

UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

ATOMIC DELIVERYMAN ON DISPLAY: THE *ENOLA GAY* AT THE NATIONAL  
AIR AND SPACE MUSEUM'S STEVEN F. UDVAR-HAZY CENTER

A THESIS

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

MASTER OF ARTS IN HISTORY OF SCIENCE, TECHNOLOGY AND MEDICINE

By

EMILY A. MARGOLIS

Norman, Oklahoma

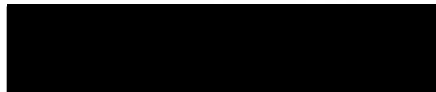
2013

00  
THESIS  
MAR  
cop. 2

ATOMIC DELIVERYMAN ON DISPLAY: THE *ENOLA GAY* AT THE NATIONAL  
AIR AND SPACE MUSEUM'S STEVEN F. UDVAR-HAZY CENTER

A THESIS APPROVED FOR THE  
DEPARTMENT OF HISTORY OF SCIENCE

BY



Dr. Katherine Pandora, Chair



Dr. Hunter Heyck



Dr. Peter Soppelsa



## Acknowledgements

This work would not have been possible without the intellectual and emotional support of the wonderful people in my life. I am grateful to Dr. Katherine Pandora for helping me develop my ideas and for encouraging me to infuse my historical scholarship with creativity. I thank Drs. Hunter Heyck and Pete Soppelsa for sharing their comments and suggestions with me in a useful and constructive manner. I extend my gratitude to Drs. Mike Neufeld and Tom Crouch of the National Air and Space Museum, who generously shared their time and experiences with me. I also thank Dr. F. Robert Van der Linden and the Visitor Services staff, also of the National Air and Space Museum, for providing access to primary source material. I acknowledge the generous financial support of the Department of the History of Science and the Graduate Student Senate at the University of Oklahoma, which enabled me to acquire invaluable information at the National Air and Space Museum and the Smithsonian Institution Archives in Washington, D.C.

I am especially grateful to my friends and family, whose love, laughter, and support sustained me throughout the challenging research and writing processes. Thanks to Margaret Gaida and John Stewart for their company and encouragement on our frequent visits to Crimson and Whipped Cream. I thank Carolyn Scarce, whose messages of support and empathy always arrived when I needed them most. I also thank Kimberly Minor and Leila McNeill for graciously listening to my complaints and concerns over home cooked meals. I am grateful to Chris Holst, for celebrating my smallest triumphs and reassuring me during moments of self-

doubt. Thanks to my parents, Suzanne and Louis Margolis, for their unabashed parental enthusiasm and to my sisters, Rachel, Miriam, and Sarah for sharing entertaining diversions. Finally, I recognize Winnie for her welcome company during many late nights at the computer, and for our shared catnaps in the days thereafter.

## Table of Contents

Chapter 1: Introduction: Intersecting Stories.....	1
Chapter 2: A Challenging Decade: The 1990s at the National Air and Space Museum.....	5
Chapter 3: The Dulles Extension and the Institutional Legacy of “The Last Act”.....	21
Chapter 4: Space, Interpretation, and the <i>Enola Gay</i> at the Udvar-Hazy Center.....	38
Chapter 5: Recovering Visitors’ Voices.....	55
Chapter 6: Moving Forward.....	68
Bibliography.....	78

## List of Figures

Figure 4.1: Aerial view of the Udvar-Hazy Center.....	39
Figure 4.2: Schematic of the arrangement of artifacts at the Udvar-Hazy Center...39	
Figure 4.3: Label accompanying the <i>Enola Gay</i> .....	43
Figure 4.4: The <i>Enola Gay</i> as viewed from the ground floor of the museum entrance.....	47
Figure 4.5: The <i>Enola Gay</i> on jacks.....	49
Figure 4.6: Japanese aircraft under the shadow of the <i>Enola Gay</i> 's wing.....	50
Figure 4.7: <i>Blackbird-Enterprise</i> axis.....	54

## Chapter 1

### Introduction: Intersecting Stories

In December 2003 the *Enola Gay* was put on public view at the National Air and Space Museum's new Steven F. Udvar-Hazy Center. Although the new space offered somewhat of a fresh start for the aircraft, the museum could not escape the plane's controversial exhibition history. In the mid-1990s the National Air and Space Museum (NASM) attempted to mount an exhibit titled "The Last Act: The Atomic Bomb and the End of World War II," which was canceled after a heated year-long public battle over the interpretation of the *Enola Gay* and its Hiroshima mission. According to former NASM director Martin Harwit, the museum's two major activities of the 1990s, "planning for the Dulles extension," where the *Enola Gay* is now on display, and the aircraft's tumultuous exhibition in 1995, were not unrelated enterprises.<sup>1</sup> In the course of this thesis I explore the relationship between these two projects and its consequences for the historical presentation of the *Enola Gay*, as well as for the visitor experiences with the resulting exhibition.

In the second chapter of this work I present brief histories of the "The Last Act" and the museum's extension at Dulles airport, now known as the Udvar-Hazy Center, as context for the discussion that follows. The third chapter explores the institutional legacy of "The Last Act" at the Udvar-Hazy Center, which I contend is evident in the activities leading up to and following the opening of the new facility.

---

<sup>1</sup> Martin Harwit, *An Exhibit Denied: Lobbying the History of Enola Gay* (New York: Springer-Verlag, 1996), 351.



To be specific, I suggest that the design and physical layout of the Udvar-Hazy Center resolved many of the interpretive issues that plagued the earlier exhibit.

In the fourth chapter I offer a description of the facility from its location to the artifact labels, as well as an analysis of the aircraft's current display site. Originally conceived as an open storage facility, the Udvar-Hazy Center presents artifacts unaccompanied by interpretive statements. Nevertheless, the decontextualization of artifacts reveals the embeddedness of historical and cultural narratives in the choices made as how to arrange the artifacts. I offer my reading of the *Enola Gay* exhibition and uncover one possible historical interpretation presented to the visitors.

In the fifth chapter I recover the voices of the visitors, which were all but lost in the cacophony of controversy over "The Last Act." Here I analyze a variety of responses to the exhibit, both in the museum's possession and publicly available on social media platforms. I also draw on Roy Rosenzweig and David Thelen's work on the presence of the past in daily life to explain the patterns of popular history-making occurring around the *Enola Gay* exhibition.

In the final chapter I summarize the lessons of the *Enola Gay* exhibition saga, and counter the claims that the latest display is a lost learning moment. I believe the public's interaction with this artifact has much to teach the historical community. I conclude by offering my suggestions for ways to utilize this exhibition to its fullest potential. I also make the case for the historical value of visitor feedback. I believe there is value in understanding an artifact's place in

popular memory, as well as through the professional interpretations of academic historians.

As a historian of technology and aspiring museum curator I am directly interested in the public appropriation of technological artifacts, ideas, images and jargon. This work aims to understand the ways in which the public, through experiences at the Udvar-Hazy Center, have used the *Enola Gay* in their personal versions of American history. Much as the milkman is both a personal remembrance and a national relic, so too is this atomic deliveryman a familiar figure in personal narratives of a shared past. At the heart of this work is a discussion of the role of artifacts in popular history-making, told through a study of the exhibition history of the *Enola Gay*. The aircraft's display at the Udvar-Hazy Center offers an especially valuable glimpse into these practices, as the decontextualized exhibit allows the visitors to confront the artifact on their own terms in the absence of explicit museum interpretation.

I hope historians and curators will find this work useful in two primary ways. First, the visitor responses to the *Enola Gay*, while sometimes historically inaccurate are nonetheless historically significant. I believe that the legacy of an object or event is not limited to the immediate circumstance of its creation and use, but also the place (or places) it holds in popular memory, shaped by a variety of cultural and political factors. I hope this work will demonstrate the historical value of popular history-making and will inspire our community to include the public's memories and mythologies in the histories we write. Second, I hope these analyses will shed light on the ways in which visitors make sense of artifacts,

including the mythologies that surround them, leading to better strategies for public education through the objects of material culture.

## Chapter 2

### A Challenging Decade: The 1990s at the National Air and Space Museum

#### 2.1 The Final Casualty of the Second World War: "The Last Act" at the Smithsonian

One of the most controversial aircraft in the history of aviation is the *Enola Gay*, which delivered the first atomic bomb in combat. The plane itself, a modified Boeing B-29 Superfortress, carried no special significance beyond its specific military use.<sup>1</sup> But since the morning of August 6, 1945, this particular union of rivets and plates has taken on highly charged meanings. The *Enola Gay* has been viewed as a proxy for its atomic payload, representing not only the potential and realized power of nuclear weapons, but also the human agency in their deployment. To some, the *Enola Gay's* crewmen are heroes who saved the lives of countless American soldiers and Japanese civilians. To others, they are complicit in the murder of more than 80,000 Japanese in an unprecedented transgression of human morality.<sup>2</sup>

---

<sup>1</sup> This statement is an oversimplification of the *Enola Gay's* pre-Hiroshima political significance. In *The Whale and the Reactor: A Search for Limits in an Age of High Technology* (Chicago: University of Chicago Press, 1989), Langdon Winner argues that technologies are inherently political in two ways. First, he suggests they can be employed to create conditions that favor specific social groups. Second, he notes that they can "require or be strongly compatible with particular kinds of political relationships." (Winner 22) An analysis of the Boeing B-29 in light of Winner's work would be worthwhile, though it is not central to this thesis.

<sup>2</sup> Martin Harwit, *An Exhibit Denied: Lobbying the History of Enola Gay* (New York: Springer-Verlag, 1996), vii.

Throughout its service and retirement, the *Enola Gay* has been a complicated symbol, appropriated for various purposes in diverse and divergent renderings of American history. Even before the *Enola Gay* rolled out of the factory and onto the tarmac on May 18, 1944, it had been regarded with great ambivalence.<sup>3</sup> During its five years of service and beyond, the plane has evoked a wide spectrum of emotions, which were simultaneously unleashed on the Smithsonian when it announced plans to display the aircraft on the fiftieth anniversary of the war's end.

