Engineering: 7625th Civil Engineering Squadron*

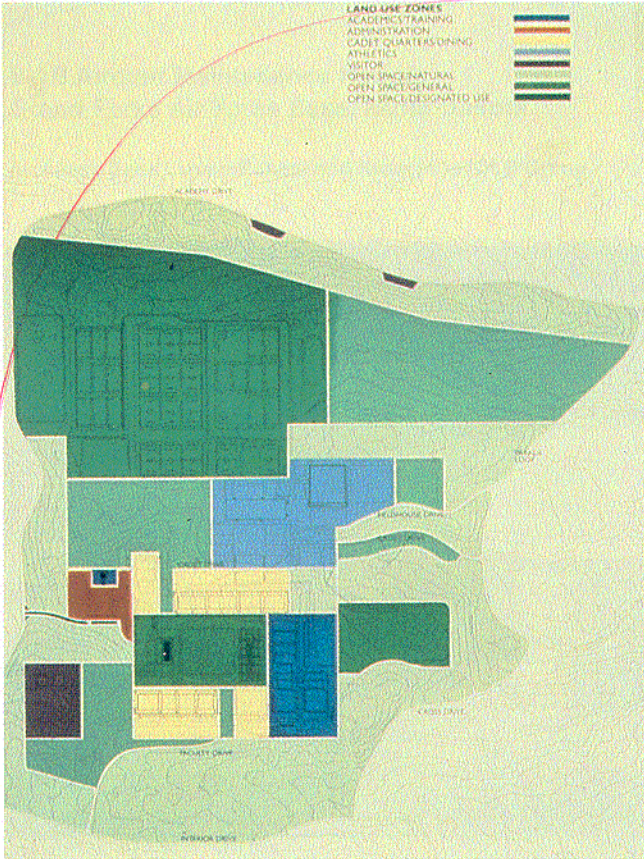


ACADEMIC COMPLEX LOOKING SOUTHWEST

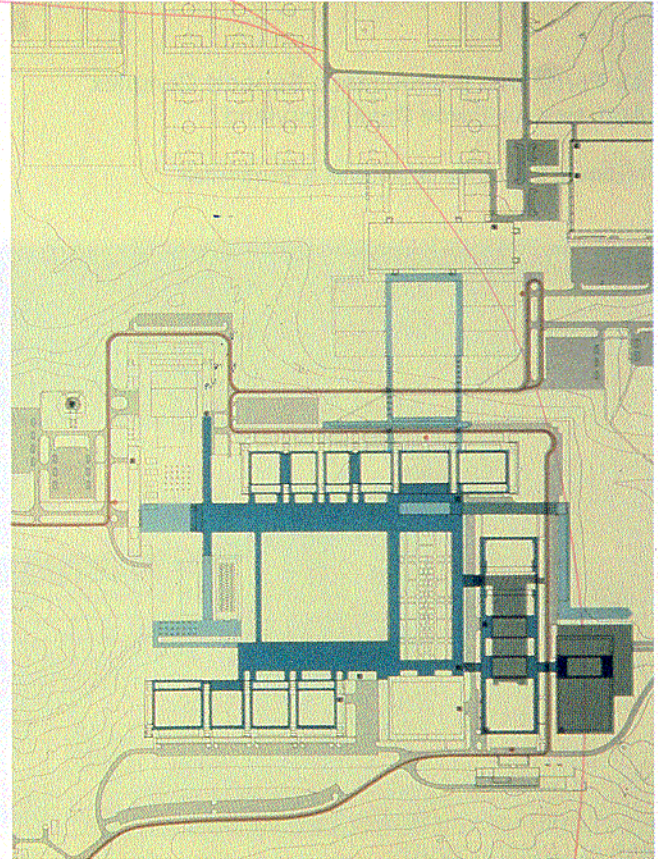


# Merit Award

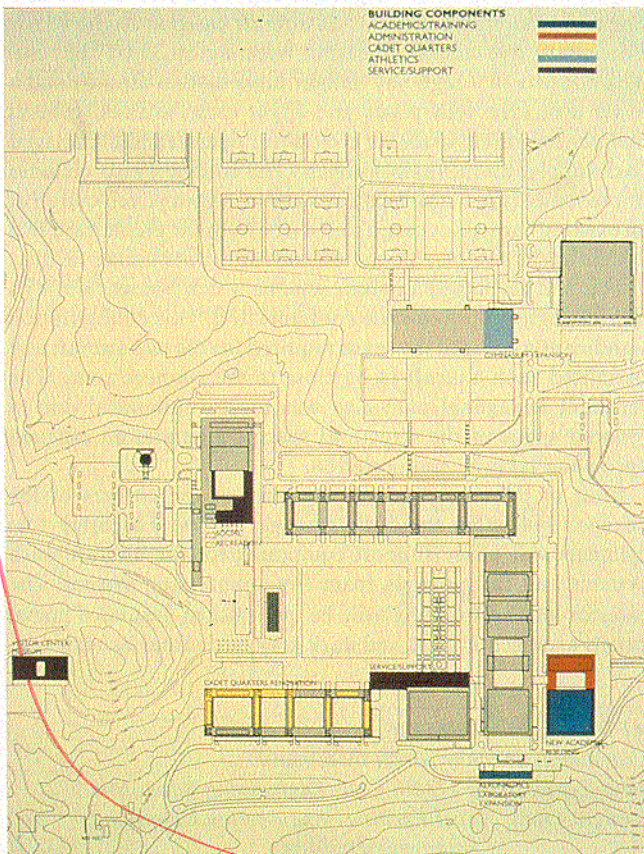
# Honor Award



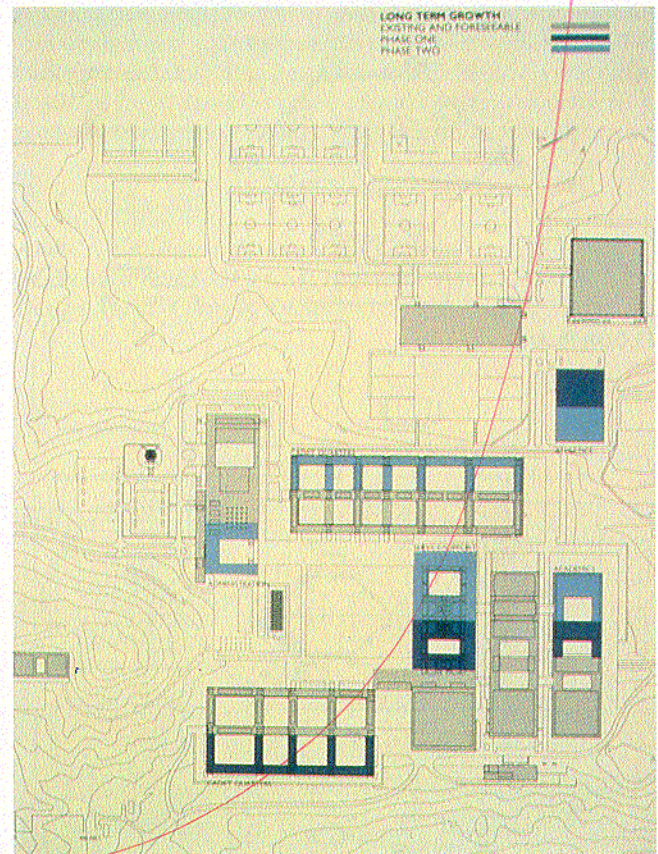
LAND USE PLAN



CIRCULATION PLAN



BUILDING COMPONENTS PLAN



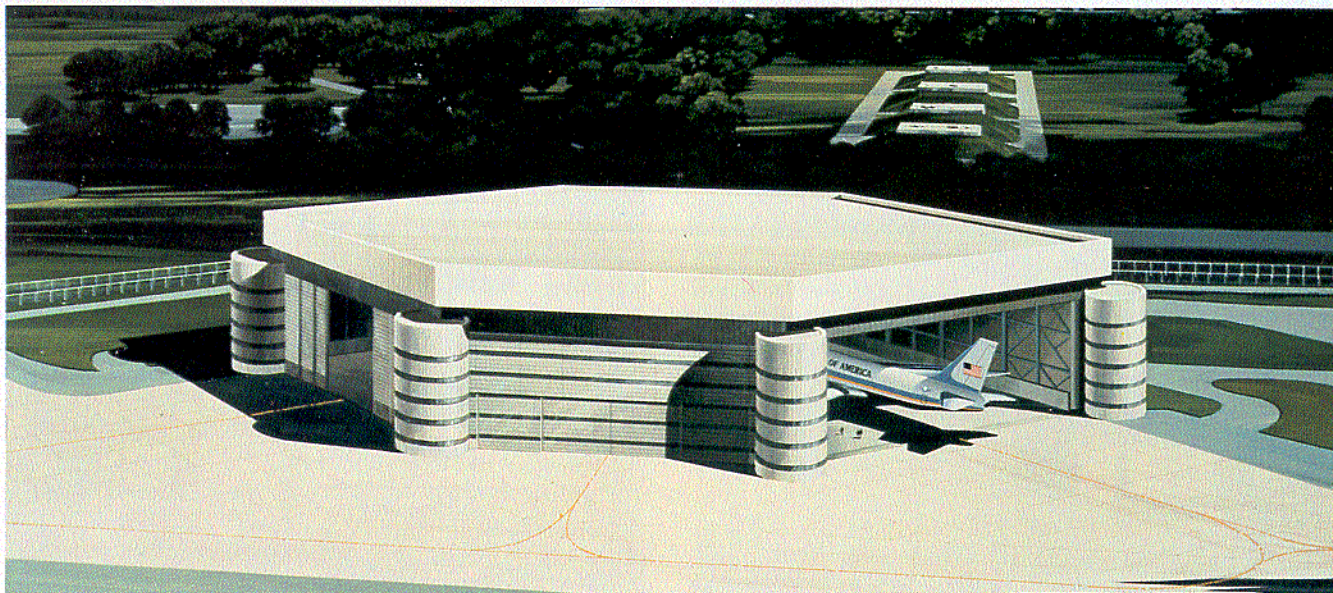
LONG TERM GROWTH PLAN



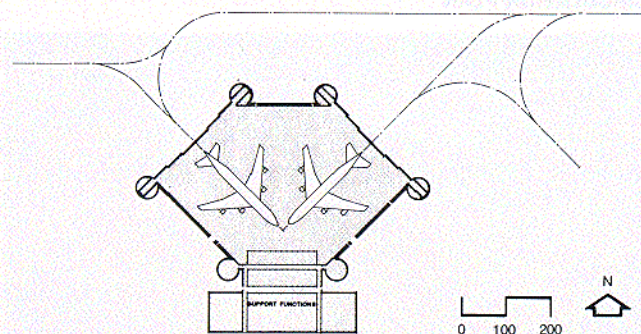
# Honor Award

## Air Force One Maintenance Support Complex Andrews Air Force Base, Maryland

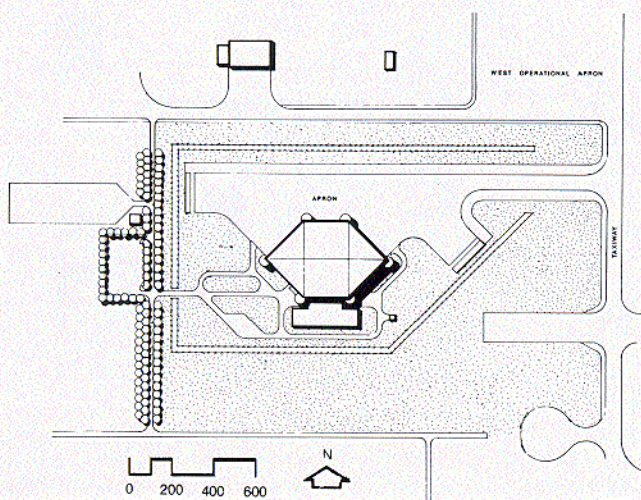
Architect: Daniel, Mann, Johnson & Mendenhall



AERIAL LOOKING SOUTH



FLOOR PLAN



SITE PLAN

This new complex is designed to support a fleet of two new Boeing 747 aircraft and one C-20 aircraft based at Andrews Air Force Base, five miles southeast of Washington, D.C. The complex consists of a high bay hangar housing two aircraft and a lower structure with pilots and flight crews offices, general maintenance area, space for contractor operated and managed base supply, and a flight kitchen. The complex also includes improvements to the airfield aprons and taxiways, relocation of an existing hazardous cargo pad, a new hydrant pressurized fuel system and a new petroleum, oil and lubricants tanker facility.

The A-E developed a unique scheme which houses two 747's in a 90 degree, nose-to-nose configuration. This configuration significantly reduced the space required for the two aircraft and permitted both aircraft to be close to the support areas. The resultant hexagonal plan also was more economical due to reduced spans of the structural space frame and an efficient apron and taxiway configuration.

Four of the six cylindrical elements at the corners of the hexagon will store the sliding hangar doors. The other two cylinders will house support equipment for the aircraft wash systems and the aqueous foam fire suppression system. The exterior of the building will be prefinished insulated metal panels arranged in light and dark gray horizontal bands.

