



**DEPARTMENT OF THE ARMY**  
**ARMY NATIONAL CEMETERIES PROGRAM**  
**ARLINGTON NATIONAL CEMETERY**  
**ARLINGTON, VA 22211-5003**

February 12, 2019

Arlington National Cemetery (ANC) is identifying historic properties potentially eligible for listing in the National Register of Historic Places (NRHP) as well as those already listed and which are properties in the area potentially affected by the cemetery's proposed Southern Expansion development. The Air Force Memorial (AFM) is in the area of potential effect.

ANC is evaluating the AFM for its eligibility for listing in the NRHP. In accordance with 36 CFR 60.4, commemorative properties, which have achieved significance within the past 50 years shall not be considered eligible for the National Register unless the property is primarily commemorative in intent; if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or the property achieving significance within the past 50 years is of exceptional importance. The AFM embodies the distinctive characteristics of a type, period, or method of construction; and/or represent the work of a master; and/or possess high artistic values; and/or represent a significant and distinguishable entity whose components may lack individual distinction.

Designer of the AFM, James Ingo Freed, a widely noted architect, designed a number of iconic buildings including the US Holocaust Memorial Museum. During the U.S. Commission of Fine Arts' review of the proposed AFM, they lauded this work as "majestic."<sup>1</sup> ANC is researching and analyzing the AFM to evaluate qualifications for listing in the NRHP as the work of a master and/or possesses high artistic values.

The determination of eligibility process includes consultation with the Virginia State Historic Preservation Officer (SHPO) and consulting parties. In addition to consultation, we will use the evaluation of the designed landscape elements of the memorial to determine their contribution to the property.

If, in consultation with the SHPO and consulting parties, ANC determines the AFM is NHRP eligible, then in accordance with 36 CFR 800.5(a)(1), we will apply the criteria of adverse effect to the AFM within the proposed Southern Expansion project. ANC will provide the SHPO and consulting parties an opportunity to comment on our determination of effect for the project. Upon the SHPO's concurrence with our determination of adverse effect, ANC will proceed with the Section 106 process.

At this time, Arlington National Cemetery invites you to provide comments on the draft National Register of Historic Places determination of eligibility. Attached is the draft "Air Force Memorial: Physical Description, Background Research, and Evaluation of Eligibility for the National Register of Historic Places", Virginia Cultural Resources Information System (V-CRIS) form, photographs and maps.

Please send your comments to Cultural Resources Manager at < usarmy.pentagon.hqda-anc-osa.mbx.cultural-resources@mail.mil> and include "Air Force Memorial" in the subject line. Comment are due no later than March 1, 2019.

Thank you for your interest in Arlington National Cemetery.

---

<sup>1</sup> Letter from David M. Childs, Chairman of the Commission of Fine Arts to Edward F. Grillo, Jr., President of the Air Force Memorial Foundation, dated 27 April 2004

---

# Air Force Memorial: Physical Description, Background Research, and Evaluation of Eligibility for the National Register of Historic Places

## EAC/A, Inc.

### Introduction

EAC/Archaeology, Inc. (EAC/A) has prepared a report to determine the eligibility or ineligibility of the Air Force Memorial (AFM) in Alexandria, Virginia, for listing in the National Register of Historic Places (NRHP). Plans for the Arlington National Cemetery Southern Expansion (ANCSE) project include proposed changes to the AFM. The primary purpose of this study is to prepare a National Register of Historic Places determination of eligibility for the AFM, which is required by the National Historic Preservation Act.

### Physical Description

The AFM is located on a three-acre site formerly occupied by the Navy Annex Building, in Arlington County, Virginia, with the street address of 1 Air Force Memorial Drive, Arlington, VA 22204 (**Figures 1 and 2, Table 1**). The memorial, dedicated in 2006, is situated on an open landscape, bordered by Southgate Road on the north and Columbia Pike (VA Route 244) on the east and south. The Foxcroft Heights residential neighborhood lies to the west. The memorial is situated adjacent to and just south of Arlington National Cemetery. It is on high ground, at the summit of a hill, overlooking the Pentagon, Potomac River, and Washington, DC.

Made up of several components, buildings, structures and objects, the AFM presents as a historic property, completed and dedicated in 2006 (**Table 2**). Ordinarily, properties commemorative in nature and less than 50 years old would not be considered eligible for the National Register of Historic Places. However, the property meets the criteria for exceptional significance under National Register Criterion C, because of its unique and evocative design and the importance of the artistic contribution of the architect, James Ingo Freed, of the firm Pei Cobb Freed & Partners. This was the last commission for Freed, who died in 2005.

The memorial consists of several elements, including an entrance driveway, Air Force Memorial Drive, which enters from Columbia Pike and culminates with a landscaped circle at its north terminus. Visitor parking is available along the drive. Granite walkways lead from the Air Force Memorial Drive diagonally to meet and make an apex at the base of a triangular promontory which contains the focal point of the memorial (**Photographic Plate 1**). While the triangle points to the east, parallel walkways and a parade ground run north-south, terminating with a memorial wall at each end (**Photographic Plates 2 and 3**). The system of parallel and intersecting diagonal walkways looks from above like airport runways.



**Air Force Memorial  
Property Boundary on Aerial Photograph**

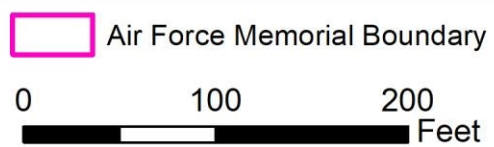




Figure 1  
Figure 2

Table 1: Geographical Data

<b>Acreage:</b>	3 acres
<b>UTM Zone (NAD 1983):</b>	18N
<b>Easting (NAD 1983):</b>	320720.5
<b>Northing (NAD 1983):</b>	4304213.8

Table 2: Elements of the Air Force Memorial

<b>Resource</b>	<b>Materials</b>
Air Force Memorial Drive	Asphalt
Contemplation Chamber	Glass
Guard House	Concrete
Honor Guard	Bronze
Inscription Wall North	Granite
Inscription Wall South	Granite
Memorial Steps	Granite
Parade Ground	Granite
Parking Area	Asphalt
Promontory	Granite
Retaining Wall	Concrete
Service Building	Concrete
Sidewalk	Concrete
Spires	Steel / Concrete

The landmark feature of the memorial is the cluster of three towering, curved stainless steel and concrete spires set on the triangular promontory that overlooks the city of Washington (**Photographic Plate 4**). Each spire is set into an angle of the triangle and arches outward from the base. In the center of the promontory is the Air Force Star insignia embedded into the granite slab floor (**Photographic Plates 5 and 6**). Each spire is constructed of three-fourths inch plate stainless steel over a reinforced concrete core. The spires are asymmetrical, each a different height, 201, 231, and 270 feet tall (**Photographic Plate 7**). The curving spires evoke the image of contrails left when the precision United States Air Force Thunderbird Demonstration Team performs the “bomb burst” maneuver. In addition, the spires represent the three core values of the Air Force - integrity first, service before self, and excellence in all that is done. They also suggest the Air Force’s Total Force—active, guard, and reserve (Air Force Memorial Foundation 2006).

While the spires are the most well-known and emblematic part of the memorial, there are other components, structures, objects and buildings. The triangular base for the spires points to the east. Passing to the west of it are granite walkways that run north-south. At the north end of the walks is an inscription wall, matched by a similar wall at the south terminus of the walkways. Each of these inscription walls is 56 feet long, ten feet high, and one foot thick, constructed of polished black and “jet mist” granite. The north wall records the names of Air Force recipients of the

Medal of Honor, and the south wall lists inspirational quotations regarding the Air Force core values (**Photographic Plates 8 and 9**).

Just south of the north inscription wall is a free standing clear glass “contemplation wall” made of five layers of glass that have been laminated. The wall is nine feet wide and ten feet tall and is engraved with an image of the missing man fighter jet formation (**Photographic Plate 10**). At the opposite end of the memorial, north of the south inscription wall stands an eight-foot tall bronze sculpture, the work of sculptor Zenos Frudakis. The sculpture depicts an Air Force Honor Guard, with four freestanding figures that also represent the diversity of the people who are the United States Air Force (**Photographic Plate 11**). The granite paved walkways evoke airport runways, particularly when viewed from above. West of the west walkway and adjacent to it are Memorial Steps, granite block steps and seats (**Photographic Plate 12**). In addition to the elements described above, is a discretely placed administration building, located behind the north memorial wall. A low, flat-roofed building, it is barely visible from the main memorial viewing area but contains offices and restrooms (**Photographic Plate 13**).

At the entrance to Air Force Memorial Drive is a small gate keeper’s guard house (**Photographic Plate 14** **Photographic Plate 15**). Other features include stainless steel bollards as security devices. The grounds are landscaped with a combination of deciduous and evergreen trees, part of the original design of the memorial. Most of the trees are concentrated on the western side of the AFM.