To the American men, women, and children who lived through and served in the Second World War, the public and private hopes and anxieties of the war effort are reflected in the plane's mirror-like silver fuselage. By the time the Army Air Force initiated "Project Silverplate" in 1943, the directive that commissioned the atomic ordnance delivery system, Americans had been engaged in ground, aquatic, and aerial conflict in Europe and the Pacific for nearly two years.<sup>4</sup> Having borne the high human and financial costs of warfare on two fronts, the American people and its government were eager for victory. They welcomed the news of the *Enola Gay's* successful mission, not without regret for the human loss, but grateful

---

<sup>3</sup> Norman Polmar, *The Enola Gay: The B-29 that Dropped the Atomic Bomb on Hiroshima* (Washington, DC: Brassey's Inc., 2004), 13.

<sup>4</sup> Richard H. Campbell, *The Silverplate Bombers: A History and Registry of the Enola Gay and Other B-29s Configured to Carry Atomic Bombs* (Jefferson, NC: McFarland and Company, 2005), 6-7, 18, and 21.

for the Americans lives that were spared once a presumed land invasion of Japan was no longer deemed necessary.<sup>5</sup>

For the officials privy to the details of the Manhattan Project, the secret nuclear weapons development program, the fate of their careers rested with the performance of the *Enola Gay*.<sup>6</sup> The Manhattan Project was an enormous and exceedingly expensive undertaking. At Los Alamos Laboratory in New Mexico project scientists pushed the limits of theoretical physics and designed never-before-seen applications of their newly developed ideas. The technologies involved in the refinement of the fissile material, as well as the design of the detonation devices, had never been tested on such a large scale. Across the nation over 125,000 people were employed in more than twenty facilities in an effort to produce a handful of atomic weapons.<sup>7</sup> The human and natural resources necessary to design the bombs, procure the raw materials, and equip a delivery

---

<sup>5</sup> Henry L. Stimson, US Secretary of War during World War II, codified this popular perception in his widely read 1947 article in *Harper's Magazine*. In "The Decision to Use the Atomic Bomb," Stimson offers a variety of justifications for the deployment of the nuclear weapons in August 1945, including projected casualties in excess of one million for a land invasion of the Japanese mainland (Stimson 102). The origin of this high figure is unknown. The Joint War Plans Committee provided President Truman with estimates ranging from 25,000 to 46,000 casualties (Rotblat xviii-xix). Additionally, intelligence from the time suggested that a land invasion might not be necessary, as the Japanese forces were irreversibly weakened and the Emperor had already gestured to the Soviets to mediate a peace agreement with the United States (Alperovitz 7).

<sup>6</sup> For a comprehensive history of the Manhattan Project, see Richard Rhodes' *The Making of the Atomic Bomb* (New York: Simon and Shuster, 1986).

<sup>7</sup> Cynthia C. Kelly, "Preserving the Manhattan Project," *American Physical Society Forum on Physics & Society* 39, no. 4 (2010), accessed 25 February 2013, <http://www.aps.org/units/fps/newsletters/201010/kelly.cfm>. K.D. Nichols, *The Road to Trinity* (New York: William Morrow and Company, 1987), 18.

system cost in excess of \$2 billion dollars.<sup>8</sup> Historian John Dower notes, “once the war ended, bipartisan unity would end with it... if the costly, ultrasecret Manhattan Project failed to show concrete results before war’s end, it would inevitably become a target” on Capitol Hill.<sup>9</sup> As leaders learned of the *Enola Gay*’s early morning departure from Tinian Island, their political futures were hanging in the balance.

More extreme responses to the aircraft stemmed from concerns over the morality of the atomic ordnance, rather than from personal or professional anxieties. These issues first came to the fore after the Trinity test of the first nuclear weapon on July 16, 1945. The display of force rattled many of the scientists at Los Alamos. Most notably, project manager John Robert Oppenheimer remarked after witnessing the blast, “Now I am become Death, the destroyer of worlds.”<sup>10</sup> Since then many moral objections have been raised against the bomb’s subsequent deployment, particularly in regard to the arguments that the Japanese were already in a weakened state and that a weapon of such unprecedented strength should have been demonstrated before it was used. After the war, the security of atomic technology was of the utmost importance. A number of religious groups, including the Society of Friends, and peace activists have

---

<sup>8</sup> F.G. Gosling, *The Manhattan Project: Making the Atomic Bomb*, DOE/MA-0002 Revised (Washington, D.C.: Department of Energy, 2010), 19.

<sup>9</sup> John W. Dower, “Three Narratives of Our Humanity,” in *History Wars: The Enola Gay and Other Battles for the American Past*, ed. Edward Linenthal and Tom Engelhart (New York: Henry Holt and Company, 1996), 82.

<sup>10</sup> Kai Bird and Martin Sherwin, *American Prometheus: The Triumph and Tragedy of J. Robert Oppenheimer* (New York: Vintage Books, 2006), 309.

championed anti-nuclear positions in the immediate aftermath of and in the seven decades since the bombing of Hiroshima.

In light of the history of national ambivalence toward the *Enola Gay*, it is understandable that museum displays of this aircraft would be highly contested. In preparation for the fiftieth anniversary of the end of World War II, the Smithsonian Institution's National Air and Space Museum (NASM) made plans to exhibit the plane in its historical context and in light of the latest scholarship on recently declassified government documents about projected wartime casualties and the state of Japanese and Russian affairs. Special interest groups, each claiming unique understanding of the plane's historical significance, took to their typewriters and word processors in a media campaign to criticize to proposed exhibition. They ultimately achieved the cancellation of the Smithsonian's exhibition addressing the end of World War II and the beginning of the Cold War. This episode, while representing the opinions of key stakeholders in the exhibition- including veterans, academic and public historians, peace groups and politicians- largely ignores the interests of the non-specialist museum-going public who were the intended beneficiaries of the exhibition.

The exhibit was largely inspired by a 1980 reunion of the 509<sup>th</sup> Composite Group, the unit responsible for both atomic missions over Hiroshima and Nagasaki.<sup>11</sup> The veterans met at the Paul E. Garber Preservation, Restoration, and Storage Facility in Suitland, Maryland, where they saw the pieces of the *Enola Gay* stacked in a tin storage shed. Following its decommissioning in 1949, the aircraft

---

<sup>11</sup> Harwit, 1.



had been stored at airfields in Park Ridge, Illinois, Pyote, Texas and Andrews Air Force Base, Maryland. Exposed to the elements, wildlife, and "curiosity seekers," the plane was badly damaged by the time it arrived at Garber in 1961. The veterans were appalled by the poor condition of the plane and began a campaign to raise money for its restoration, which began in 1984. They formed the *Enola Gay* Restoration Association (EGRA) in Indianapolis, which solicited donations from veterans across the country. The members of the EGRA also rallied other veterans to push NASM and Congress to exhibit the aircraft.

Three years after the privately funded efforts to restore the plane started, NASM director Martin Harwit convened the museum's Research Advisory Committee to begin a serious discussion about exhibiting the plane to the public for the first time. This group of highly qualified men- representing the museum, the military, and university scholars- expressed ambivalence toward the plane's display. While Smithsonian Secretary Robert McCormick Adams showed guarded interest in the exhibition, he warned that it would have to be carried out with "extraordinary sensitivity." Admiral Noel Gayler, on the other hand, was forthrightly opposed to displaying the *Enola Gay*.<sup>12</sup> The innovative cargo, rather than the mass-produced plane, was of aeronautical significance, he argued; consequently, the aircraft's display was incongruous with the museum's mission to preserve artifacts relevant "to the progress of aviation."<sup>13</sup>

---

<sup>12</sup> Harwit, 15 and 30-32.

<sup>13</sup> "National Air and Space Museum Press Kit," *National Air and Space Museum News and Events Press Room*, accessed 3 December 2011, [http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview\\_nasm.cfm](http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview_nasm.cfm).

While there was internal disagreement over the appropriateness of an *Enola Gay* exhibition, there was significant external pressure to display the aircraft. Veterans championed this cause, expressing a desire to see the *Enola Gay* one last time before they passed away. In fact, most of these men had only seen the plane in promotional photographs. Their desire to restore this particular aircraft over those they may have flown in combat speaks to the popular mythology that surrounds the plane.

In the end, the museum decided to proceed with an exhibit focused on the *Enola Gay* and its role in the strategic bombing programs of World War II. In anticipation of the exhibition, NASM organized a yearlong symposium in 1993 on strategic bombing, featuring commentary from military and academic historians. The participants regarded the workshops and sessions as great successes. The museum also ran a short video clip of the plane's restoration, accompanied by footage of the atomic bomb explosion, on a loop outside of the World War I gallery. Reception of the video and symposium were positive and encouraged the museum as it moved forward with the *Enola Gay* exhibit.

Drs. Tom Crouch and Michael Neufeld, experts in aviation history, were selected as lead curators for the exhibit. They finished the first script for the tentatively titled "The Crossroads: The End of World War II, the Atomic Bomb and the Origins of the Cold War" on January 31, 1994.<sup>14</sup> Both curators worked to represent the perspectives of the major stakeholders in the history of the Hiroshima bombing. Harwit and Crouch communicated with and visited staff at the

---

<sup>14</sup> Harwit, 210-212.

Hiroshima Peace Memorial Park and the Nagasaki National Peace Memorial Hall for the Atomic Bomb Victims, while others solicited personal reflections from the crew of the *Enola Gay*, including pilot Paul Tibbets who named the aircraft after his mother on the eve of the plane's atomic mission.