*AFRCE: Eastern Region*

*Command: Military Airlift Command*

*Base Engineering: 1776th Civil Engineering Squadron*

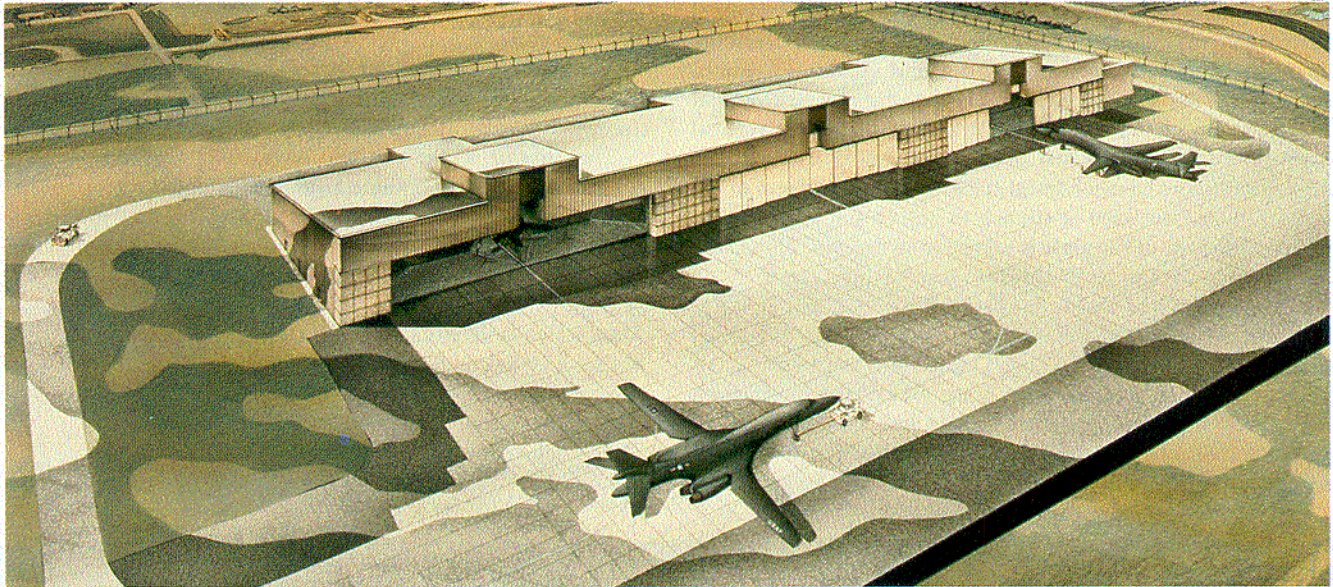
*Design Agent: Naval Facilities Engineering Command,  
Chesapeake Division*



# Merit Award

**B-1B Aircraft Maintenance Hangar**  
Grand Forks Air Force Base, North Dakota

Architect: Dana Larson Roubal and Associates/DLR Group



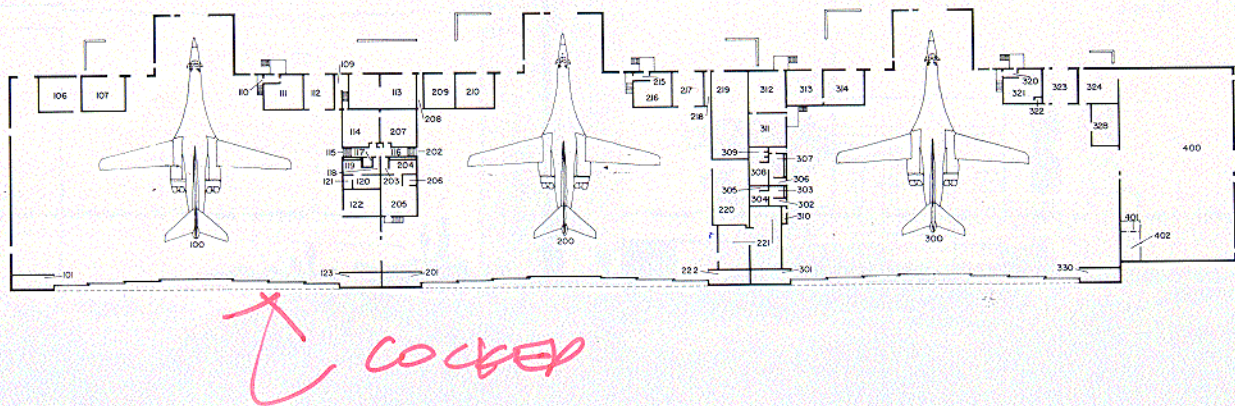
**AERIAL LOOKING SOUTH**

This hangar is designed to provide all-weather protection for and serve as a maintenance facility for three B-1B aircraft simultaneously. The project encompasses 162,000 square feet including two maintenance bays devoted totally to standard maintenance operations and one bay designed to support fuel cell maintenance activities as well as the standard maintenance operation. Storage/maintenance team areas are located between the hangar bays and include tool and parts storage and administrative and training spaces.

The form of the hangar with the distinctive tail doors was dictated by aircraft clearance requirements and the desire to minimize the building height and volume. Finish materials were

chosen for durability, ease of maintenance and appearance. The southern face of the hangar is precast concrete which provides subtle color and textural variations as well as providing the durability required at a point where finishes are vulnerable. Insulated metal panels are used on walls where the material is protected from vehicle damage by screen walls and landscaping.