## History and Context

The AFM serves as a commemoration to active-duty service members in the United States Air Force (USAF) and to the approximately 54,000 airmen killed in combat in service to the USAF and its predecessor organizations (Air Force Memorial Foundation 2006:1). The main focus of the memorial revolves around the three arching stainless-steel spires reaching out toward the downtown Washington, DC area. The memorial was initially intended as a multicomponent commemorative site and, as a result, actively incorporates other sculptural and design elements that are equally important to the use and implementation of the total site as an inclusive monumental and interpretive space.

The Air Force Memorial Foundation was first granted a 501(c)(3) nonprofit status in August 1992 and began surveying applicable sites for the memorial early in 1994. The Foundation chose the Arlington Ridge site in September 1994; three years later, in 1997, a bill was introduced to forestall the placement of any commemorative monument within sight of the Marine Corps’ Iwo Jima monument at Arlington Ridge. Architectural firm Pei Cobb Freed & Partners presented the first design for the AFM in 1996. Concerns that the AFM would disrupt the viewshed of downtown Washington from the Iwo Jima Memorial, as well as the initial design of the memorial as “an aluminum can” that would “stand out like a sore thumb and cause headaches everywhere” prompted a drawn-out, litigious process that eventually denied the Air Force Memorial Foundation the desired location at Arlington Ridge (**Photographic Plate 16**; Isackson 1997). The current location of the AFM at the former site of the Navy Annex/Federal Office Building 2 (FOB 2) was first proposed in 1998 and accepted in late 2001. Pei, Cobb Freed & Partners were accepted again in 2002 to design the AFM at the new site (Air Force Memorial Foundation 2018). The easternmost wing associated with the Navy Annex/FOB 2, Wing 8, was demolished between August 2004 and April 2005; the other seven wings of the Navy Annex/FOB 2 were entirely removed by April 2014 (Google Earth Pro). The formal groundbreaking for the AFM took place on September 15, 2004 (Air Force Memorial Foundation 2018). The memorial space was completed over the course of the following two years (**Photographic Plates 17, 18, and 19**).

Dedicated on October 14, 2006, the AFM represents the culmination of a controversial struggle between the Air Force and other branches of the United States military to provide and preserve the organization’s own memorialized space

(Air Force Memorial Foundation 2006:1). Following the contentious process of litigation that spanned from the initial objections of the Marine Corps in 1997 to the final dedication in October 2006, the AFM has since become "...the Air Force's ceremonial stage, hosting promotions and retirements, historic commemorations, band concerts, and drill team performances" (Grier 2016:20). Until its dedication, the Air Force was the only branch in the United States armed services "without any memorial in the Washington DC area commemorating its service to the nation" (Air Force Memorial Foundation 2006:1).

Renowned architect James Ingo Freed conceived the primary design of the memorial's structure and space. Freed first began his career with the famous modernist Chicago architect Mies van der Rohe before joining I.M. Pei & Associates in 1956; Freed was included as a partner at the same organization in 1980, following his appointment as dean of the School of Architecture at his alma mater, the Illinois Institute of Technology (IIT), and had been granted several awards for excellence in architecture, notably the first Thomas Jefferson Award for Public Architecture, presented as a lifetime achievement award by the American Institute of Architects, and honorary degrees at the New Jersey Institute of Technology, Hebrew Union College – Jewish Institute of Religion and the IIT before his death in 2005 (Pei Cobb Freed & Partners 2018). Freed brought with him a sense of space and its purposeful utilization that was applied to the AFM. Immersion and space were considered integral and important to the general design characteristics of Freed's multitudinous architectural projects, which ranged from "civic, cultural, and academic buildings to residential complexes and office towers," as well as commemorative memorials, suggesting a preferred treatment of the architectural space within the context and scope of its intended purpose (Pei Cobb Freed and Partners 2018).

Freed is closely associated with the first-generation postmodern group of architects known as the Chicago Seven. The group was formed in the 1970s in response to what they perceived to be an over-emphasis on the work of Ludwig Mies van der Rohe. Mies' modernist style had utilized modern industrial materials, minimal framework, and straightforward, functional design, emphasizing the spirit of the modern era. Architects Stanley Tigerman, Stuart Cohen, Larry Booth, Ben Wesse, James Ingo Freed, James Nagle, and Thomas Beeby began planning and exhibiting their own shows which abandoned what they perceived to be canonical rules of architecture. Reflecting the turbulent social changes that served as the backdrop for this movement, the name for this group of seven architects derived from a group of radical leftists who were accused of conspiring to incite a riot at the 1968 Democratic National Convention. The Seven identified themselves through negation and distance from the established architectural culture of Chicago, emphasizing individuality and singularity while "deploying semantic devices intended for a broader audience" (Waldheim and Ray 2005:xvi). They staged a "Chicago Townhouse" competition which emphasized pluralism in architectural design (Klotz 1985:345). James Ingo Freed was the only member of the Chicago Seven not to have been born in the United States.

Freed did much of his earliest work in New York, but by the 1990s, he had buildings in Minneapolis, Washington, San Francisco, Stanford, and Los Angeles (**Table 3**). Regarding his early work, Terence Riley, the chief curator of architecture and design at the Museum of Modern Art, stated: "88 Pine Street and University Plaza are two of the most refined examples of modern design in all of Manhattan" (The New York Times 2005). The AFM was Freed's last design before he passed away from Parkinson's Disease, and it was still under construction at the time of his death in 2005. It was also his only work in Virginia, and the only discrete memorial that he designed.

Freed is perhaps most famous for his design of the United States Holocaust Memorial Museum, which he designed to be viewed "not only intellectually, but also viscerally" (Freed 1990; Linton 1988). The Hall of Witness, the centrally located component of the Holocaust Memorial Museum, was created as a "purposefully disquieting" area, highlighting the use of space as a vessel for the architect's intended experience of the visitor to the memorial (Freed 1990). Freed also incorporated his own childhood experiences of Kristallnacht, followed by his flight from Germany as an immigrant to the United States in 1939, to the application of the experience he expected visitors to receive at the Holocaust Memorial Museum. After "four weeks looking at blank paper" Freed traveled to Auschwitz in 1986 and

---

made several subsequent return trips in an attempt to understand the underlying human experience of Holocaust victims (Giovanni 1993:1). By “sliding into the brutality,” Freed was able to take a step back from the human suffering endemic to the Holocaust experience, and approached the study of Holocaust architecture from a more systematic and objective viewpoint. Through an analysis of individual architectural “tectonics” ubiquitous to concentration camp construction, Freed came to the conclusion that: “The death factories were deliberately designed as a matter of problem-solving, like some movie on industrial efficiency gone mad” (Giovanni 1993:2). The underlying utilitarian effect of industrialized death left a lasting impression on Freed, who would go on to incorporate these factory-made architectural elements to the Holocaust Memorial Museum, most notably in the Hall of Witness. Freed intentionally created a space that would “both join Washington urbanistically on the exterior” and allow visitors to “leave Washington metaphorically in order to enter sacred ground” (Freed 1990). In so doing, Freed attempted to create a fluid, and abruptly startling, experience for visitors to the Holocaust Memorial Museum.

Table 3: Notable Designs by James Ingo Freed

Date	Work	Location
1963	Kips Bay Plaza Housing Complex	New York, NY
1967	University Plaza	New York, NY
1973	88 Pine Street	New York, NY
1981	499 Park Avenue	New York, NY
1986	Jacob K. Javits Convention Center	New York, NY
1992	First Bank Place (Capella Tower)	Minneapolis, MN
1993	United State Holocaust Memorial Museum	Washington, DC
1996	San Francisco Main Public Library	San Francisco, CA
1997	Los Angeles Convention Center Expansion	Los Angeles, CA
1998	Ronald Reagan Building and International Trade Center	Washington, DC
1999	Stanford University Science and Engineering Quad	Palo Alto, CA
2000	Roman L. Hruska United States Courthouse	Omaha, NE
2002	Broad Center for Biological Sciences	Pasadena, CA
2006	United States AFM	Arlington, VA

The preconceived space of the AFM has a similar air of intended perception, purposefully sculpted by the architect to incorporate those values considered most important to the Air Force, symbolized by the three stainless steel spires, as: “Integrity first, Service before self, and Excellence in all we do” (Freed 2004). The spires are not the only element included in the AFM, which is meant to be viewed as a comprehensive whole, combining the other sculptural and structural elements on the site into an inclusive experience. The functionality and immersive utilization of space at the AFM is also evident in the design of the Parade Ground, which serves as both a commemorative avenue, with the Honor Guard tableau situated to the south and the Chamber of Contemplation to the north, bordered by black granite walls replete with quotes and names of honored airmen demonstrating the innate values considered inherently important to the Air Force, as well as a staging ground that acts as a “large-group, ceremonial space” (Kennett 2018). The intended purpose of the AFM, both from a monumental as well as a landscaping perspective, was meant to ensure that the memorial “...enshrines the past in permanent remembrance of the pioneers of flight who came before, and pays homage to those of the future” (Freed 2004).