NASM also reached out to the military community. As a courtesy, a confidential copy of the initial script was delivered to the Air Force Association (AFA), an organization representing United States Air Force veterans. John T. Correll, editor of AFA's *Air Force* magazine was enraged by what he characterized as the "political horror show" he saw unfolding in the script. Correll charged NASM with practicing revisionist history and with using the *Enola Gay* to highlight a history of military aggression rather than heroism. Correll circulated the script to other veterans' organizations and also leaked it to the press with summary packets reflecting AFA's interpretation of the exhibit. Questionable journalistic practices, which media scholars Tony Capaccio and Uday Mohan heavily criticize, helped propagate this interpretation until it prevailed.<sup>15</sup>

Over the next year NASM tried to balance the conflicting, and ultimately irreconcilable, needs of the stakeholders. Three additional scripts were produced, each submitted to the scrutiny of Smithsonian administrators, Japanese leaders, and representatives of the veterans groups. By this time the title of the exhibit had been changed to "The Last Act: The Atomic Bomb and the End of World War II." The museum hoped the American Legion could smooth things over with AFA and

---

<sup>15</sup> Tony Capaccio and Uday Mohan, "How the U.S. Press Missed the Target," in *Hiroshima's Shadow: Writings on the Denial of History and the Smithsonian Controversy*, ed. Kai Bird and Lawrence Lifschultz (Stony Creek, CT: The Pamphleteer's Press, 1998).

other veterans' organizations and so initiated a partnership with them to edit the fifth and final script. This strategy ultimately proved ineffective, however, as the American Legion used its special authority to make demands that NASM was unable to meet. After the Legion pulled its support from the exhibit, Smithsonian Secretary I. Michael Heyman officially canceled "The Last Act" on January 30, 1995.<sup>16</sup> In May of that year Harwit resigned from NASM, believing the museum would not be allowed to move on from this incident under his leadership. Under Heyman's guidance, the museum mounted a much pared-down replacement exhibit from 1995-1998, featuring crew commentary and parts of the *Enola Gay*, including its iconic cockpit and tailpiece. Although an Air Force Historian and former NASM curator called the exhibit "a beer can with a label," over 4 million people came to see it.<sup>17</sup>

The events that transpired in Washington, D.C. shook the museum community at the time, and the aftershocks are still being registered almost twenty years later. This thesis explores the legacy of "The Last Act" at NASM, specifically at its extension facility, where the specter of the controversy greatly influenced the historical presentation and interpretation of America's technological heritage.

## **2.2 The National Air and Space Museum Extension**

At the same time that the museum struggled to save its exhibit and reputation, it was also developing plans for a second facility. NASM is the most

---

<sup>16</sup> Harwit, 418.

<sup>17</sup> Tony Capaccio and Uday Mohan, 364.

visited, if not the most beloved, of the Smithsonian Institution's nineteen museums. In 2012 over 6.8 million visitors from across the United States and the globe traveled to Washington, D.C. to marvel at the world's finest collection of artifacts from the skies and beyond.<sup>18</sup>

NASM opened to the public on July 1, 1976 as part of the nation's bicentennial celebrations. On this occasion President Gerald R. Ford described the museum as the "perfect birthday present from the American people to themselves."<sup>19</sup> The mission of the museum and its stewards is to:

commemorate the national development of aviation and spaceflight, and [to] educate and inspire the nation by: preserving and displaying aeronautical and spaceflight equipment and data of historical interest and significance to the progress of aviation and spaceflight; developing educational materials and conducting programs to increase the public's understanding of, and involvement in, the development of aviation and spaceflight; and conducting and disseminating new research in the study of aviation and spaceflight and their related technologies.<sup>20</sup>

These ideas have guided the collecting mission, educational programming, and research at NASM for the past 35 years.

Since its founding NASM has struggled to preserve and display its collection as mandated in its charter. When federal budget constraints during the Vietnam era forced the museum to settle for a smaller building than had been originally

---

<sup>18</sup> "Visitor Statistics," *Newsdesk: News Room of the Smithsonian Institution*, accessed 26 March 2013, <http://newsdesk.si.edu/about/stats>.

<sup>19</sup> Ted Maxwell and Tom Crouch, "The World's Most Popular Museum," in *Smithsonian National Air and Space Museum: An Autobiography*, ed. Michael Neufeld and Alex Spencer (Washington, D.C.: National Geographic, 2010), 262-263.

<sup>20</sup> "National Air and Space Museum Press Kit," *National Air and Space Museum News and Events Press Room*, accessed 3 December 2011, [http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview\\_nasm.cfm](http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview_nasm.cfm).

planned, most of NASM's growing collection was left in drafty tin sheds at Suitland, Maryland.<sup>21</sup> Even the new two-story, 161,145 square-foot facility could only accommodate approximately ten percent of the 50,000 artifacts in the museum's care.<sup>22</sup> Consequently, the museum had planned for an extension even before the original space opened on the National Mall. NASM needed a "huge, hangar-like building located at a major airport where future aircraft could simply be flown in and taxied into position for display." It was to be "identical in purpose to the Garber Facility only much larger... and constitute a museum in and of itself."<sup>23</sup>

Donald Lopez, the first chairman of the Aeronautics Department, articulated the initial criteria that would guide the search for an expansion site. In 1977 Lopez explained that it was essential that the new facility provide covered display for the museum's gargantuan aircraft. He suggested that the extension be co-located with an airport so that newly accessioned artifacts could take their place without costly and labor-intensive ground transportation.<sup>24</sup> Finally, Lopez proposed that the annex be located no farther than one hour's drive from the National Mall to avoid

---

<sup>21</sup> "Building on the National Mall Fact Sheet," *National Air and Space Museum News and Events Press Room*, accessed 3 December 2011, [http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview\\_nasm.cfm](http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview_nasm.cfm). Dik Daso, "The National Air and Space Museum Spreads Its Wings," in *Smithsonian National Air and Space Museum: An Autobiography*, ed. Michael Neufeld and Alex Spencer (Washington, D.C.: National Geographic, 2010), 328.

<sup>22</sup> John T. Correll, "New Horizons for Air and Space," *Air Force* 84, no. 3 (2001): 43. "About the Collection," *National Air and Space Museum Collections*, accessed 24 March 2013, <http://airandspace.si.edu/collections/about.cfm>.

<sup>23</sup> F. Robert Van der Linden, *The Nation's Hangar: Aircraft Treasures of the Smithsonian from the National Air and Space Museum's Steven F. Udvar-Hazy Center* (Washington, D.C.: Smithsonian Books, 2011), 11.

<sup>24</sup> Daso, 334.

duplicating staff. In 1981 NASM director Noel Hinners initiated the search for a location that could meet Lopez's requirements.<sup>25</sup> While a variety of sites near the capital were considered, including the Baltimore-Washington International (BWI) Airport, Hinners eventually settled on a tract of land outside of the Dulles International Airport in Chantilly, Virginia.

The activities and efforts of the Air and Space Heritage Council (ASHC) significantly influenced Hinners' decision. The ASHC "worked tirelessly behind the scenes with museum staff, local politicians, federal officials, and business to push forward the idea [of a facility near Dulles] until it became a reality." Most notably, the ASHC privately funded a feasibility study in 1983, which was conducted by Dewberry & Davis Engineers, Architects, Planners and Surveyors.<sup>26</sup> In the January 1984 meeting of the Smithsonian Institution Board of Regents, this site was approved as the future home of the museum annex, in part because of the results of the study.<sup>27</sup> Less than a year later, in March 1985, the House of Representatives announced it was unable or unwilling to tackle such a large project and Congress halted further planning.

Planning for the extension was still in a state of suspension when the museum received an enticing offer from Maryland governor William Donald in the summer of 1987, making the grounds around BWI airport available for NASM's extension. Wishing to explore this new opportunity, Secretary Adams and NASM

---

<sup>25</sup> Harwit, 22.

<sup>26</sup> Daso, 342.

<sup>27</sup> Harwit, 23. Daso, 338.

director Harwit sought a meeting with Congressman Sidney Yates, who sat on the House committee overseeing the Smithsonian. Their discussion on January 4, 1988 opened the door for preparations for the extension to resume.<sup>28</sup> At this time the Smithsonian Office of Design & Construction commissioned a more detailed planning study of the Dulles site, completed by the firm of Skidmore, Owings & Merrill. Armed with the resulting report, Secretary Adams approached the Regents with a request for \$300 million to lease and commence construction on 200 acres of land outside of Dulles. The ASHC simultaneously arranged for the expansion of local business and tourism around the site.<sup>29</sup>

After working with representatives from BWI and Dulles, NASM submitted proposals for the two sites to the Board of Regents for review at its January 1990 meeting.<sup>30</sup> The Regents failed to proceed with either of NASM's recommendations, however. Citing concerns for "federal cost savings and fairness," the Board demanded that NASM investigate other possible locations for the museum extension, including Stapleton Airport in Denver and sites in Pennsylvania, West Virginia, and Texas.<sup>31</sup> Each location proved unsuitable for various logistical or financial reasons, and the museum staff again turned toward Dulles.

Twelve years after the investigation was initiated, the Dulles site was finally secured. Money that was earmarked for construction, however, had been spent

---

<sup>28</sup> Harwit, 24-25.

<sup>29</sup> Daso, 347.

<sup>30</sup> Harwit, 113.

<sup>31</sup> Daso, 347. Harwit, 115-116.



during the drawn-out location scouting process. Now, the new facility would be strictly held to a \$330 million budget, as set by Harwit in late 1990. The museum would be constructed in two phases: the hangar, office spaces, observation tower and IMAX theater would be first, followed by a restoration facility and artifact and archival storage. The first phase was to be completed for \$162 million.<sup>32</sup> In August 1993, Public Law 103-75 authorized NASM to plan the extension at its chosen location in northern Virginia. Congress appropriated a mere \$8 million dollars for this purpose.<sup>33</sup> The dramatic deficit between the proposed costs and promised funds was to be made up through revenue generated by parking fees and sales of IMAX movie tickets, as well as from private donations.<sup>34</sup>

Late in the summer of 1999, aviation enthusiast and international aircraft lessor Steven F. Udvar-Hazy donated \$65 million to support the extension, which would eventually be named in his honor. The state of Virginia also contributed \$40 million in infrastructure support and construction. At this point, new museum director John R. "Jack" Dailey, a retired Marines Corps general and former NASA administrator, decided to proceed with construction. Confident that the remainder of the funds for phase two could be raised during construction, and eager to settle contracts and fix costs, he set an ambitious opening date of December 2003, timed to celebrate the centennial of the Wright brothers' first flight. In March 2001 the

---

<sup>32</sup> Daso, 374 and 354.

<sup>33</sup> Harwit, 117.

<sup>34</sup> Daso, 354.

Regents awarded the contract for the annex to Hensel Phelps Construction Company.<sup>35</sup>

Linda Ezell was appointed project manager for the center.<sup>36</sup> While she coordinated with contractors, William "Jake" Jacobs laid out the exhibition design with special consideration for structural constraints and foot traffic patterns.<sup>37</sup> Jacobs also said of his design plans, "we wanted the planes to appear like they were soaring or gliding. We wanted some attitude."<sup>38</sup> Beginning in March 2003, the staff at Garber worked day and night to deliver artifacts for display. The center's first plane, a small Piper Cub, was installed on March 17.<sup>39</sup> Soon after, the components of the *Enola Gay* arrived on the back of a tractor-trailer.<sup>40</sup> Five months of full-time labor were required to reassemble the plane on-site.<sup>41</sup> One of the museum's most recently acquired artifacts, the space shuttle *Discovery*, landed on a Dulles runway on the back of a specially-equipped NASA 747 and taxied to the

---

<sup>35</sup> Daso, 354, 362 and 357.