AFRCE/Command: Strategic Air Command  
Base Engineering: 321st Civil Engineering Squadron  
Design Agent: Corps of Engineers/Omaha District



**FLOOR PLAN**



# Merit Award

## Control Tower Davis Monthan Air Force Base, Arizona

Architect: NAC/ABKJ Associated Architects-Engineers

The ingenious use of an exterior walkway around the cab level of this control tower provides a graceful transition between the hexagonal cab and the square tower and creates a graceful structure for this Arizona base. Four-foot wide recessed vertical strips introduced to each side of the tower enhance the vertical expression of the tower and provide controlled locations for doors, windows and mechanical grilles. All glass surfaces of the cab are sloped outward at the top to reduce sun glare for the pilots. The slope of the glass is extended to the roof of the cab, thus shaping the cab structure into a simple, bold form.

The tower will be constructed with post-tensioned concrete walls and structural steel flooring and roof framing. The structure is designed for Seismic Zone 1 conditions and to withstand basic wind speeds of 80 miles per hour. All exterior finishes will require low maintenance. The concrete walls of the tower will have a sandblasted texture. The recessed vertical strips will have a fine, striated appearance resulting from the use of plastic form

liners. Buff cement will be used in lieu of concrete additives to ensure a uniform and integral concrete color.

The window frames, louvers and walkway guardrails will be dark bronze anodized aluminum. The steel doors and door frames will be painted to match the aluminum.

The interior of the cab will have black ceiling and walls, dark matte plastic laminate countertops and control console and dark patterned carpet. Smoke colored window shades will be provided to help control sun and sky glare when the blue-green tinted glass cannot do an adequate job.

*AFRCE: Western Region*

*Host Command: Tactical Air Command*

*Using Command: Communications Command*

*Base Engineering: 836th Civil Engineering Squadron*

*Design Agent: Corps of Engineers/Sacramento District*

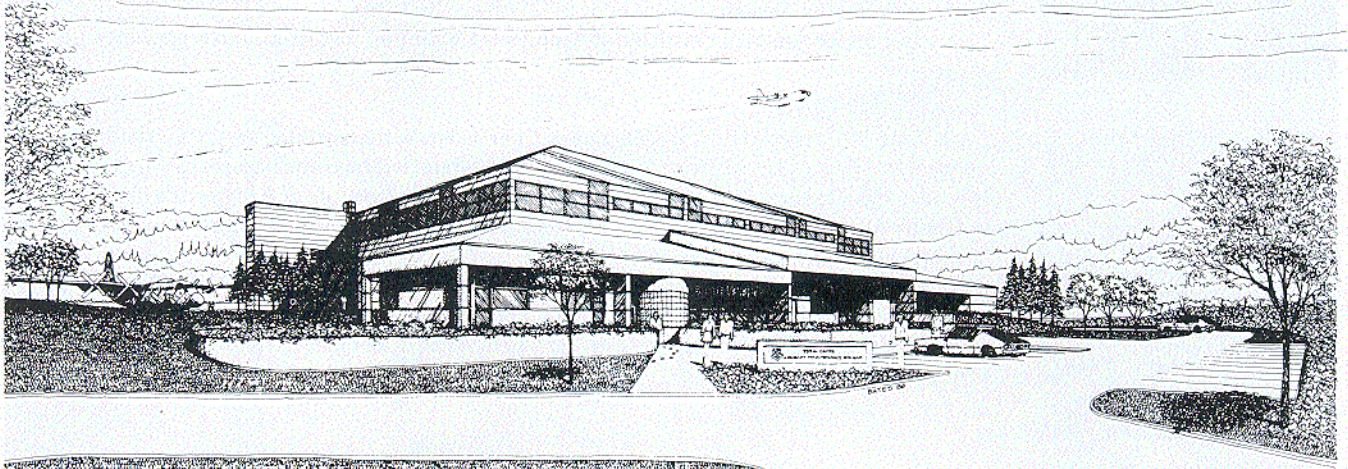




# Merit Award

## HC-130 Aircraft Maintenance Hangar Portland International Airport, Oregon

Architect: ARCHITECTS Barrentine, Bates, Lee AIA



RENDERING LOOKING NORTHEAST

This new aircraft maintenance hangar will be part of the Air Force Reserve complex at the Portland International Airport in Oregon. One of the objectives of the design program was to minimize the visual impact of the hangar on adjacent buildings. Skillful manipulation of the roof profile, the addition of earth berms on three sides of the building and careful selection of compatible finish materials have successfully achieved this objective. The roof profile of the hangar is repeated at a lower height over the support and administrative areas located along the south side of the hangar. This further reduces the visual impact and strengthens the relationship of this new building to the adjacent Squadron Operations Building.