The other aspects of the AFM, excluding the spired monument itself, were also originally intended to be included in the commemorative space. Landscaping features were carefully laid out in Freed's original vision; deciduous and evergreen trees were planned to align "mostly along the west of the complex" and were "carefully shaped to intensify the memorial experience" (Freed 2004). The intended landscaping was also included in architectural construction plans, which consisted of grading and planting new trees, as well as removing some preexisting trees. These efforts seemed limited to the periphery of the memorial space, extending to the west side of Air Force Memorial Drive, on the west side of the monument, and extending to the west side of the "existing sidewalk to be removed," on the east side of the monument. It does not appear from the architectural plans that landscaping and grading efforts extended to the west side of Columbia Pike, which is included in the proposed limits of the new interment area for the southern expansion of the Arlington National Cemetery (Pei Cobb Freed & Partners 2004:L-001, L-100). The landscape architecture elements were provided by David Rubin, who was the Principal-in-Charge for the OLIN Studio of Philadelphia, Pennsylvania, and incorporated into Freed's original design plan dated December 2004 (Pei Cobb Freed & Partners:L-001, L-100; David Rubin Land Collective 2018). The contributions of Rubin and the other subcontractors are detailed below in the ***Auxiliary Elements and Landscape*** section.

Freed further described the initial elements of landscape architecture in its implementation to the AFM in an interview that took place in 1997: "Landscape architecture was always thought of as part of what we were making. There were trees and so on, but as I think back on it, it was never a discipline on its own. I don't think that it was ever an aesthetic that you chose. You tried to make space with trees. It was a very British thing. I found myself doing it the other day. I'm doing a new United States Air Force Memorial in Arlington, Virginia, right across from the Lincoln Memorial. And what I did there was to create little groves of space..." (Blum 2000:30). Most notably, trees enclose three sides the Chamber of Contemplation at the north end of the Parade Ground, obstructing views of Washington to the east and the access drive to the west (a translucent glass wall forms the southern enclosing element). In 2016, Air Force Secretary Deborah Lee James commented on the trees lining the periphery of the AFM, saying that: "These are trees that thrive in harsh conditions... these trees truly represent the resilience of our airmen and their families" (Sisk 2016). Her comments help to highlight the overall effect that the multiple elements of the AFM were aimed to portray to those visiting the monumental space.

The site of the AFM itself was also considered to be important as an interpretive and experiential tool. Freed, in his summary of the memorial's design, stated that: "Before the Memorial could take shape, the critical component, the site, had to be analyzed for its informational and formational impact" (Freed 2004). In the same summary, he also includes the "stepped stone plinth" running alongside of the Parade Ground as a reserved area for "special events as well as for the 'trooping of the colors.'" The Parade Ground was also revealed as an integral part of the commemorative design and effective implementation of the AFM, as David M. Childs, Chairman of the Commission of Fine Arts, expressed concerns "that the inclusion of the [Honor Guard] sculpture be carefully reconsidered, as it was perceived that the statues may create an awkward situation during ceremonies when an actual Honor Guard is present on the memorial's Parade Ground." Sculptor Zenos Frudakis cast the Honor Guard statuary as it now stands at the AFM. Frudakis viewed his own work as integral to the interpretation and experience of those visiting the memorial; he wrote that: "The figures came into view as unique people, with faces and bodies infused with life, inspiring connections to the real people who serve and sacrifice. They reflect the diversity of gender and race that strengthens the Air Force and Nation. Through this sculpture, visitors to the Memorial encounter the iconic notion of the Honor Guard. They become aware of the presence of those who have and continue to protect the dignity of service to the country" (Frudakis 2006).

The expansive view offered from the eastern edge of the Parade Ground and the Promontory is an important aspect of the commemorative experience at the AFM. Correspondence from April 2004 between Childs and Edward F. Grillo, Jr., the President of the Air Force Memorial Foundation, indicates that the viewshed of "unobstructed views of the city" was considered important to the overall effect of visitors to the site. Freed designed the Hall of Remembrance in

---



the Holocaust Memorial Museum to allow carefully directed partial glimpses of Washington – narrow openings on the side walls provide partial views of the Washington Monument and the Jefferson Memorial. The viewshed is much more expansive in the AFM, eliciting a much more explicit connection between the commemorative space and the city.

The memorial has become a multi-purpose monumental and commemorative space since its dedication on October 14, 2006: “In just 10 years it has become the Air Force’s ceremonial stage, hosting promotions and retirements, historic commemorations, band concerts, and drill team performances. It is the scene of speeches, parades, and Honor Flight visits. Couples get engaged there. Spouses and children visit to remember departed loved ones. Airmen – currently serving, retired, and even those who served in USAF’s predecessor organizations – come for inspiration ... So far in 2016, wreath-laying ceremonies have commemorated Memorial Day, the Civil Air Patrol, National POW/MIA Recognition Day, the 20th anniversary of the Khobar Towers bombing, and other events and significant dates” (Grier 2016:20, 25). The site had seen more than 1.7 million visitors by October 2016 (Grier 2016:29). The AFM receives an approximate average of 250,000 annual visitors and is the site of over 250 events every year (AFA 2006; Cacatian n.d.).

As such, active duty members of the Air Force as well as veterans of the same organization consider the memorial to be a physical embodiment of their own values. Freed recognized the issues inherent in presenting a physical manifestation of the Air Force’s purview: the air itself. Freed stated that: “The Air Force Memorial is rooted in the necessary symbolic transition of making the medium of the Air Force visible. The Navy has the medium of water, which can be shown in fountains. The Army has the medium of land, which can be referenced with mountains and plains. The Air Force has the medium of air, which is much more difficult to illustrate than water or land” (Freed 2004). Freed’s artistic implementation of “the medium of the air” was “enthusiastically and unanimously approved” in a 2003 correspondence between Harry G. Robinson III, Chairman of the FAIA (Fellowship of the American Institute of the Architects), to Edward F. Grillo, Jr. Service members also consider Freed’s design to be germane to the values of the Air Force; in 2006, Air Force Chief of Staff, General David Goldfein, encapsulated the difficulty of representing the medium of air: “A soldier can walk the battlefields where he once fought; a Marine can walk the beaches he once stormed. But an airman can never visit the patch of sky he raced across on a mission to defend freedom, and so it’s fitting that from this day forward airmen will have this memorial” (Sisk 2016). Goldfein also assessed the practicability and relevance of the memorial’s location in asserting that: “Standing watch is what we do... So, how appropriate that this powerful, moving memorial stand watch over our fallen at Arlington Cemetery” (Sisk 2016). The inculcation of a physical manifestation of the air as a representative medium in the central monument, which ensures that “...your eyes are drawn to the sky,” also serves as a synthetic connection between the ground and the air or the physical and the abstract, highlighting the continuity of visitors to the site with those that they are commemorating and remembering (Gomez 2006). Architecturally, the AFM has also received an array of awards, illustrated in **Table 2**.

Table 4: Architectural awards granted to the AFM (Pei Cobb Freed & Partners 2018)

Date	Award	Granting Organization
2006	Gill Robb Wilson Award	Air Force Association
2007	Award of Excellence	American Concrete Institute
2007	Certificate of Merit for Excellence in Construction	Associated Builders and Contractors: Metropolitan Washington and Virginia Chapters
2008	International Illumination Design Awards: The Paul Westbury Award for Outdoor Lighting Design: Award of Distinction	Illuminating Engineering Society of North America

2008	Lumen Award: Award of Merit	Illuminating Engineering Society of North America: New York City Section
------	-----------------------------	--

The AFM is “...the last military service monument to be erected in the National Capital Region and is the last design project of American architect James Ingo Freed” (Air Force District of Washington 2018). Although none of Freed’s works appear on the National Register of Historic Places or as National Historic Landmarks, Freed was part of an important revolution in architectural style in Chicago and was the recipient of multiple nationally-recognized awards (Pei Cobb Freed and Partners 2018). The memorial reflects the minimalist, pluralistic style that he helped to create in Chicago in the 1970s. Elements of the memorial do not convey specific meanings, but rather visceral feelings. The Frudakis Honor Guard sculpture conveys individualism that was prominent in the works of the Chicago Seven. The memorial is also considered to be unique in its wind-dampening technique: a series of 13 total steel boxes is situated within the spires; this “unique energy-dampening system... promises to keep the monument’s swaying within tolerable limits well into the 22nd century” (Weiss 2006). The intended use of space encompasses not only the central monument itself, but also the surrounding structural, sculptural, and landscaping elements considered integral to the interpretation of the site. Freed’s involvement in the creation of the AFM site lends an air of experiential involvement expected of visitors to the memorial as a direct result of the combined total elements of the memorial space. Views of the AFM itself from the southern area of Arlington National Cemetery are contributing elements to National Register eligibility of the cemetery, demonstrating the symbolic importance of the memorial in the surrounding landscape (**Photographic Plate 20**; Smith et al. 2013:206). Despite the earlier controversy between branches over the original site of the AFM, its current placement overlooking the Arlington Cemetery has come to symbolize an integration of common values in the memorialization of fallen service members.