<sup>36</sup> For a history of the facility's construction, see Lin Ezell's *Building America's Hangar: The Design and Construction of the Steven F. Udvar-Hazy Center* (London: GILES, 2004).

<sup>37</sup> Daso, 357.

<sup>38</sup> Jacqueline Trescott, "The Ultimate Wingding: Smithsonian's New Aviation Museum at Dulles Gets Off to a Flying Start," *Washington Post* (Washington, D.C.), Dec. 12, 2003.

<sup>39</sup> Daso, 361.

<sup>40</sup> Polmar, vii.

<sup>41</sup> Daso, 362.

museum in mid-April 2012. Since the museum's opening, the permanent displays have been enhanced with a rotation of artifacts that have arrived by land and sky.<sup>42</sup>

After approximately thirty months of construction, the Steven F. Udvar-Hazy Center opened to the public on Monday, December 15, 2003.<sup>43</sup> Despite the wintry weather, nearly 7,100 people came to wonder at the new facility.<sup>44</sup> In the debut week alone the museum attracted over 200,000 visitors.<sup>45</sup> Since its opening, the facility has welcomed an average of one million visitors yearly and has earned the nickname "America's Hangar."<sup>46</sup> In light of the Udvar-Hazy Center's popularity, it is important to understand the ideas and themes that are communicated to visitors in its exhibitions.

---

<sup>42</sup> For images and descriptions of the artifacts on display, see the National Air and Space Museum's *America's Hangar: The Steven F. Udvar-Hazy Center* (Washington, D.C.: Smithsonian Books, 2003) and F. Robert Van der Linden's *The Nation's Hangar: Aircraft Treasures of the Smithsonian from the National Air and Space Museum's Steven F. Udvar-Hazy Center* (Washington, D.C.: Smithsonian Books, 2011).

<sup>43</sup> Robert Redding Jr., "'Cathedral to Aviation' Set to Open," *Washington Times* (Washington, D.C.), Dec. 6, 2003.

<sup>44</sup> Maria Glod, "The Biggest Arrival at Dulles; Flight Fans, Protesters Come for Museum Opening," *Washington Post* (Washington, D.C.), Dec. 16, 2003.

<sup>45</sup> Daso, 364.

<sup>46</sup> "Visitor Statistics," *Newsdesk: News Room of the Smithsonian Institution*, accessed 12 December 2011, <http://newsdesk.si.edu/about/stats>.

## Chapter 3

### The Dulles Extension and the Institutional Legacy of the “Last Act”

#### 3.1 The Legacy of “The Last Act”

Martin Harwit asserts that NASM’s two major activities of the 1990s, “planning for the Dulles extension and the *Enola Gay* exhibition,” were not unrelated enterprises.<sup>1</sup> NASM curator Michael Neufeld confirms this sentiment, noting that during preparations for the Udvar-Hazy Center “we lived under the shadow of *Enola Gay* [affair]. There’s no doubt about it.”<sup>2</sup> This section aims to illuminate the ways in which the controversy over “The Last Act” influenced the planning and execution of the Udvar-Hazy Center. I suggest that the specter of the cancelled exhibit is evident in five elements of the center’s history: museum leadership and organization, capital fundraising, exhibition design, program of opening festivities, and responses from key participants in the earlier controversy.

##### 3.1.1 Leadership, Organization, and Institutional Changes

In the immediate aftermath of “The Last Act,” Smithsonian Secretary I. Michael Heyman echoed the Congressional pleas for the resignation of Martin Harwit. Beginning with Harwit’s departure on May 2, 1995, the museum experienced a rapid change of leadership.<sup>3</sup> Donald Lopez, NASM’s deputy director,

---

<sup>1</sup> Martin Harwit, *An Exhibit Denied: Lobbying the History of Enola Gay* (New York: Springer-Verlag, 1996), 351.

<sup>2</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

<sup>3</sup> Harwit, 422.

oversaw museum operations until Donald Engen was appointed director in July 1996. Engen, a 36-year veteran of the Navy and former head of the Federal Aviation Administration, had the military credentials and bureaucratic experience required to help NASM regain its good name after the *Enola Gay* affair. Three years after assuming office, however, Engen was tragically killed in a glider accident.<sup>4</sup> His successor, General John R. "Jack" Dailey, had a similar history of military and civilian service. Dailey was a 36-year veteran of the Marines and had served as associate deputy administrator of the National Aeronautics and Space Administration before arriving at NASM in January 2000.<sup>5</sup>

I contend that the political controversy over "The Last Act" was a strong, but not singular, motivation for hiring both Engen and Dailey. Whereas Harwit, a university trained physicist and liberal intellectual, had led the museum into murky interpretative territory, the pilot-directors would help the museum return to its commemorative and celebratory roots. As Neufeld explains, it was clear under Engen and Dailey that "those intellectuals weren't running the place, it was the pilots who were running the place again."<sup>6</sup> The decorated directors would set the tone for the patriotic displays at the Udvar-Hazy Center. "Clearly there was this expectation that we would kind of go back to our roots as a kind of military oriented or dominated institution, that we would not be doing things that would

---

<sup>4</sup> "National Air and Space Museum Director Donald Engen Dies in Glider Accident," *National Air and Space Museum Press Room*, 14 July 1999, accessed 16 April 2013, <http://airandspace.si.edu/events/pressroom/releaseDetail.cfm?releaseID=103>.

<sup>5</sup> "John R. 'Jack' Dailey, *Newsdesk: Newsroom of the Smithsonian*, 1 April 2012, accessed 16 April 2013, <http://newsdesk.si.edu/about/bios/john-r-jack-dailey>.

<sup>6</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

question the received wisdom about the atomic bomb or anything else," says Neufeld.<sup>7</sup>

Significant organizational changes were made on lower levels, as well. Immediately following the cancellation of the *Enola Gay* exhibit, Congress initiated an inquiry into the museum's managerial practices. It cut the museum's budget, as "punishment" for the *Enola Gay* affair, according to Neufeld, which necessitated a reduction in force.<sup>8</sup> Engen was responsible for laying off staff and restructuring the museum hierarchy. This meant that a smaller work force was responsible for the ever-growing extension project.

Additionally, the remaining employees were now subject to new constraints as a result of the *Enola Gay* controversy. The entire Institution was forced to accept greater oversight from Smithsonian administrators. Neufeld explains,

Memos were written and edicts were issued specifying that there would be much more consultation [with Smithsonian administrators]. I mean, whether it really changed anything very much was questionable, but certainly the impression was left that we had instituted management controls that would mean that these [potentially controversial exhibits] had to be more extensively debated internally or had to be cleared up to the level of the Secretary of the Smithsonian.<sup>9</sup>

Crouch echoes Neufeld's sentiments, noting "There was a time when scripts had to be specially vetted... but it didn't last very long."<sup>10</sup>

---

<sup>7</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Tom Crouch (NASM curator) in discussion with the author, April 10, 2013.

### 3.1.2 Financial Consequences

After six years of fundraising for the extension in the middle of a media maelstrom, the museum had only secured \$28 million, less than ten percent of the total cost of the facility.<sup>11</sup> The rapid change in leadership is one possible explanation for NASM's financial difficulties. Museum directors are most often responsible for courting corporate and high profile donors; continuity is vital to this delicate process of interpersonal dealings. The director must also reassure potential supporters that the museum's exhibits will not conflict with the donors' philosophies and objectives. NASM is unique from other Smithsonian museums in that it displays recent technologies produced by companies currently in operation. Manufacturers would not support displays that render their products controversial. The role of the director is thus even more important at NASM, where donations are solicited from Boeing, Airbus, McDonnell Douglas, and other aerospace corporations. Although the lack of continuity may have been a hindrance to the financial negotiations, Engen and Dailey's similar histories of military and civilian service, "was a reassurance to our.... aerospace industry and military constituencies," explains Neufeld.<sup>12</sup>

There were also external challenges to the fundraising efforts. Veterans' organizations such as the Air Force Association and American Legion, whose demands led to the cancellation of "The Last Act," again spoke out against the

---

<sup>11</sup> Dik Daso, "The National Air and Space Museum Spreads Its Wings," in *Smithsonian National Air and Space Museum: An Autobiography*, ed. Michael Neufeld and Alex Spencer (Washington: National Geographic, 2010), 354.

<sup>12</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

museum extension. In the midst of the *Enola Gay* affair, they complained that NASM was holding the aircraft hostage in order to secure funds for the extension. Their emotional appeals to representatives on the Hill may have successfully dissuaded Congress from appropriating further funds.<sup>13</sup> Only \$8 million was offered in support of the extension. To this day, the Udvar-Hazy Center remains the only privately funded Smithsonian museum.

### 3.1.3 Exhibition Planning

Roger Launius, senior curator of Space History at NASM, writes that the controversy around “The Last Act” left “a legacy of fear and resultant self-censorship at NASM.”<sup>14</sup> He explains, “during literally dozens of meetings, the long shadow of the *Enola Gay* controversy has been invoked as an object lesson on what we should not do, and decisions not to pursue something we might otherwise do have resulted from those discussions.”<sup>15</sup> Neufeld echoes these sentiments noting, “the atmosphere of intimidation and fear about doing anything controversial lingers to this day.”<sup>16</sup>

It would seem that the context-free exhibition labels are a product of an environment overly cautious of interpretation. In fact, the technology-heavy texts are a natural outgrowth of the facility’s function as an open storage space. “The

---

<sup>13</sup> Harwit, 132-135.

<sup>14</sup> Roger D. Launius, “American Memory, Culture Wars, and the Challenge of Presenting Science and Technology in a National Museum,” *The Public Historian* 29, no. 1 (2007): 19.

<sup>15</sup> *Ibid.*, 21.

<sup>16</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.



wide open floor plan almost inevitably militates against having any kind of coherent, long, linear narratives, or significantly interpretive exhibits," explains Neufeld.<sup>17</sup> Both Neufeld and Crouch lament the lack of interpretation in these labels and have noted museum-wide discussions to augment the existing displays with interactive panels.