The floor plan offers a functional and efficient layout that minimizes circulation space. Rooms requiring natural light and ventilation have been located on the exterior walls. Win-

dows on the south and west walls have been recessed and protected from the sun by roof overhangs. Natural light is introduced into the hangar through translucent, insulated, energy-efficient panels located high on the east and west walls and in the roof.

The hangar doors and gable roof profile on the north facade of the building is compatible with the other aircraft hangars nearby. The standing seam metal roof and flat metal wall panels will be compatible with the other buildings in the complex.

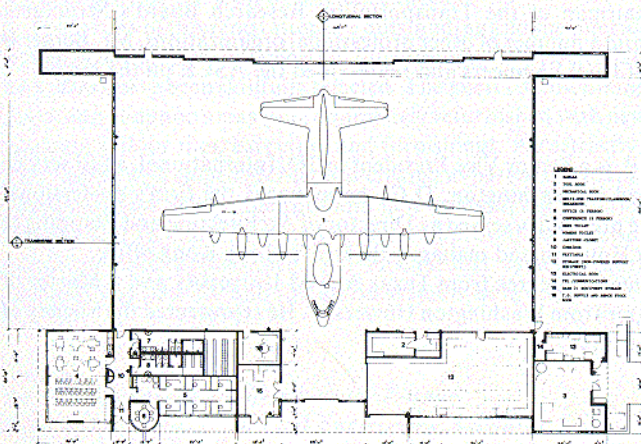
*AFRCE: Western Region*

*Host Command: National Guard Bureau*

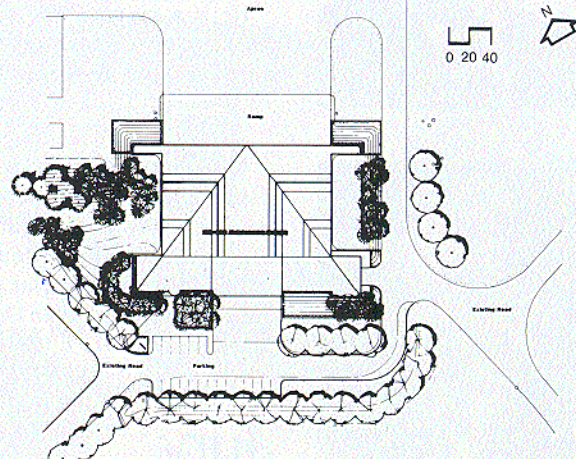
*Using Command: Air Force Reserve*

*Base Engineering: 142nd Civil Engineering Squadron*

*Design Agent: United States Property and Fiscal Office/Oregon*

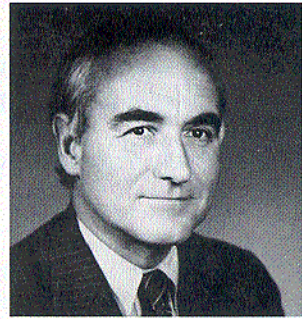


FLOOR PLAN



SITE PLAN

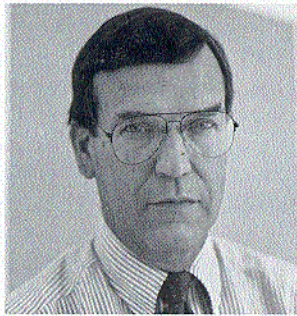




Mr. Henry S. Reeder, Jr., AIA, is a principal of Architectural Resources Cambridge, Inc., a planning and design firm in Cambridge, Massachusetts. His primary role is as project principal for institutional and corporate facilities. Recent projects under his direction include the John F. Kennedy School of Government at Harvard University, renovation of the administration building at Williams College, renovation of four dormitories at the Harvard Business School, and new office facilities for Signal Capital Corporation, GTE and Arthur D. Little.

Mr. Reeder received a Bachelor of Arts degree from Princeton University, a Bachelor of Architecture degree from MIT and a Master of Architecture degree from Harvard University Graduate School of Design.

He serves on the American Institute of Architects Committee on Design and represented the AIA on the Jury.



Mr. John P. Locke, AIA, is co-founder of Charles Herbert and Associates, a Des Moines, Iowa architectural firm which has received more than 100 state, regional and national awards for design. The most important award received has been the American Institute of Architects's highest award, an Honor Award. The twenty person firm was reorganized in 1987 and is now known as Herbert Lewis Kruse Blunck Architecture.

Mr. Locke has been a member of the AIA Committee on Design since 1977 and has served on a number of design award juries, including the 1984 AIA Honors Award jury.

He holds a degree in Architectural Engineering from the University of Illinois and represented the AIA on the jury.