## Auxiliary Elements and Landscape

An examination of the auxiliary elements of the AFM space is integral in understanding the holistic effect that its designers intended for visitors experiencing this commemorative space. These elements include Air Force Memorial Drive, its adjacent parking allotment, the guard house situated at the AFM entrance, the administrative/service building situated at the northeast corner of the memorial space, and the elements of landscape architecture across the site. Also included are the various subcontractors that collectively realized the design of the entire space occupied by the AFM.

The Centex Construction Company was selected as the general contractor for “pre-construction services” in September 2003 and contracted to oversee the development of the AFM in June 2004 (Air Force Memorial 2018). The Centex Construction Company, headquartered in Fairfax, Virginia, was a division of the Centex Corporation of Dallas, Texas at the time of the AFM construction (Air Force Memorial Foundation 2006:3; Business Wire 2004; Bisnow 2007). The Mid-Atlantic division of Centex oversaw the construction of the AFM, including the “work to prepare the site, construct the formal processional, parade ground and Chamber of Contemplation and build, assemble and erect the spires and the inscription walls,” as well as the excavation of Air Force Memorial Drive (Grier 2016:22; Air Force District of Washington 2018; **Photographic Plate 17**).

Centex subcontracted Mariani Metal Fabricators, located in Toronto, to fabricate the stainless-steel spires that would become the centerpiece of the AFM, and the Cianbro Corporation of Baltimore, Maryland to erect the spires (Air Force Memorial Foundation 2018; Mariani Metal Fabricators Limited 2018; Air Force Memorial Foundation 2006:3). Ove Arup & Partners’ Advanced Technology Group designed the “ball-in-box” damping mechanism placed within the spires which allows them to sway (Air Force Memorial Foundation 2006:2-3; Arup 2018). The Cianbro Corporation was recognized in 2006 with a craftsmanship award from the Washington Building Congress for cast-in-place concrete work (Washington Building Congress 2018; Cianbro Corporation 2018). Global construction supergiant Balfour Beatty would go on to purchase the Centex Construction Company on April 1, 2007 (Bisnow 2007).

Like other components of the AFM's construction, the landscape around the monument was subcontracted to the Olin Partnership (Hanna/Olin, Olin Partnership, OLIN, 1990-2012) under Partner David Rubin, who has since gone on to form his own landscape architecture and urban design firm in 2012 (OLIN Studio 2017; DAVID RUBIN Land Collective 2018). OLIN's modern mission statement centers around the development of "aesthetically pleasing" landscapes within urban settings that "have potential to be catalysts for human interaction, recreation and community" (OLIN Studio 2017). Rubin had worked with James Ingo Freed before on the Science and Engineering Quad at Stanford University in Palo Alto, California.

Rubin worked closely in collaboration with Freed of PCF&P as landscape architect for the memorial. Rubin's portfolio provides credit for the "competition-winning design by Jim Freed of Pei Cobb Freed & Partners" of the AFM and goes on to discuss the landscape architecture in particular as "a sequence that heightens the experience of the Memorial" (David Rubin Land Collective 2018). In a phone interview with EAC/A on November 21, 2018, Rubin stated that he began with Freed's design as a starting point and found ways to modulate the topography and arrange horticultural elements to communicate Freed's intent.

Rubin intended for his design to enhance the emotional experience through procession – from the parking lot toward the parade grounds, and eventually to the spire overlooking Washington's Monumental Core. The composition of elements in the landscape assisted in framing the visual and auditory experience at the memorial. The concept for the landscape surrounding the AFM "arises from ancient temple structures, increasing emotion as one passes from court to sanctuary" and that different areas of the memorial space "are defined by changes in tree species: oak, London plane, maple, Liriodendron" (DAVID RUBIN Land Collective 2018). As visitors approach the "inner sanctum" of the designed memorial experience, they are greeted by tulip poplars, "the straightest trunks in nature," which are intended to be reflective of the temple columns seen in sacred spaces. Rubin carried similar ideas over to his own studio, which is "driven by empathy" and "socially-purposeful design" focused on "urban design to bring people together in a positive dialogue" (DAVID RUBIN Land Collective 2018).

Rubin was also responsible for the design of the parking lot, which was necessary to make the memorial handicapped- and elderly-accessible. The strategic choice was made to carve the sloping land away, leaving a retaining wall to the west to keep all of these elements together and not disrupt the procession.

The guard house situated at the entrance to the monument was incorporated into the design at the behest of the U.S. Air Force in order to close off the entrance and provide privacy for events and to allow for security checks at all times. Air Force Memorial Drive, its attendant parking area, the guard house, and the administrative/service building all appear in the design plans from circa 2004 (and last revised in 2006). These plans include elevations and layout designs for the guard house as well as Air Force Memorial Drive and a reserved space for 18 parking spots along the west side of the thoroughfare, in addition to the administrative/service building (Pei Cobb Freed & Partners:A-302 – A-305; A-010.0 – A-12.0; A-311.0-A – A-320.0). While Wells and Associates, LLC is listed as a traffic consultant in the same plans, they do not include the Air Force Memorial in their current project portfolio (Wells and Associates 2017). Similarly, landscaping elements, including tree layout plans and planting plans of groundcover and shrubs also appear in the circa 2004 construction plans, suggesting an assimilation of the subcontracting work in general and landscape architecture in particular into Freed's overall design plan (Pei Cobb Freed & Partners 2004:L-001 – L-203). Furthermore, the deliberate selection and spacing of various tree species is present in both Rubin's studios approach to the experience of visitors to the AFM as well as the design implements included in the circa 2004 construction plans. These plans give the exact number, distribution, and spacing of tree by species.

## Evaluation

The AFM constitutes a historic property consisting of the entire three-acre parcel. Included within the property are buildings, structures and objects that are part of the designed memorial landscape. All of these components



constitute the original design created by architect James Freed and constructed in 2006. The components are all considered to be contributing to the significance of the historic property. The Memorial appears as built and therefore retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. It is significant under National Register of Historic Places Criterion C for its architectural expression, representing the work of a master and possessing high artistic values. It is singular, as the only U.S. Air Force Memorial. Having been designed and constructed so recently, the AFM also meets National Register Criteria Consideration G for properties less than 50 years old, which are of exceptional importance.

The AFM's exceptional significance stems from its evocative design which depicts flight, while also commemorating Air Force Medal of Honor recipients and the ideals of the Air Force. Most notable are the three soaring stainless-steel spires rising high above the landscape and visible from miles distant (**Photographic Plate 21 Photographic Plate 22**). The three spires capture the essence of the Air Force Thunderbird bomb blast maneuver in a very masterful way. The exceptional visual character of the memorial symbolizes the spirit of the United States Air Force and exhibits the high artistic values that architect James Freed articulated with this memorial. It was his last work. He died in December of 2005, shortly before the AFM was completed. The Memorial is considered one of his major works, along with the Jacob K. Javits Convention Center in New York City and the San Francisco Main Public Library. In Washington DC, his buildings include the Ronald Reagan Building and International Trade Center, and the United States Holocaust Memorial Museum.

Because the auxiliary structural, transportation, and landscaping elements are included in the original (circa 2004) design plans for the AFM commemorative space, these elements contribute to the significance of the historic property. While Criteria Consideration F designates a property that is "primarily commemorative in intent," the AFM is exceptionally significant, because of its outstanding artistic merit and because it is the only property that commemorates Air Force contributions and memorializes their sacrifices.

## References Cited

A. LaCroix Granit

2018 Air Force Memorial. Available at <http://www.lacroixgranite.com/en/portfolio-item/air-force/>. Accessed October 15, 2018.

Air Force Association

2006 United States Air Force Memorial: Your National Memorial. Available at [https://higherlogicdownload.s3.amazonaws.com/AFA/94c3226a-e59e-41c1-9d76-8f2bb8b49c94/UploadedImages/AFM%20Presentation for General Public June11.pdf](https://higherlogicdownload.s3.amazonaws.com/AFA/94c3226a-e59e-41c1-9d76-8f2bb8b49c94/UploadedImages/AFM%20Presentation%20for%20General%20Public%20June%2011.pdf). Accessed September 25, 2018.