The most striking example of censorship involves "Little Boy," the uranium bomb detonated over Hiroshima. "The Last Act" called for a model of "Little Boy" to be suspended below the *Enola Gay's* bomb bay doors. The artifact did not appear in the 1995 substitute exhibit, nor is it on display at the Udvar-Hazy Center.

Neufeld reflects,

There were discussion of putting the Little Boy bomb 'shape,' as the Energy Department people call it, out on the floor, but we never got serious about it... it was easier to do nothing than to contemplate whether putting a bomb out would attract more unwanted attention from the public, or more unwanted attention from anti-nuclear protesters.<sup>18</sup>

The decision to omit the *Enola Gay's* ordnance is a direct consequence of the earlier controversy, as other explosive devices occupy prominent places in the museum. In his description of the Vietnam exhibit at the Udvar-Hazy Center, curator Tom Crouch notes the centrality of the surface-to-air missiles:

When we moved the F-105, the Thunderchief, in, half the F-105s ever built wound up as smoking holes in the North Vietnamese earth as a result of surface-to-air missiles, SAMs. So when we put [the F-105] out there, we thought it was really important that the thing closest to it, most associated with it, wouldn't be another airplane from the North Vietnamese, but it would be a surface-to-air missile.<sup>19</sup>

---

<sup>17</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

<sup>18</sup> Ibid.

<sup>19</sup> Tom Crouch (NASM curator) in discussion with the author, April 10, 2013.

According to this exhibition philosophy, one would expect the "Little Boy" model to be on public view. It remains in storage, however, in an attempt to avoid stirring memories of the *Enola Gay* controversy.

Another manifestation of legacy of "The Last Act" can be seen in the museum's attempt to generalize the *Enola Gay*. Its label emphasizes its technical specifications, common to all Superfortresses, with but a brief mention of the atomic mission that set it apart. Crouch notes, "they really wanted to treat [the *Enola Gay*] as the museum's B-29. Of course, you can never do that. It's like the *Spirit of St. Louis*. It's the one airplane in that building that more people are going to be familiar with than any other airplane in that building." "I think that to an extent," he concludes, "treating it as our B-29 at the Hazy Center, to some strange extent it probably worked. I think it's less controversial there than it was in most earlier points in its career."<sup>20</sup>

On a more superficial level, the few violent responses to the *Enola Gay* exhibit on the Mall encouraged Udvar-Hazy Center designers to include a plexiglass shield around the plane's nose. After an incident on opening day in which a can of red paint was thrown at the aircraft, the plexiglass shield was increased in area.<sup>21</sup>

---

<sup>20</sup> Tom Crouch (NASM curator) in discussion with the author, April 10, 2013.

<sup>21</sup> Ibid.

### 3.1.4 Opening Festivities

Soon after he was named director, Dailey took charge of the extension project and set an ambitious opening date of December 2003. The museum staff was pushed to its limits in preparation for the first visitors. Dailey wanted to open the facility on the centennial of the first flight in Kitty Hawk. "By tying [the opening] to the 100<sup>th</sup> anniversary of powered flight," explains Neufeld, "we had sort of hitched ourselves to the Wright brothers and made this out to be patriotic. It was easy to make the Hazy Center look fundamentally like a patriotic enterprise."<sup>22</sup> I suggest that this strategic alignment was used to erase memories of charges of anti-Americanism that surfaced during NASM's attempt to mount "The Last Act."

Not only was the date significant, but the opening festivities were also influential in setting a patriotic and pro-military tone. NASM hosted a variety of celebratory events in advance of the museum's public opening on December 15, 2003, many of which highlighted the *Enola Gay*. The program of festivities began on December 9 with a "Salute to Military Aviation Veterans." This event, which included over 4,000 guests, was planned "to fulfill a promise to Veterans- in particular WWII Veterans- that when the *Enola Gay* was totally put together NASM would invite our Nation's veterans to be the first to celebrate in the bomber's new home."<sup>23</sup> In attendance was General Paul Tibbets, pilot of the *Enola Gay* on its

---

<sup>22</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

<sup>23</sup> Daso, 362.

Hiroshima mission and influential critic of "The Last Act."<sup>24</sup> With entertainment by the United States Air Force WWII-style jazz band, the Airmen of Note, the atmosphere was described as "joyfully patriotic."<sup>25</sup>

A black-tie gala followed the next evening. Complete with champagne toasts and distinguished guests, including museum benefactors and astronauts, this affair was much more subdued than the veteran's earlier celebration. The official dedication ceremony was held on December 11. As the master of ceremonies, actor and aviation enthusiast John Travolta presided over political dignitaries and pioneers of aviation and spaceflight.<sup>26</sup> The afternoon included a "roll call" of the celebrities in attendance, including Neil Armstrong, John Glenn, and Tibbets. According to an account in the *Washington Post*, "Armstrong and Tibbets got the loudest applause."<sup>27</sup> Following the dedication ceremony, guests explored the new facility and as "crowds of well-wishers streamed by, Tibbets stood by the [*Enola Gay*], talking and shaking hands."<sup>28</sup>

The *Enola Gay* and its pilot were also prominently featured in the months leading up to the museum's grand opening. In March 2001 General Dailey

---

<sup>24</sup> "Udvar-Hazy Center Celebrates Its Opening," *National Air and Space Museum Steven F. Udvar-Hazy Center*, accessed 3 February 2013, <http://dmadison.clarion.edu/khs/washdc/2009/links2/airspace/www.nasm.si.edu/museum/udvarhazy/articles/opening/opening.html>.

<sup>25</sup> Daso, 362.

<sup>26</sup> "Udvar-Hazy Center Celebrates Its Opening."

<sup>27</sup> Jacqueline Trescott, "The Ultimate Wingding; Smithsonian's New Aviation Museum At Dulles Gets Off to a Flying Start," *Washington Post* (Washington, D.C.), Dec. 12, 2003.

<sup>28</sup> John T. Correll, "The Nation's Hangar," *Air Force* 87, no. 3 (2004): 25.

announced plans to get “people to come out and wave” during the *Enola Gay*'s delivery at the new facility, although this idea was never realized. Additionally, Tibbets was invited to the museum in April 2001 for a book signing and to “deliver a special lecture in the museum’s Langley Theater about bombing operations in the Pacific theater during World War II.”<sup>29</sup>

More so than any other artifact on display, the *Enola Gay* became associated with the Udvar-Hazy Center, featured in the events leading up to and celebrating the museum’s grand opening. Additionally, nearly every newspaper story on the facility mentions the controversial aircraft. The museum’s renewed commitment to the *Enola Gay*, Tibbets, and his cohort of WWII veterans at the start of the new millennium seems like an attempt to erase any ill feelings lingering from “The Last Act.”

### 3.1.5 Familiar Voices

The organizations that participated in the earlier exhibit controversy carefully watched the *Enola Gay*'s debut at the Udvar-Hazy Center. The media coverage of the museum opening makes it clear that, almost a decade after the affair, the plane’s recent past was still very much present.

The Air Force Association was the museum’s earliest and most vocal critic, proudly acknowledging its role in the cancellation of the “The Last Act.” Between March 2001 and April 2004 the Udvar-Hazy Center was featured in five articles in AFA’s *Air Force* magazine, four of which were authored by John T. Correll, the magazine’s former editor-in-chief who credits himself with bringing the world’s

---

<sup>29</sup> John T. Correll, “New Horizons for Air and Space,” *Air Force* 84, no. 3 (2001): 47.

attention to the museum's earlier devious display plans. The majority of each article is dedicated to summarizing and glorifying AFA's role in shutting down an exhibit "that emphasized Japanese suffering and depicted Japan more as a victim than an aggressor in World War II."<sup>30</sup>

The few new details in the *Air Force* articles focus on activities of the Udvar-Hazy Center's critics, namely the Committee for a National Discussion of Nuclear History and Current Policy, the mayor of Hiroshima, and the peace activists who protested on opening day. The aggressive and accusatory tone of the articles harkens back to the magazine's rhetoric of the mid-1990s, but with its anger redirected from the museum to these new foes. In his article "*Enola Gay II*," Robert S. Dudley writes, in the 1990s "the antinuclear activists were mostly inside the NASM tent spitting out. Today, they are outside, spitting in. What has not changed is their goal, which is to use the *Enola Gay* as a prop in a politically loaded antinuclear horror show."<sup>31</sup>

In retelling its triumph over the revisionist exhibition, and turning its ire towards the critics of the plane's decontextualized display, it is clear the Air Force Association viewed the museum's opening as an opportunity to reassert AFA's role as the savior of American history. Correll and Dudley are more than satisfied that "the Udvar-Hazy Center leaves the airplane to speak for itself. The basic facts, including the fact that it dropped the atomic bomb on Hiroshima, are on the label

---

<sup>30</sup> Correll, "The Nation's Hangar," 29.

<sup>31</sup> Robert S. Dudley, "*Enola Gay II*," *Air Force* 86, no. 12 (2003): 3.

in front of the airplane.”<sup>32</sup> With the presentation at the “Nation’s Hangar” in line with AFA’s rendering of history, the organization asserts its authority over the nation’s history. “It’s a new day at Air and Space,” writes Correll, and one that AFA celebrates.<sup>33</sup>

The Committee for a National Discussion of Nuclear History and Current Policy was less impressed with the new *Enola Gay* display. Its members were “deeply astonished and angered” by the exhibit text, which was made public in advance of the museum opening in August 2003.<sup>34</sup> They charged that glorification of the *Enola Gay* would be “completely unacceptable to the atomic bomb victims of Hiroshima and Nagasaki” and also a violation of the spirit of the United States’ recently renewed commitment to the Nuclear Non-Proliferation Treaty.<sup>35</sup> In its November 5, 2003 letter to General Dailey, the Committee requested photographs and other “materials showing the ‘calamity of the bombing’ also be exhibited.”<sup>36</sup>

---

<sup>32</sup> Correll, “The Nation’s Hangar,” 29.

<sup>33</sup> Correll, “New Horizons for Air and Space,” 47.

<sup>34</sup> Japan Confederation of A- and H-Bomb Sufferers Organizations, Letter to Mr. John R. Dailey and Mr. George W. Bush, November 5, 2003, <http://web.archive.org/web/20051206204957/http://www.ne.jp/asahi/hidankyo/nihon/english/enolagay-sign.html>. Jacqueline Trescott, “*Enola Gay* Draws More Flak; Petitioners Want Atom Bomb Deaths Added to Exhibit,” *Washington Post* (Washington, D.C.), Nov. 6, 2003.