General W. Thomas Meredith (Retired) is a Director at Parsons Brinckerhoff Construction Services, Inc. and directs the company's worldwide business and technical activities involving construction and facilities management. He is Principal-in-Charge of the Sunshine Skyway Bridge project in Tampa, Florida. This concrete cable-stayed structure will be the longest bridge of this type in the world. General Meredith was project manager for Philadelphia's \$308 million Center City Commuter Rail Connection project. This project won the American Society of Civil Engineers award for the Most Outstanding Civil Engineering Achievement in 1985.

His 30-year military career included positions with both the U.S. Army Corps of Engineers and the U.S. Air Force. General Meredith represented the Society of American Military Engineers on the jury.



Mr. Roland H. Berger is Senior Vice President and Manager of Byrd, Tallamy, MacDonald and Lewis Division of Wilbur Smith Associates. He has been practicing civil engineering for more than 35 years and is responsible for all design activities of the firm, including highways, bridges, railroad and rail transit, buildings, site development and construction management.

Mr. Berger has a Bachelor of Science in Civil Engineering degree from Notre Dame. He is a registered Professional Engineer in Virginia and a number of other states as well as a registered Structural Engineer in Illinois.

He is a member and former chairman of the Transportation Research Board's Structures Maintenance Committee (A3C06), and a number of other professional organizations. Mr. Berger is a Fellow of the American Society of Civil Engineers and represented the ASCE on the jury.



Mr. Daniel R. Brents, AIA, AICP, is a Senior Vice President of 3D/International, a full service design and management firm. Based in Washington, D.C., he manages the firm's professional services on the Eastern seaboard. He previously served as Director of Architecture and Planning at 3D/International's headquarters in Houston and managed the firm's Hong Kong office.

He received a Bachelor of Architecture degree from Texas A & M University and a Master of Architecture and Urban Design degree from Washington University. He represented the Society of American Military Engineers on the jury.

## Jury



# Special Citation

## Cannon Hotel Renovation Ramstein Air Base, Germany

Architect: Bayer Ingenieur Gesellschaft

Interior Design: Bill Middleton and Karin Turner-Foss, HQ USAFE/DPSX



LOBBY INTERIOR

Three decades of providing temporary lodging for visitors to Headquarters United States Air Force at Ramstein Air Base had taken their toll on the Cannon Hotel. The interior and the exterior appearances were uninviting, the spatial relationships were disfunctional, and the mechanical systems were obsolete. Complete renovation of the building was needed to enable the hotel to provide the level of services expected.

The results of this renovation are outstanding and the interior design is particularly noteworthy. Furnishings, finish materials and colors have been skillfully selected. The guest rooms, dining room and common areas were completely refurbished with new wallpaper, floor tiles, carpeting and furnishings. An attractive entry lobby with sloped glazing was created as part of the spatial reorganization. A new tile roof and new landscaping, exterior lighting and an entrance canopy greatly improved the exterior condition and appearance. All mechanical systems were replaced and new TV and fire alarm systems were added.

Command: United States Air Force Europe  
Base Engineering: 377th Civil Engineering Squadron  
Design Agent: Staats Bauamt-Kaiserslautern-West



LOBBY INTERIOR



# Special Citation

## Officers Club Renovation Holloman Air Force Base, New Mexico

Architect: Tactical Air Command IDP Training Team A

Interior Design: Paula Cole and Patrick Pantalo, Tactical Air Command Design Team

This renovation of the Officers Club in New Mexico clearly demonstrates that the quality of Air Force interior design has improved in recent years. Equally impressive is that this renovation project was designed by Air Force military and civilian design professionals. A group of intern architects – Lt. Mark Koll and Captains Nicholas Desport, Douglas Fitzpatrick and John McDermon – worked under the direction of Mr. Allan Hockett at the Tactical Air Command Design Team and were responsible for program development, design concepts and preparation of the architectural portion of the construction documents. The mechanical engineer was Capt. Mario Domingues. The structural and electrical engineering were accomplished by outside consultants. The intern architects and two interior designers on the Design Team, Ms. Paula Cole and Mr. Patrick Pantalo, were responsible for the interior design.

This highly successful renovation project reorganized the functional areas, replaced the mechanical, plumbing and electrical systems and created an inviting atmosphere. Service access and internal circulation problems were corrected and the kitchen and serving line were reorganized. Several offices were relocated to improve efficiency, to create a small waiting area in the main lobby and to provide better separation between the