Air Force District of Washington

2018 About the Air Force Memorial. Available at <https://www.afdw.af.mil/about/>. Accessed September 25, 2018.

2018 History of the Memorial. Available at <https://www.afdw.af.mil/history/>. Accessed November 6, 2018.

Air Force Memorial Foundation

2006 United States Air Force Memorial: Quick Facts. Available at [http://www.airforcemag.com/SiteCollectionDocuments/Reports/2006/October/Day24/mem\\_facts.pdf](http://www.airforcemag.com/SiteCollectionDocuments/Reports/2006/October/Day24/mem_facts.pdf). Accessed September 25, 2018.

2018 Chairman's Welcome. Available at <http://www.airforcememorial.org/about>. Accessed October 15, 2018.

2018 Chronology. Available at <http://www.airforcememorial.org/about/chronology>. Accessed November 6, 2018.

Andrus, Patrick W. and Rebecca H. Shrimpton

2002 "How to Apply the National Register Criteria for Evaluation." United States Department of the Interior, National Park Service. Available at <https://www.nps.gov/nr/publications/bulletins/nrb15/>. Accessed September 26, 2018.

Arup

2018 "United States Air Force Memorial, Arlington, Virginia." Available at <https://www.arup.com/projects/united-states-air-forcememorial?query=united%20states%20air%20force%20memorial>. Accessed November 6, 2018.

Bisnow

2007 "What's in a Name: Centex Construction becomes 'Balfour Beatty.'" April 12, 2007. Available at <https://www.bisnow.com/washington-dc/news/commercial-real-estate/WHATS-IN-A-NAME-CENTEXCONSTRUCTION-BECOMES-BALFOUR-BEATTY-13338>. Accessed November 6, 2018.

Blum, Betty J.

2000 "Oral History of James Ingo Freed." The Art Institute of Chicago, Department of Architecture, The Ernest R. Graham Study Center for Architectural Drawings, Chicago Architects Oral History Project. Available at <http://digital-libraries.saic.edu/cdm/ref/collection/caohp/id/3527>. Accessed September 25, 2018.

Business Wire

2004 "Marine Corps Heritage Foundation Awards Centex Construction Company Contract to Build National Museum of the Marine Corps." April 12, 2004. Available at <https://www.businesswire.com/news/home/20040412005530/en/Marine-Corps-Heritage-Foundation-AwardsCentex-Construction>. Accessed November 6, 2018.

Catacian, Courtney

n.d. "Air Force Memorial Honors Service and Sacrifice." *Arlington Convention and Visitors Service*. Available at <https://www.arlington.com/blog/air-force-memorial-honors-service-and-sacrifice/>. Accessed September 25, 2018.

Cianbro Corporation

2018 "United States Air Force Memorial." Available at <http://www.cianbro.com/ProjectsMarkets/ProjectDetails.aspx?pid=27>. Accessed November 6, 2018.

David Rubin Land Collective

2018 "Mission." Available at <https://land-collective.com/mission/>. Accessed November 6, 2018.

2018 "U.S. Air Force Memorial." Available at <https://land-collective.com/projects/u-s-air-force-memorial/>. Accessed November 6, 2018.

Dunlap, David W.

2005 "James Ingo Freed, 75, Dies; Designed Holocaust Museum." *New York Times*, December 17, 2005. Available at <https://www.nytimes.com/2005/12/17/arts/design/james-ingo-freed-75-dies-designed-holocaustmuseum.html>. Accessed September 25, 2018.

Freed, James Ingo

1990 "The United States Holocaust Memorial Museum: What Can It Be?" Washington, CD: U.S. Holocaust Memorial Council. Available at <https://babel.hathitrust.org/cgi/pt?id=uc1.31210024779058;view=1up;seq=1>. Accessed September 26, 2018.

2004 "Memorial Design." *Air Force District of Washington*, September 15, 2004. Available at <https://www.afdw.af.mil/heritage/>. Accessed September 25, 2018.

Frudakis, Zenos

2006 "Honor Guard Sculpture." *Air Force District of Washington*, June 2006. Available at <https://www.afdw.af.mil/heritage/>. Accessed September 25, 2018.

2015 "The Sculptural Process of Creating the U.S. Air Force Memorial Honor Guard." Frudakis Studio, Inc. Available at <http://www.zenosfrudakis.com/process/>. Accessed October 15, 2018.

Giovanni, Joseph

1993 "The Architecture of Death: To Design the U.S. Holocaust Museum, James Freed Had to Challenge the Values That Had Guided His work – and Confront Old Horrors." *Los Angeles Times*, April 18, 1993. Available at [http://articles.latimes.com/1993-04-18/magazine/tm-24163\\_1\\_holocaust-museum/4](http://articles.latimes.com/1993-04-18/magazine/tm-24163_1_holocaust-museum/4). Accessed September 26, 2018.

Google Earth Pro

2018 [2004-2014] 1 Air Force Memorial Drive, Arlington, VA, 22204. 38°52'08" N, 77°04'01" W. Google Earth. Accessed September 26, 2018.

Gomez, Alan

2006 "After 15 years, Air Force gets memorial over capital." *USA Today*, October 3, 2006. Available at [http://www.usatodayeducate.com/wp-content/uploads/AFA\\_Memorial.pdf](http://www.usatodayeducate.com/wp-content/uploads/AFA_Memorial.pdf). Accessed September 25, 2018.

Grier, Peter

2016 "These Magnificent Spires." *Air Force Magazine*, October 2016. Available at <http://www.airforcemag.com/MagazineArchive/Documents/2016/October%202016/1016afm.pdf>. Accessed September 25, 2018.

Hatlie, Mark R.

2006 "Air Force Memorial in Arlington, Virginia." *Sites of Memory*, June 20, 2006. Available at <http://sites-ofmemory.de/main/DCairforce.html>. Accessed October 15, 2018.

Isackson, Noah

1997 "Marines Object to Site of Air Force Memorial." *Chicago Tribune*, September 18, 1997. Available at <http://www.chicagotribune.com/news/ct-xpm-1997-09-18-9709180249-story.html>. Accessed September 26, 2018.

Kennett, Dena

2018 "The Landscape Architect's Guide to Washington, D.C.: The Ceremonial Runway." *American Society of Landscape Architects*. Available at <https://www.asla.org/guide/site.aspx?id=35731>. Accessed September 25, 2018.

Klotz, Heinrich

1985 *Postmodern visions: drawings, paintings, and models by postmodern architects*. New York: Abbeville Press.

Linton, Joseph

1988 "Architect Agonizes over Holocaust Memorial." *Deseret News* (October 16). Electronic Document. Available at <https://www.deseretnews.com/article/21517/ARCHITECT-AGONIZES-OVER-HOLOCAUST-MEMORIAL.html>. Accessed October 1, 2018.

Mariani Metal Fabricators Limited

2018 "02. United States Air Force Memorial Arlington, Virginia." Available at <http://www.marianimetal.com/model-2>. Accessed November 6, 2018.

New York Times

2005 "Obituary: James Ingo Freed, architect." *The New York Times*. December 19. Available at <https://www.nytimes.com/2005/12/19/world/americas/obituary-james-ingo-freed-architect.html>. Accessed October 1, 2018.

OLIN Studio

2018 "Who we are." Available at <https://www.theolinstudio.com/philosophy/>. Accessed November 6, 2018.

Pei Cobb Freed & Partners

2004 "Construction Documents." United States Air Force Memorial.

2018 James Ingo Freed, FAIA. Available at <https://www.pcf-p.com/about/james-ingo-freed/>. Accessed September 25, 2018.

Sisk, Richard

2016 "Air Force Marks 10<sup>th</sup> Anniversary of Once-Disputed Memorial." Available at <https://www.military.com/daily-news/2016/10/14/air-force-marks-10th-anniversary-once-disputedmemorial.html>. Accessed September 25, 2018.

Smith, Adam, Megan Tooker, and John Haynes

2018 *Arlington National Cemetery (Including Soldiers' and Airmen's Home National Cemetery) Integrated Cultural Resources Management Plan: 2013 to 2018*. Prepared for Arlington National Cemetery Cultural Resources Program.

United States Air Force

2006 "Memorial dedication to launch AF's 60<sup>th</sup> Anniversary observance." Available at <https://www.af.mil/News/Article-Display/Article/129438/memorial-dedication-to-launch-afs-60th-anniversaryobservance/>. Accessed October 15, 2018.



Waldhiem, Charles and Katerina Rüedi Ray

2005     *Chicago architecture: histories, revisions, alternatives*. Chicago: University of Chicago Press.

Washington Building Congress

2018 “2006 Craftsmanship Awards Winners.” Available at <http://www.wbcnet.org/craftsmanshipawards/current-and-past-winners/2006-craftsmanship-awards-winners/>. Accessed November 6, 2018.