<sup>35</sup> Japan Confederation of A- and H-Bomb Sufferers Organizations.

<sup>36</sup> Debbie Ann Doyle, “Historians Protest New *Enola Gay* Exhibit,” *Perspectives* 41, no. 9 (2003), accessed 3 February 2013, <http://www.historians.org/perspectives/issues/2003/0312/0312new4.cfm>. Japan Confederation of A- and H-Bomb Sufferers Organizations.

Led by Peter Kuznick of the Nuclear Studies Institute at American University, more than 150 historians, scholars, activists, and public figures signed the petition.<sup>37</sup>

The efforts of the signatories came too late. Just as in the earlier controversy, the “traditionally disorganized group” of “historians entered the debate... much too late to influence public opinion.”<sup>38</sup> The Committee’s plea was publicly dismissed by General Dailey on November 7 on the NASM website, but not after an attempt to jointly write a secondary label on the atomic bomb and its effects with Kuznick. Kuznick proved too “dogmatic” and unwilling to compromise, however.<sup>39</sup> Dailey ultimately rejected his request that the plane be used as a starting point for discourse on nuclear policy, citing both a conflict with museum goals and a lack of popular opposition to the text.<sup>40</sup> Dailey noted that the label should and does “focus on the technological achievements, because we are a technological museum.”<sup>41</sup> Furthermore, the exhibit text “was based in part on the

---

<sup>37</sup> Lawrence S. Wittner, “The *Enola Gay*, the Atomic Bomb and American War Memory,” *The Asia-Pacific Journal: Japan Focus*, accessed 3 February 2013, [http://www.japanfocus.org/-Lawrence\\_S\\_-Wittner/1777](http://www.japanfocus.org/-Lawrence_S_-Wittner/1777). Trescott, “*Enola Gay* Draws More Flak.”

<sup>38</sup> Tony Capaccio and Uday Mohan, “How the U.S. Press Missed the Target,” in *Hiroshima’s Shadow: Writings on the Denial of History and the Smithsonian Controversy*, ed. Kai Bird and Lawrence Lifschultz (Stony Creek, CT: The Pamphleteer’s Press, 1998), 371.

<sup>39</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

<sup>40</sup> “Statement on Exhibition of the B-29 Superfortress *Enola Gay*,” *National Air and Space Museum Press Room*, 7 November 2003, accessed 24 March 2013, <http://airandspace.si.edu/events/pressroom/releaseDetail.cfm?releaseID=44>.

<sup>41</sup> Elizabeth Olson, “*Enola Gay* Reassembled for Revised Museum Show,” *New York Times* (New York, N.Y.), Aug. 19, 2003.



reactions of people who had seen parts of the plane in the main museum," which had been well received by more than 4 million visitors.<sup>42 43</sup>

Around the same time the mayor of Hiroshima, Tadatoshi Akiba, independently wrote to General Dailey with similar requests. Specifically, he desired a "description of the damage inflicted by the bomb the *Enola Gay* dropped and the intense desire of the people of Hiroshima for the abolition of nuclear weapons and a world genuine peace" to be included in the exhibition. Akiba also lamented the loss of the "sincere re-examination of the meaning of the atomic bombing" that would have been included in "The Last Act."<sup>44</sup> Akiba's wishes also went unfulfilled.

In the wake of both failed petitions, organizations tangentially associated with the Committee for a National Discussion of Nuclear History and Current Policy persisted. On opening day, fifty "U.S. peace activists and six hibakusha [victims of the atomic bomb] protested on site." Members of Peace Action, the Catholic Worker, and the D.C. Antiwar Network, as well as local scholars and religious leaders cooperated with the museum staff in preparing this peaceful demonstration.<sup>45</sup> On the ground floor beneath the *Enola Gay*, the activists sang

---

<sup>42</sup> Jacqueline Trescott, "*Enola Gay* Draws More Flak."

<sup>43</sup> Jacqueline Trescott, "*Enola Gay* Exhibit Won't Be Changed; Museum Head Rejects Call To Discuss Nuclear Warfare," *Washington Post* (Washington, D.C.), Nov. 11, 2003.

<sup>44</sup> John T. Correll, "The Smithsonian and the *Enola Gay*: A Retrospective on the Controversy 10 Years Later," 26.

<sup>45</sup> Lawrence S. Wittner, "The *Enola Gay*, the Atomic Bomb and American War Memory."

"Down by the Riverside," unfurled banners with antinuclear messages, and chanted slogans such as "No More War."<sup>46</sup> In turn they were greeted with cries of "Remember Pearl Harbor" and pleas to "Go Home."<sup>47</sup> Despite the antagonism among the museum visitors, the day was mostly peaceful. An unaffiliated protestor damaged the plane, however, when he hurled a jar of red paint at the aircraft, which did not explode on impact.<sup>48</sup> He was subsequently arrested.

The critics of the museum's decontextualized presentation of the *Enola Gay*, most notably the Committee for a National Discussion of Nuclear History and Current Policy, as well as concerned historians, clergy, and peace activists, were unsuccessful in altering the exhibit. It was certainly more difficult to justify a departure from the bland label text that had resolved the earlier controversy. It was also harder to challenge the interpretation of one artifact, when that presentation is part of a coherent exhibition scheme without an ostensible narrative. The museum was able to justify their staunch position on the *Enola Gay* display because, to change it would mean that all other exhibitions could be edited or enhanced in a way that would detract from the facility's function as an open storage center.

---

<sup>46</sup> Daso, 362-364. John T. Correll, "The Smithsonian and the *Enola Gay*: A Retrospective on the Controversy 10 Years Later," 26. Matthew Wald, "A Big Museum Opens, to Jeers as Well as Cheers," *New York Times* (New York, N.Y.), Dec. 16, 2003.

<sup>47</sup> Lawrence S. Wittner, "The *Enola Gay*, the Atomic Bomb and American War Memory."

<sup>48</sup> Daso, 364.

### 3.1.6 Educational Programming

Educational activities and programs are important elements in a museum's communication strategy. This is especially true at the Udvar-Hazy Center, where the artifacts are presented virtually without context. Here, docents, dedicated museum volunteers who have completed rigorous coursework and training with museum staff, provide information omitted from the brief object labels. Docents offer a variety of programs, including museum-wide tours, as well as presentations of specific artifacts. Their presentations are based on curator-vetted content and each volunteer is free to personalize their style of delivery within reason.<sup>49</sup>

Crouch and others express some anxiety towards the docent presentations of the *Enola Gay*, in light of its history and the history of its display. He explains,

one of the reasons it makes me nervous with the *Enola Gay*, and other folks too, I think, is because you know, part of the problem with the *Enola Gay* is that you're not really going to get a lot of interpretation with that airplane because it's an icon, which basically means that people are going to know how they feel about that airplane before they get to it. And whatever you say to them is going to interact in one way or another with how they already feel about it. And its always just seemed to me that that's especially interesting, chancing over, to put it, when there are docents involved in the mix.<sup>50</sup>

The museum took precautions, however, to prepare the docents for reactions to this iconic artifact, especially in light of the controversy on the Mall. According to the Media Digest prepared by NASM's Office of Public Affairs titled "Introducing the Steven F. Udvar-Hazy Center," the museum "prepared an extensive confidential Q&A" to educate staff about the *Enola Gay* in advance of the opening. After the

---

<sup>49</sup> Tom Crouch (NASM curator) in discussion with the author, April 10, 2013.

<sup>50</sup> Ibid.

public was welcomed to the center, “a broader, more intensive approach, including a statement and Q&A [were] published on the Museum’s Internet Press Room.”<sup>51</sup> Finally, Crouch notes that two docents “specialize” in the *Enola Gay* and through their own interest and initiative have educated themselves about the aircraft.

### **3.2 Conclusion**

In the mid-1990s, NASM was busy defending “The Last Act” and planning the much needed museum extension. The history of the Udvar-Hazy Center is colored by the controversy on the National Mall, the effects of which are evident in the museum’s leadership, fundraising struggles, exhibition design, opening festivities, and the public response from special interest groups. Ultimately, the greatest influence can be seen in the design and layout of the museum and the exhibitions. The following chapter describes the decontextualized displays and explores the consequences of the historical narrative implicit in the museum’s layout.

---

<sup>51</sup> “The Expansion of the National Air and Space Museum: Introducing the Steven F. Udvar-Hazy Center, Media Digest,” (Washington, D.C.: National Air and Space Museum Office of Public Affairs, 2004), 4.

## Chapter 4

### Space, Interpretation, and the *Enola Gay* at the Udvar-Hazy Center

#### 4.1 Introduction

The Udvar-Hazy Center was created to accommodate the museum's growing collection, which had been sitting idle for over 25 years in the Garber Restoration Facility. Because of the size and number of artifacts to be displayed at the extension, the facility demanded a space unlike any exhibition hall on the National Mall. Museum administrators settled on a T-shaped facility modeled after the style of an aircraft hangar (see figure 4.1). The Boeing Aviation Hangar, which features artifacts related to military and commercial aviation, boasts 235,000 square feet of exhibition space.<sup>1</sup> Displayed at oblique angles and broadly, but inconsistently, arranged according to function, modern military aircraft are concentrated at the north end of the hangar, and early military and commercial aircraft to the south (see figure 4.2). Perpendicular to this space is the James S. McDonnell Space Hangar, which displays satellites and astronaut paraphernalia around the space shuttle *Discovery*. The space hangar is much smaller than the aviation hangar, occupying 53,000 square feet.<sup>2</sup> More than 80 aircraft are on display at the Udvar-

---

<sup>1</sup> Dik Daso, "The National Air and Space Museum Spreads Its Wings," in *Smithsonian National Air and Space Museum: An Autobiography*, ed. Michael Neufeld and Alex Spencer (Washington: National Geographic, 2010), 364.

<sup>2</sup> "National Air and Space Museum Press Kit: Steven F. Udvar-Hazy Center Fact Sheet," *Newsdesk: News Room of the Smithsonian Institution*, accessed 12 December 2011, <http://newsdesk.si.edu/about/stats>.



Figure 4.1: Aerial view of the Udvar-Hazy Center. Photo credit: <http://dc.about.com/od/photos/ss/PhotosUdvarHazy.htm>.