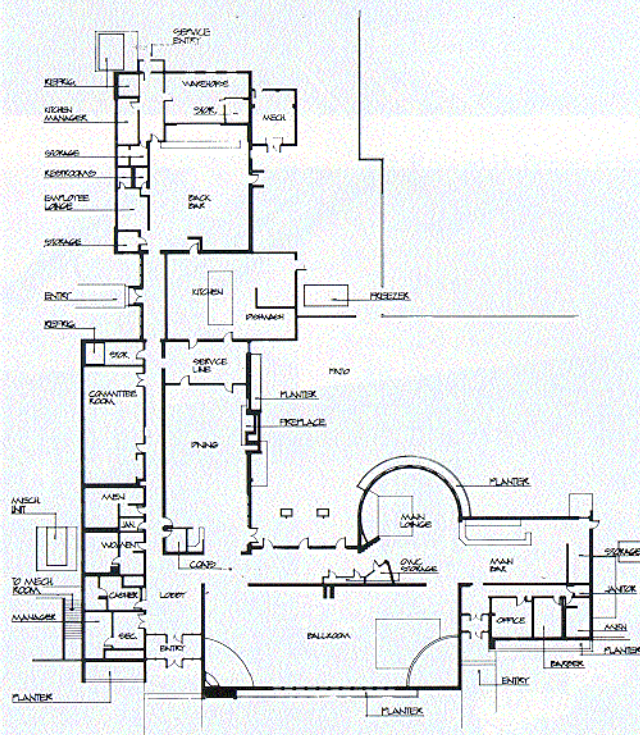
main bar and the formal bar. A fully-glazed addition to the dining room created a “greenhouse” terrace, doubled the room size and permitted the ballroom/multipurpose room to be moved into the space. A moveable wall system, in conjunction with two remote service bars and two waitress stations, permit flexible use of this space while still maintaining good service flows with the kitchen.

The revised circulation permits evening dining patrons to easily use the restrooms or visit the formal bar prior to entering the dining room and provides the main bar with a separate entrance. Access for the physically handicapped is provided to all functional areas in the building.

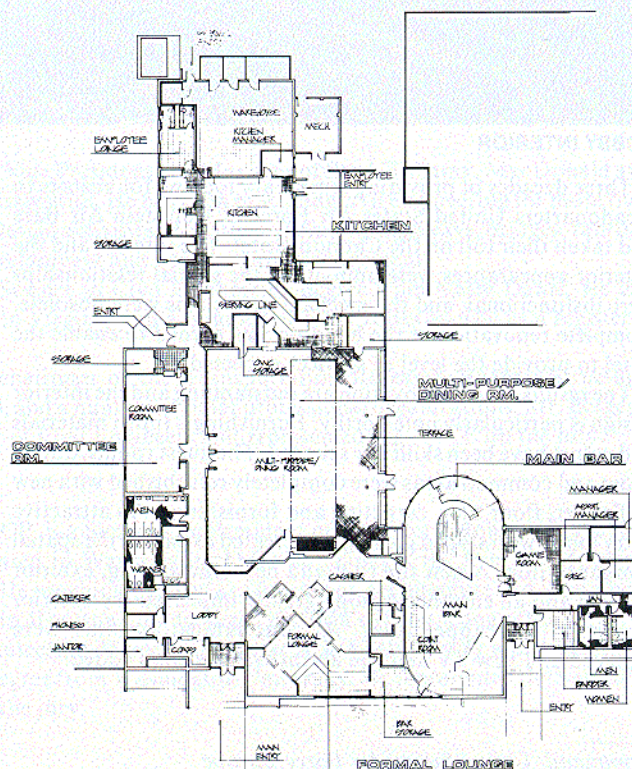
It is the refined quality of the interior design that is the most dramatic aspect of the renovation. The orchestrated selection of colors, fabrics and furnishings gives each of the functional spaces a richness and character that is rare in Department of Defense facilities.

Command: Tactical Air Command

Base Engineering: 833rd Civil Engineering Squadron



OLD FLOOR PLAN



NEW FLOOR PLAN

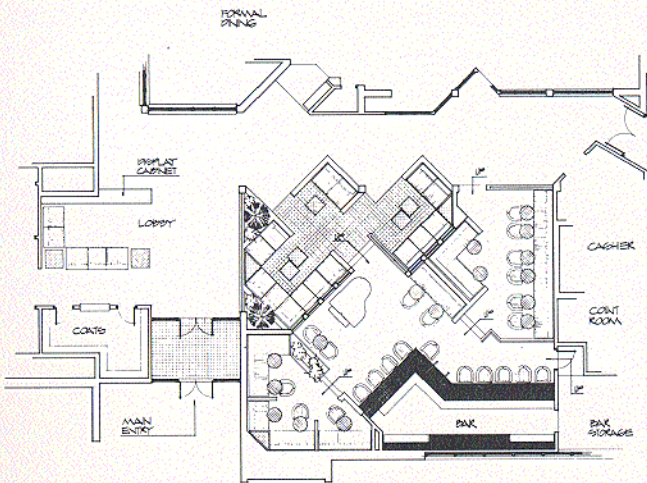




LOBBY



MULTIPURPOSE ROOM



FORMAL LOUNGE PLAN



MAIN BAR



TERRACE DINING ROOM



FORMAL LOUNGE





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