Weiss, Rick

2006     “Air Force Memorial a Tribute to Flight and Engineering.” Washington Post, July 17, 2006. Available at <http://www.washingtonpost.com/wp-dyn/content/article/2006/07/16/AR2006071600622.html?noredirect=on>. Accessed September 25, 2018.

Wells and Associates, LLC

2017     “Projects.” Available at <http://www.wellsandassociates.com/projects>. Accessed November 6, 2018.

## Attachment 1: Photographic Plates



Photographic Plate 1: "Runway to Glory" leading to focal point of memorial (AFA 2006)



Photographic Plate 2: Parade Ground, looking north towards the “Chamber of Contemplation” and Missing Man glass wall (Kennett 2018)



Photographic Plate 3: Parade Ground, looking south towards the bronze Honor Guard sculpture (Kennett 2018)





Photographic Plate 4: AFM entrance sign with spires in background (USAF 2006)





Photographic Plate 5: USAF Star insignia beneath spires, with dedication stone in center (AFA 2006)



Photographic Plate 6: Close-up of dedication stone located beneath spires (AFA 2006)





Photographic Plate 7: Asymmetrical stainless steel and concrete spires comprise the centerpiece of the AFM (Pei Cobb Freed & Partners 2018)



Photographic Plate 8: North granite inscription wall with Missing Man glass wall in foreground (AFA 2006)



Photographic Plate 9: South granite inscription wall (A. LaCroix Granit 2018)



Photographic Plate 10: Close-up of Missing Man glass wall in the “Chamber of Contemplation” at the north end of the parade ground (AFA 2006)





Photographic Plate 11: Honor Guard sculpture by Zenos Frudakis, situated at the south end of the parade ground (Frudakis 2015)



Photographic Plate 12: Granite seating area running along west length of the Parade Ground (AFA 2006)

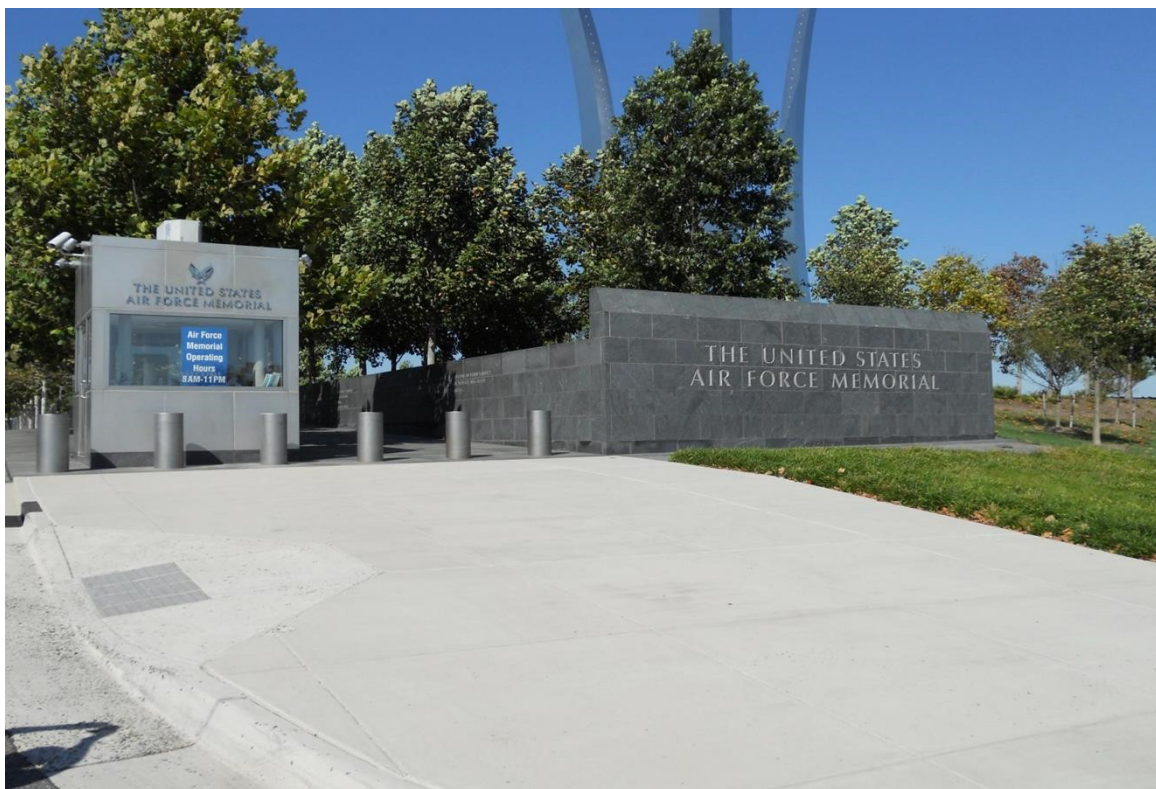


Photographic Plate 13: Administrative/service building (AFA 2006)

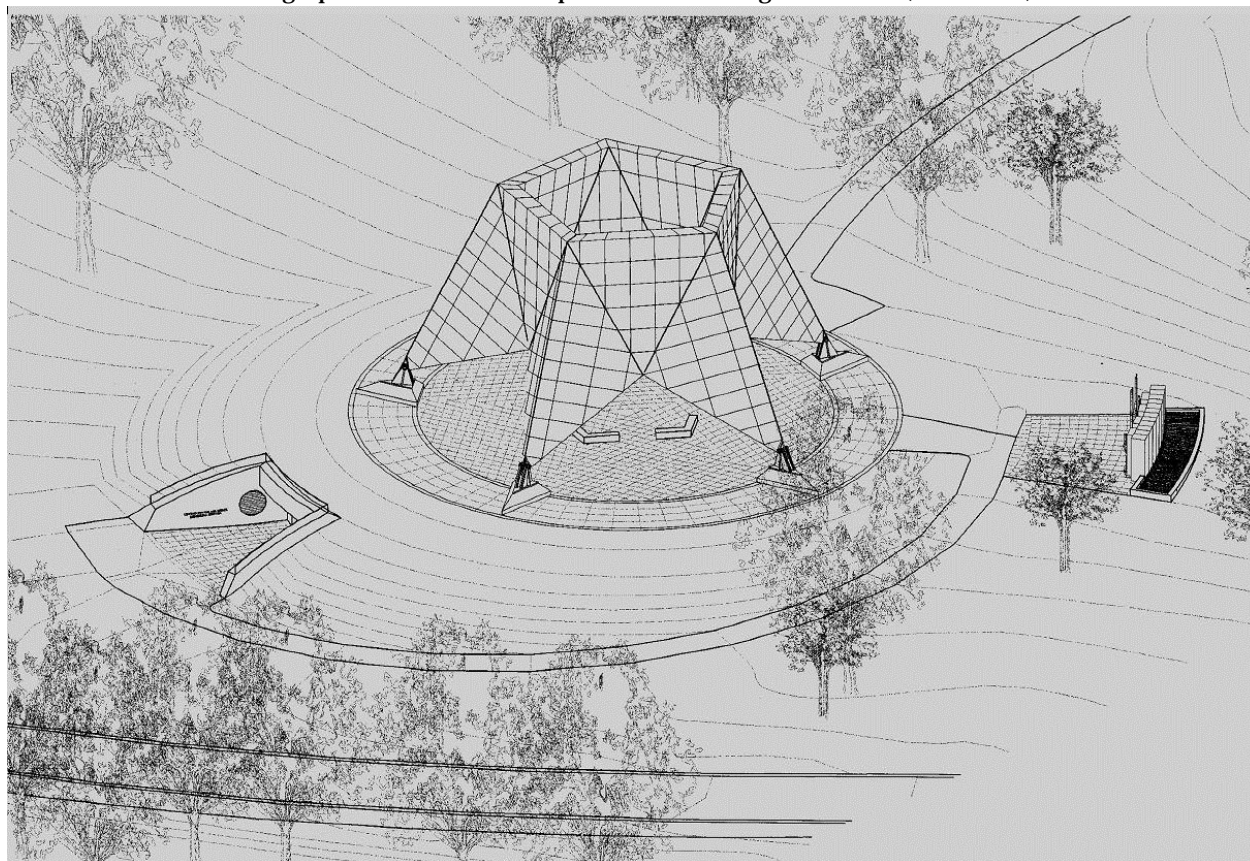


Photographic Plate 14: Entrance to AFM, with guard house in lower right (AFA 2006)





Photographic Plate 15: Close-up of entrance and guard house (AFA 2006)





Photographic Plate 16: Original design for the AFM proposed by Pei Cobb Freed & Partners in 1996 (AFA 2006)



Photographic Plate 17: Construction in progress for the AFM in November 2005 (Grier 2016:22)





Photographic Plate 18: AFM under construction in June 2006 (Hatlie 2006)



Photographic Plate 19: Spires close to completion in 2006 (Grier 2016:23)







Photographic Plate 20: View of AFM from Arlington National Cemetery



Photographic Plate 21: Aerial view of the AFM before demolition of the remainder of the Navy Annex complex, circa 2006 (AFA 2006)



Photographic Plate 22: View of AFM from Pentagon

## Attachment 2: V-CRIS Data Fields

## Property Information

### Property Names

Name Explanation	Name
Current Name	Air Force Memorial
Function/Location	Monument, 1 Air Force Memorial Drive

### Property Addresses

Current - 1 Air Force Memorial Drive

**County/Independent City(s):** Arlington (County)

**Incorporated Town(s):** Arlington

**Zip Code(s):** 22204

**Magisterial District(s):** *No Data*

**Tax Parcel(s):** 34014001

**USGS Quad(s):** ALEXANDRIA

### Property Evaluation Status

Not Evaluated

This Property is associated with the Air Force Memorial.