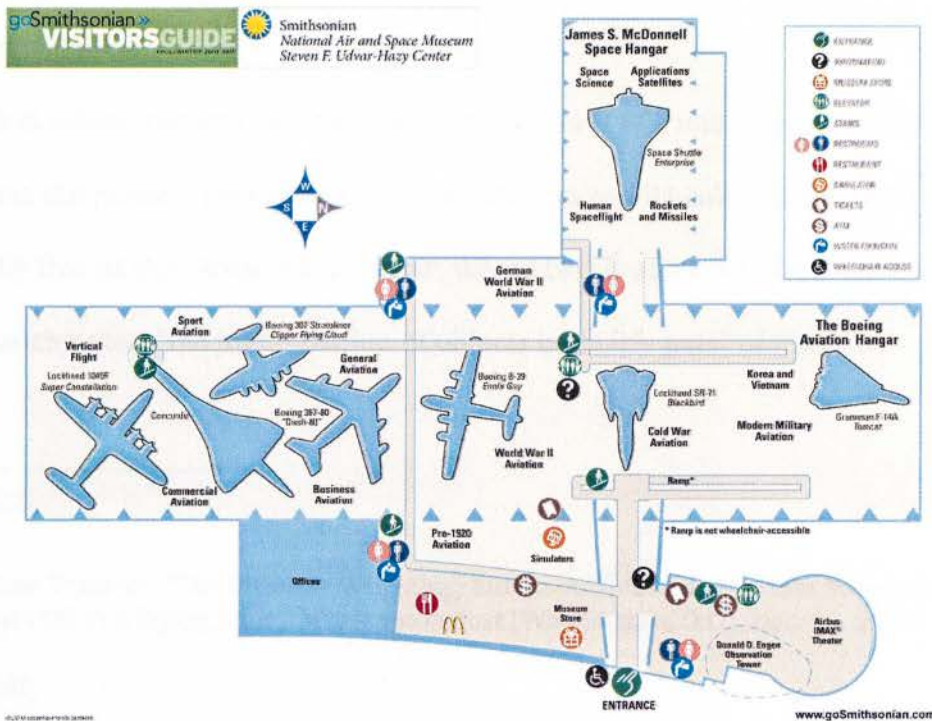


Figure 4.2: Schematic of the arrangement of artifacts at the Udvar-Hazy Center.

Hazy Center, some “hanging at several levels, suspended from the building’s huge trusses, and larger, heavier aircraft displayed on the floor. The suspended aircraft are displayed at various angles to demonstrate typical flight maneuvers.”<sup>3</sup> Two levels of catwalks, rising 25 and 42 feet above the ground floor respectively, allow visitors to view the artifacts from a variety of vantage points.<sup>4</sup>

Originally conceived as an open storage facility, the Udvar-Hazy Center would not offer the “contextually rich storytelling” found in the National Mall building. “At a late stage,” however, “the museum decided to insert exhibit stations to give at least some context for groupings of artifacts,” explains curator Dik Daso.<sup>5</sup> These explanatory panels offer but a glimpse of the historical, political, and cultural significance of the artifacts. Unlike at other museums, the interpretative framework is almost exclusively found in the design of the space rather than in the educational labels.

It is widely recognized that the physical layout of a museum significantly influences the public’s perception of the institution and its collection.<sup>6</sup> This is especially true at the Udvar-Hazy Center, where text is at a minimum. Curator Tom Crouch notes, “the juxtaposition of objects is clearly part” of the

---

<sup>3</sup> Daso, 365.

<sup>4</sup> Jacqueline Trescott, “The Ultimate Wingding; Smithsonian’s New Aviation Museum At Dulles Gets Off to a Flying Start,” *Washington Post* (Washington, D.C.), Dec. 12, 2003.

<sup>5</sup> Daso, 368.

<sup>6</sup> Gillian Thomas and Tim Caulton, “Communication Strategies in Interactive Spaces,” in *Exploring Science in Museums*, ed. Susan Pearce (London: The Athlone Press, 1996), 112.

interpretation scheme.<sup>7</sup> I suggest that the interpretation is embedded in the architecture, artifact layout, and label texts, which work in unison to decontextualize the artifacts. In the remainder of this chapter I describe the exhibition scheme and explore the implications of this style of historical presentation, specifically in the case of the controversial *Enola Gay*. This environment projects the museum's contents as technical triumphs, seemingly reinforcing the ideology of American exceptionalism.

#### **4.2 A Program of Decontextualization**

The Udvar-Hazy Center's secluded location prepares its visitors for the contextual isolation of the artifacts. Located in Chantilly, Virginia, the center is the most remote Smithsonian museum at a distance of 28 miles from the National Mall. The facility is found at the end of an access road that discreetly breaks off from the tangle of highways surrounding Dulles International Airport. Buffered by grassy grounds and bordered by woods, the Udvar-Hazy Center enjoys relative isolation, save for the audible interruptions of the low-flying commercial aircraft ascending or descending from the nearby runways. This location is physically and symbolically distant from the bustle of Washington society.

The architecture of the facility further removes the collection from the realm of human activity. With its 10-story high ceilings, exposed structural supports, and gargantuan bifold doors, the Udvar-Hazy Center accommodates machine more than museum-goer. Visitors feel like guests in the mechanical

---

<sup>7</sup> Tom Crouch (NASM curator) in discussion with the author, April 10, 2013.



environment of the grounded air and spacecraft, insignificant in comparison to the gigantic objects present at every angle and elevation. The industrial interior, with webs of steel cable and air ducts suspended from the ceiling, emphasizes the utility of the space. The bright lighting and chilled air are slightly uncomfortable and the poured concrete floor is unfriendly on visitors' feet and backs. Gaining access to the catwalks and viewing platforms is inconvenient, requiring a hundred-yard trek between entry points. Here, the needs of the technology prevail over those of the guests.

The exhibit text most explicitly communicates the museum's strategy of decontextualization. All artifact labels emphasize technical merits over historical or cultural significance. The brief explanatory panels at the Udvar-Hazy Center offer only basic technical details, such as the materials of production, the manufacturer's name and the artifact's function.<sup>8</sup> As labels are the traditional locus of interpretation, these bare text blocks may unsettle or even confuse the visitor.

This effect is clearly illustrated in the label accompanying the *Enola Gay* (see figure 4.3):

Boeing's B-29 Superfortress was the most sophisticated propeller-driven bomber of World War II and the first bomber to house its crew in pressurized compartments. Although designed to fight in the European theater, the B-29 found its niche on the other side of the globe. In the Pacific, B-29s delivered a variety of aerial weapons: conventional bombs, incendiary bombs, mines, and two nuclear weapons.

On August 6, 1945, this Martin-built B-29-45-MO dropped the first atomic weapon used in combat on Hiroshima, Japan. Three days later, Bockscar (on

---

<sup>8</sup> Catherine Allen, "The Steven F. Udvar-Hazy Center," *Technology and Culture* 45, no. 2 (2004): 360.

display at the U.S. Air Force Museum near Dayton, Ohio) dropped a second atomic bomb on Nagasaki, Japan. Enola Gay flew as the advance weather reconnaissance aircraft that day. A third B-29, The Great Artiste, flew as an observation aircraft on both missions.

*Transferred from the United States Air Force.*

**Manufacturer:** Boeing Aircraft Co. , Martin Co., Omaha, Nebr.

**Date:** 1945

**Country of Origin:** United States of America

**Dimensions:** Overall: 900 x 3020cm, 32580kg, 4300cm (29ft 6 5/16in. x 99ft 1in., 71825.9lb., 141ft 15/16in.)

**Materials:** Polished overall aluminum finish

**Physical Description:** Four-engine heavy bomber with semi-monoque fuselage and high-aspect ratio wings. Polished aluminum finish overall, standard late-World War II Army Air Forces insignia on wings and aft fuselage and serial number on vertical fin; 509th Composite Group markings painted in black; "Enola Gay" in black, block letters on lower left nose.<sup>9</sup>

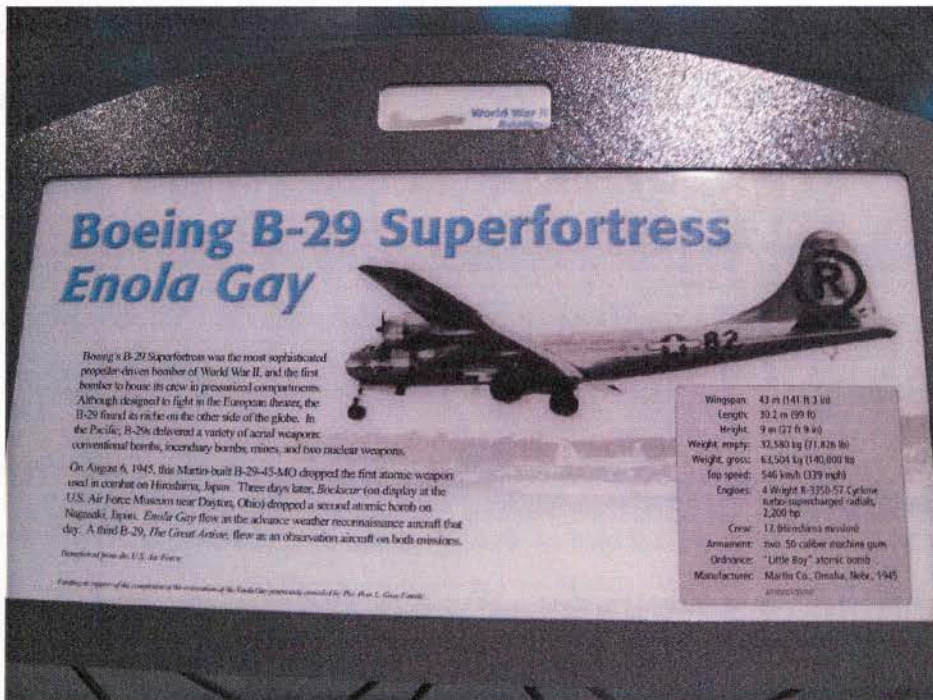


Figure 4.3: Label accompanying the *Enola Gay*. Photo credit: Christopher Holst.

<sup>9</sup> "Boeing B-29 Superfortress 'Enola Gay,'" *National Air and Space Museum Collections*, accessed 1 March 2013, <http://airandspace.si.edu/collections/artifact.cfm?id=A19500100000>.