## Additional Property Information



**Architecture Setting:** Urban**Acreage:** 3**Site Description:**

October 2018: The Air Force Memorial is located on a three-acre site formerly occupied by the Navy Annex, in Arlington County, Virginia, with the street address of 1 Air Force Memorial Drive, Arlington, VA 22204. The memorial is situated on an open landscape, bordered by Southgate Road on the north and Columbia Pike (VA Route 244) on the east and south. The Foxcroft Heights residential neighborhood lies to the west. The memorial is situated adjacent to and just south of Arlington National Cemetery. It is on high ground, at the summit of a hill, overlooking the Pentagon, Potomac River, and Washington, DC.

The memorial consists of several elements, including an entrance driveway, Air Force Memorial Drive, which enters from Columbia Pike and culminates with a landscaped circle at its north terminus. Visitor parking is available along the drive. Granite walkways lead from the Air Force Memorial Drive diagonally to meet and make an apex at the base of a triangular projection which contains the focal point of the memorial. While the triangle points to the east, parallel walkways and a parade ground run north-south, terminating with a memorial wall at each end.

The landmark feature of the memorial is the cluster of three towering, curved stainless steel and concrete spires set on a triangular promontory that overlooks the city of Washington. The triangular base for the spires points to the east. Passing to the west of it are granite walkways that run north-south. At the north end of the walks is an inscription wall, matched by a similar wall at the south terminus of the walkways. Just south of the north inscription wall is a free standing clear glass "contemplation wall." Just north of the south inscription wall stands an eight-foot tall bronze sculpture depicting an Air Force Honor Guard. In addition to these elements there is a discretely placed administration building, located behind the north memorial wall. A low, flat-roofed building, it is barely visible from the main memorial viewing area but contains offices and restrooms.

At the entrance to Air Force Memorial Drive is a small gate keeper's guard house. Other features include stainless steel bollards as security devices. The grounds are landscaped with a combination of deciduous and evergreen trees, part of the original design of the memorial. Most of the trees are concentrated on the western side of the memorial.

**Surveyor Assessment:**

October 2018: The Air Force Memorial (AFM) constitutes a historic property consisting of the entire three-acre parcel. Included within the property are buildings, structures and objects that are part of the designed memorial landscape. All of these components constitute the original design created by architect James Freed and constructed in 2006. The components are all considered to be contributing to the significance of the historic property. The Memorial appears as built and therefore retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. It is significant under National Register of Historic Places Criterion C for its architectural expression, representing the work of a master and possessing high artistic values. It is singular, as the only U.S. Air Force Memorial. Having been designed and constructed so recently, the AFM also meets National Register Criteria Consideration G for properties less than 50 years old, which are of exceptional importance.

The AFM's exceptional significance stems from its evocative design which depicts flight, while also commemorating Air Force Medal of Honor recipients and the ideals of the Air Force. Most notable are the three soaring stainless-steel spires rising high above the landscape and visible from miles distant. The three spires capture the essence of the Air Force Thunderbird bomb blast maneuver in a very masterful way. The exceptional visual character of the memorial symbolizes the spirit of the United States Air Force and exhibits the high artistic values that architect James Freed articulated with this memorial. It was his last work. He died in December of 2005, shortly before the AFM was completed. The Memorial is considered one of his major works, along with the Jacob K. Javits Convention Center in New York City and the San Francisco Main Public Library. In Washington DC, his buildings include the Ronald Reagan Building and International Trade Center, and the United States Holocaust Memorial Museum.

Because the auxiliary structural, transportation, and landscaping elements are included in the original (circa 2004) design plans for the AFM commemorative space, these elements contribute to the significance of the historic property. While Criteria Consideration F designates a property that is "primarily commemorative in intent," the AFM is exceptionally significant, because of its outstanding artistic merit and because it is the only property that commemorates Air Force contributions and memorializes their sacrifices.

**Surveyor Recommendation:** Recommended Eligible**Ownership****Ownership Category**

Federal Govt

**Ownership Entity**

Air Force

## Primary Resource Information

<b>Resource Category:</b>	Social/Recreational
<b>Resource Type:</b>	Monument/Marker
<b>Date of Construction:</b>	2006
<b>Historic Time Period:</b>	Post Cold War (1992 - Present)
<b>Historic Context(s):</b>	Military/Defense
<b>Architectural Style:</b>	Post Modern
<b>Form:</b>	<i>No Data</i>
<b>Number of Stories:</b>	<i>No Data</i>
<b>Condition:</b>	Excellent
<b>Interior Plan:</b>	<i>No Data</i>
<b>Threats to Resource:</b>	None Known

## Architectural Description:

October 2018: The Air Force Memorial (AFM) serves as a commemoration to active-duty service members in the United States Air Force (USAF) and to the approximately 54,000 airmen killed in combat in service to the USAF and its predecessor organizations. The memorial was initially intended as a multi-component commemorative site and, as a result, actively incorporates other sculptural and design elements that are equally important to the use and implementation of the total site as an inclusive monumental and interpretive space.

The Air Force Memorial Foundation was first granted a 501(c)(3) nonprofit status in August 1992 and began surveying applicable sites for the memorial early in 1994. The Foundation chose the Arlington Ridge site in September 1994; three years later, in 1997, a bill was introduced to forestall the placement of any commemorative monument within sight of the Marine Corps' Iwo Jima monument at Arlington Ridge. Architectural firm Pei Cobb Freed & Partners presented the first design for the AFM in 1996. Concerns that the AFM would disrupt the viewshed of downtown Washington from the Iwo Jima Memorial prompted a drawn-out, litigious process that eventually denied the Air Force Memorial Foundation the desired location at Arlington Ridge. The current location of the AFM at the former site of the Navy Annex/Federal Office Building 2 (FOB 2) was first proposed in 1998 and accepted in late 2001. Pei Cobb Freed & Partners were accepted again in 2002 to design the AFM at the new site. The easternmost wing associated with the Navy Annex/FOB 2, Wing 8, was demolished between August 2004 and April 2005. The formal groundbreaking for the AFM took place on September 15, 2004. The memorial space was completed over the course of the following two years. Dedicated on October 14, 2006, the AFM represents the culmination of a controversial struggle between the Air Force and other branches of the United States military to provide and preserve the organization's own memorialized space. Until its dedication, the Air Force was the only branch in the United States armed services without any memorial in the Washington area commemorating its service to the country.

Renowned architect James Ingo Freed conceived the primary design of the memorial's structure and space. Freed is closely associated with the first-generation postmodern group of architects known as the Chicago Seven, a group formed in the 1970s in response to what they perceived to be an over-emphasis on modern industrial materials, minimal framework, and straightforward, functional design. Freed did much of his earliest work in New York, but by the 1990s, he had buildings in Minneapolis, Washington, San Francisco, Stanford, and Los Angeles. The AFM was Freed's last design before he passed away from Parkinson's Disease, and it was still under construction at the time of his death in 2005. It was also his only work in Virginia, and the only discrete memorial that he designed.

The Centex Construction Company was selected as the general contractor for construction services for the monument. The Mid-Atlantic division of Centex oversaw the construction of the AFM, including the work to prepare the site, the construction of the Parade Ground and the Chamber of Contemplation, the construction, assembly, and erection the spires and inscription walls, and the excavation of Air Force Memorial Drive.

The memorial consists of several elements, including an entrance driveway, Air Force Memorial Drive, which enters from Columbia Pike and culminates with a landscaped circle at its north terminus. Visitor parking is available along the drive. Granite walkways lead from the Air Force Memorial Drive diagonally to meet and make an apex at the base of a triangular projection which contains the focal point of the memorial. While the triangle points to the east, parallel walkways and a parade ground run north-south, terminating with a memorial wall at each end. The system of parallel and intersecting diagonal walkways looks from above like airport runways.

The central feature of the memorial is the cluster of three towering, curved stainless steel and concrete spires set on a triangular promontory that overlooks the city of Washington. Each spire is set into an angle of the triangle and arches outward from the base. In the center of the triangle is the Air Force Star insignia embedded into the granite slab floor. Each spire is constructed of three-fourths-inch plate stainless steel over a reinforced concrete core. The spires are asymmetrical, each a different height, 201, 231, and 270 feet tall. The curving spires evoke the image of contrails left when the precision United States Air Force Thunderbird Demonstration Team performs the "bomb burst" maneuver. In addition, the spires represent the three core values of the Air Force - integrity first, service before self, and excellence in all that is done. They also suggest the Air Force's Total Force—active, guard, and reserve. The spires are considered to be unique in the incorporation of a wind-dampening technique: a series of 13 total steel boxes is situated within the spires to keep the monument's swaying within tolerable limits.

Centex subcontracted Mariani Metal Fabricators, located in Toronto, to fabricate the stainless-steel spires, and the Cianbro Corporation of Baltimore, Maryland to erect the spires. Ove Arup & Partners designed the "ball-in-box" damping mechanism placed within the spires. The Cianbro Corporation was recognized in 2006 with a craftsmanship award from the Washington Building Congress for cast-in-place concrete work.

The triangular base for the spires points to the east. The expansive view offered from the eastern edge of the Promontory is an important aspect of the commemorative experience at the AFM. The unobstructed view of the nation's capital was considered important to the overall effect of visitors to the site.

Passing to the west of the Promontory are granite walkways that run north-south. This Parade Ground is an integral part of the commemorative design and effective implementation of the AFM. The functionality and immersive utilization of space at the AFM is evident in the design of the Parade Ground, which serves as both a commemorative avenue, with focal points on its northern and southern ends, bordered by black granite walls replete with quotes and names of honored airmen demonstrating the innate values considered inherently important to the Air Force, as well as a staging ground.

At the north end of the walks is an inscription wall, matched by a similar wall at the south terminus of the walkways. Each of these inscription walls is 56 feet long, ten feet high, and one foot thick, constructed of polished black and jet mist granite. The north wall records the names of Air Force recipients of the Medal of Honor. Just south of the north inscription wall is a free standing clear glass "contemplation wall" made of five layers of glass that have been laminated. The wall is nine feet wide and ten feet tall and is engraved with an image of the missing man F-16 fighter jet formation.

At the opposite end of the memorial, the south inscription wall lists inspirational quotations regarding the Air Force core values. Just north of the wall stands an eight-foot tall bronze sculpture, the work of sculptor Zenos Frudakis. The sculpture depicts an Air Force Honor Guard, with four freestanding figures that also represent the diversity of the people who are the United States Air Force.

## Secondary Resource Information

### Secondary Resource #1

**Resource Category:** *No Data*  
**Resource Type:** *No Data*  
**Architectural Style:** *No Data*  
**Form:** *No Data*  
**Date of Construction:** *No Data*  
**Condition:** *No Data*  
**Threats to Resource:** *No Data*  
**Architectural Description:**

*No Data*

## Historic District Information

Landscaping features were carefully laid out in Freed's original vision; deciduous and evergreen trees were planned to align along the west side of the complex to intensify the memorial experience. The intended landscaping was included in architectural construction plans, which consisted of grading and planting new trees, as well as removing some preexisting trees. Most notably, trees enclose three sides the Chamber of Contemplation at the north end of the Parade Ground, obstructing views of Washington to the east and the access drive to the west (a translucent glass wall forms the southern enclosing element). The landscape architecture elements were provided by David Rubin, who was the Principal-inCharge for the OLIN Studio of Philadelphia, Pennsylvania, and incorporated into Freed's original design plan dated December 2004.

Rubin intended for his design to enhance the emotional experience through procession – from the parking lot toward the parade grounds, and eventually to the spire overlooking Washington's Monumental Core. The composition of elements in the landscape assisted in framing the visual and auditory experience at the memorial. As visitors approach the inner sanctum of the designed memorial experience, they are greeted by tulip poplars, the straightest trunks in nature, which are intended to be reflective of the temple columns seen in sacred spaces. The deliberate selection and spacing of various tree species is present in both Rubin's studious approach to the experience of visitors to the AFM as well as the design implements included in the circa 2004 construction plans. These plans give the exact number, distribution, and spacing of tree by species.

David Rubin was also responsible for the design of the parking lot, which was necessary to make the memorial handicapped- and elderly-accessible. The strategic choice was made to carve the sloping land away, leaving a retaining wall to the west to keep all of these elements together and not disrupt the procession.

At the entrance to Air Force Memorial Drive is a small gate keeper's guard house. Other features include stainless steel bollards as security devices. The guard house situated at the entrance to the monument was incorporated into the design at the behest of the U.S. Air Force in order to close off the entrance and provide privacy for events and to allow for security checks at all times. Air Force Memorial Drive, its attendant parking area, the guard house, and the administrative/service building all appear in the design plans from circa 2004 (and last revised in 2006). These plans include elevations and layout designs for the guard house as well as Air Force Memorial Drive and a reserved space for 18 parking spots along the west side of the thoroughfare, in addition to the administrative/service building. Wells and Associates, LLC is listed as a traffic consultant in the same plans.

The AFM has received an array of architectural awards, including the Gill Rob Wilson Award from the Air Force Association in 2006, the Award of Excellence from the American Concrete Institute in 2007, the Certificate of Merit for Excellence in Construction from the Associated Builders and Contractors: Metropolitan Washington and Virginia Chapters in 2007, and the Lumen Award of Merit by the Illuminating Engineering Society of North America in 2008.

**Historic District Name:** Air Force Memorial

**Local Historic District Name:** *No Data*

**Historic District Significance:** The Air Force Memorial (AFM) constitutes a small historic district consisting of the entire three-acre property. Included within the property are buildings, structures and objects that are part of the designed memorial landscape. All of these components constitute the original design created by architect James Freed and constructed in 2006. The components are all considered to be contributing to the significance of the historic district. The Memorial appears as built and therefore retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. It is significant under National Register of Historic Places Criterion C for its architectural expression, representing the work of a master and possessing high artistic values. It is singular, as the only U.S. Air Force Memorial. Having been designed and constructed so recently, the AFM also meets National Register Criteria Consideration G for properties less than 50 years old, which are of exceptional importance.

The AFM's exceptional significance stems from its evocative design which depicts flight, while also commemorating Air Force Medal of Honor recipients and the ideals of the Air Force. Most notable are the three soaring stainless-steel spires rising high above the landscape and are visible from miles distant. The three spires capture the essence of the Air Force Thunderbird bomb blast maneuver in a very masterful way. The exceptional visual character of the memorial symbolizes the spirit of the United States Air Force and exhibits the high artistic values that architect James Freed articulated with this memorial. It was his last work. He died in December of 2005, shortly before the AFM was completed. The Memorial is considered one of his major works, along with the Jacob K. Javits Convention Center in New York City and the San Francisco Main Public Library. In Washington D.C., his buildings include the Ronald Reagan Building and International Trade Center, and the United States Holocaust Memorial Museum.

## CRM Events

---

---

**Event Type: Survey:Phase I/Reconnaissance**

**Project Review File Number:** *No Data*  
**Investigator:** Robert Wanner  
**Organization/Company:** EAC/Archaeology  
**Sponsoring Organization:** *No Data*  
**Survey Date:** 10/15/2018  
**Dhr Library Report Number:** *No Data*  
**Project Staff/Notes:**  
Paula Reed

---

**Bibliographic Information**

**Bibliography:**  
*No Data*  
**Property Notes:**  
*No Data*  
**Project Bibliographic Information:**  
*No Data*





Virginia Dept. of Historic Resources



Virginia Cultural Resource Information System

**Legend**

- ☒ Architecture Resources
- Architecture Labels
- ☒ Individual Historic District Properties
- ☒ Archaeological Resources
- Archaeology Labels
- ☒ DHR Easements
- ☐ USGS GIS Place names
- ☐ County Boundaries





Feet

0 50 100 150 200

1:2,500 / 1"=208 Feet

## Title: Architecture Labels

Date: 1/2/2019

*DISCLAIMER: Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions. The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.*

*Notice if AE sites: Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.*



AIR FORCE MEMORIAL ORIENTATION AERIAL PHOTOGRAPH

VISITOR  
PARKING

ADMINISTRATIVE/SERVICE BUILDING

NORTH INSCRIPTION WALL

CLEAR GLASS "CONTEMPLATION WALL"

PARADE GROUND

THREE SPIRES AND AIR FORCE STAR INSIGNIA

AIR FORCE HONOR GUARD BRONZE SCULPTURE

SOUTH INSCRIPTION WALL

ENTRANCE DRIVEWAY

SMALL GATE KEEPER'S GUARD HOUSE

COLUMBIA PIKE