This entry highlights the technological advancements represented by the aircraft, including the B-29's pressurized cabin and its capability to delivery a variety of ordnances. While an entire paragraph is dedicated the plane's atomic mission, only the relevant names and dates appear. The "two nuclear weapons" are tacked at the end of the list of the plane's possible cargo, which almost buries the Hiroshima mission in a discussion of the plane's more conventional operations. The second section of the label, which identifies the manufacturer, physical dimensions and materials of construction, further underscores the importance of the plane's technical specifications. Additionally, the atomic bomb is described as being used "in combat," when many historians have argued that the Japanese were caught unaware by the attack. Conspicuously absent is a discussion of the destructive effects of the atomic bomb, the dawn of the Cold War, and the realities of the nuclear age.

Decontextualization, while complementary to the museum's function as an open storage center, also conveniently circumvents many of the criticisms that arose during the *Enola Gay* affair. As a result of "The Last Act," NASM was charged with practicing "revisionist history," applying a dramatic spin to primary sources to rewrite the American past in terms of their liberal intellectual biases. At the Udvar-Hazy Center, director Dailey notes that NASM is "focusing on the facts."<sup>10</sup> This approach conforms to the "American ethic of objectivity," which, according to historian Richard Kaplan, "stands as the unchallenged commonsense of journalists,

---

<sup>10</sup> Elizabeth Olson, "Enola Gay Reassembled for Revised Museum Show," *New York Times* (New York, NY), Aug .19, 2003.

politicians, and public.”<sup>11</sup> <sup>12</sup> To this list Peter Novick would add historian. “The objective historian’s role,” in its ideal depiction, “is that of a neutral, or disinterested, judge; it must never denigrate into that of advocate or, even worse, propagandist.” It is renewed charges of the latter that NASM countered with its technology-heavy label scheme.<sup>13</sup> The “objective” presentations also reassert the trustworthiness of the institution, as it refrains from overt interpretation that could be perceived as obscuring historical realities. The “facts-only” displays also appease groups who promote opposing views of American history. During the planning of both NASM exhibits of the *Enola Gay*, the country was embroiled in a culture war, a “struggle over national identity- over the meaning of America, who we have been in the past, who we are now, and perhaps most important, who we, as a nation, will aspire to become in the new millennium.”<sup>14</sup> The groups who

---

<sup>11</sup> Richard Kaplan, “Objectivity in American Journalism,” in *The Routledge Companion to News and Journalism Studies*, ed. Stuart Allen (New York: Routledge, 2011), 26. In this work Kaplan offers a history of objectivity in journalism and the political roots thereof. Michael Schudson expands on this topic in chapters 4 and 5 of *Discovering the News: A Social History of American Newspapers* (New York: Basic Books, Inc., 1978).

<sup>12</sup> Objectivity is a theme that will be familiar to many of my readers, as it has been has been one of the guiding tenets of the scientific discipline since the nineteenth century. For a sophisticated discussion of historical variations in the concept, see Lorraine Daston and Peter Galison’s *Objectivity* (New York: Zone Books, 2007). Daston and Galison address criticisms of their work in “Objectivity and its Critics,” appearing in *Victorian Studies* 50, no. 4 (2008): 641-677. Some of the concerns were raised in Theodore Porter’s *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton, NJ: Princeton University Press, 1996). Porter’s focus is the implications of scientific objectivity in society at large.

<sup>13</sup> Peter Novick, *That Noble Dream: The “Objectivity Question” and the American Historical Profession* (Cambridge, UK: Cambridge University Press, 1988), 2. In this text Novick presents an account of the changing role of objectivity in the historical profession over the past century.

<sup>14</sup> James Hunter, *Culture Wars: The Struggle to Define America* (New York: BasicBooks, 1991), 50. In this work Hunter offers a discussion of the contemporary culture war and its

generated and joined the controversy in 1994-1995 worked at wresting the *Enola Gay* from the Smithsonian in order to appropriate its story to advance their version of military history as the authoritative one, and one which could be used to shape the nation's future. The high stakes of the plane's display, when viewed through the culture wars, explains the vitriol of that debate. The aircraft's current display, with its focus on names, dates, and technical specifications, offends few and can be appropriated by all.

#### 4.3 The *Enola Gay* and American Exceptionalism

The Udvar-Hazy Center lacks traditional interpretive presentations that visitors have come to expect from museums. The location, architecture, and labels seem to take the artifacts out of their historical, political, and cultural moments, and place them in an isolated technological trophy case. While an explicit interpretation is absent from the exhibition, the physical layout of the artifacts subtly suggests an effective narrative, which I explore in this section. Let me emphasize that this discussion presents one possible reading of the exhibition, which should not be confused with curatorial intent. I have been unable to locate similar analyses of the *Enola Gay* display at the Udvar-Hazy Center. While my reading of this artifact layout is the first of its kind, it is by no means definitive. Nevertheless, it is important to understand the possible interpretive implications of this historical presentation.

---

historical roots. For a specific treatment of the public history front of the culture war and the controversy over "The Last Act" exhibit, see *History Wars: The Enola Gay and Other Battles for the American Past*, edited by Edward Linenthal and Tom Engelhart (New York: Henry Holt and Company, 1996).

Perched at the very center of the aviation hangar, the *Enola Gay* holds court over the other World War II-era aircraft. Facing towards the southwest corner of the museum, the plane's familiar tailpiece and shining fuselage beckons visitors to make a pilgrimage to its front end (see figure 4.4). Museum-goers can view the plane from two primary vantage points: at ground level underneath the plane's iconic round glass cockpit, and from a two-story high bridge passing in front of the plane's nose. The cockpit is shielded from curious visitors and damaging projectiles by a plexiglass wall rising above the railing of the bridge.



Figure 4.4: The *Enola Gay* as viewed from the ground floor of the museum entrance. Photo credit: [http://photos.foter.com/91/steven-f-udvar-hazy-center-british-hawker-hurricane-with-p-38-lightning-and-b-29-enola-gay-behind-it\\_l.jpg](http://photos.foter.com/91/steven-f-udvar-hazy-center-british-hawker-hurricane-with-p-38-lightning-and-b-29-enola-gay-behind-it_l.jpg)

As visitors wind around the perimeter of the WWII corral en route to the *Enola Gay*, they pass an introductory display featuring informational panels and cases with bomber pilot paraphernalia, thirteen planes of American and Japanese

make (two of which are suspended from the ceiling), two missiles, and a glass display case featuring personal and professional mementoes belonging to Henry H. "Hap" Arnold, Commanding General of the United States Army Air Force.<sup>15</sup> Due west of this exhibit is a separate display of German World War II Aviation.

The largest combat aircraft on display at the National Air and Space Museum, the *Enola Gay* looms over the other artifacts in its vicinity. Its enormous presence (its body is over 99 feet long, its wingspan exceeds 141 feet, and its tailpiece reaches a height of 28 feet) is all the more imposing because of the bright yellow jacks that elevate the plane's tires an additional eight feet off the ground (see figure 4.5).<sup>16</sup> While this arrangement maximizes the number of aircraft that can be displayed, it also suggests the technological superiority of this Boeing Superfortress and perhaps the moral and cultural superiority of the nation that produced it.

The physical size and significance of this aircraft are so great that it can be seen in the background of all other planes in the exhibition. The layout seems to suggest that the wartime context of the other artifacts is only meaningful in the victorious (atomic) light of the achievements of the *Enola Gay*. Six of the total aircraft on display, all of Japanese design, are arranged under the shadow of the *Enola Gay*'s massive right wing (see figure 4.6). The subordinate position of these

---

<sup>15</sup> Richard H. Campbell, *The Silverplate Bombers: A History and Registry of the Enola Gay and Other B-29s Configured to Carry Atomic Bombs* (Jefferson, NC: McFarland and Company, 2005), 6.

<sup>16</sup> Norman Polmar, *The Enola Gay: The B-29 that Dropped the Atomic Bomb on Hiroshima* (Washington, DC: Brassey's Inc., 2004), 13 and 59. Martin Harwit, *An Exhibit Denied: Lobbying the History of Enola Gay* (New York: Springer-Verlag, 1996), 15.



Figure 4.5: The *Enola Gay* on eight-foot jacks. The P-47 Thunderbolt is visible under the landing gear. Photo credit: <http://blurblawg.typepad.com/.a/6a00e54f871a9c88330133f2e8b646970b-320wi>.

planes evokes an impression of Japan's technological inferiority and ultimate wartime defeat.

This sense of physically-arranged condescension is reinforced by the labels for the foreign aircraft, which include both the plane's official Japanese name as well as its American (male) nickname. The Nakajima J1N1-S, for example, is referred to as "Irving" and the Kawanishi N1K2-Ja Shiden Kai is designated "George." The masculine names are reminders of the male combatants in the aircraft cockpits, whereas the neighboring *Enola Gay* elicits a sense of innocence in its feminine moniker. As grouped with the *Enola Gay*, the gendered nature of the Japanese and American planes suggests a dynamic of male aggression in combat in contrast to female virtue. The male names for the Japanese aircraft are





Figure 4.6: Japanese aircraft under the shadow of the *Enola Gay*'s wing. Photo credit: [http://www.aeroinst.com/files/images/DSC\\_7332.JPG](http://www.aeroinst.com/files/images/DSC_7332.JPG)

also significant in light of the American tradition of designating machines, especially automobiles, ships, and planes, as female. The enemy's ferocity is diminished by their American nicknames, however; "Irving" and "George" conjure images of accountants rather than flying aces. Additionally, these generic wartime signifiers convey less respect than the labels for the American planes in which the artifacts are described by their model name and, if possible, the aircraft's specific name.

A narrative of technological progress can also be read into the display. Three of the most useful and successful American planes of WWII, the Republic P-47 Thunderbolt, the Lockheed P-38 Lightning, and the Grumman F6F-3 Hellcat, are in alignment with the *Enola Gay*. Forward facing, and rising from the ground or

suspended from the ceiling, the full power of the Army Air Forces flock is palpable in this vista. The Japanese planes, on the other hand, are all grounded. They face west, towards the other defeated Axis aircraft. Angled away from the American air forces, these planes seem to be off-course, both physically and symbolically.

The physical layout, reinforced by the label text, offers visitors a subtle interpretation of the historical events in which these planes participated. That American air power was technologically superior to efforts of the Japanese, as represented by their aircraft, is the major message conveyed by the exhibit. This apparently factual and neutral grouping is, I would contend, more highly charged in its presentation than it may appear at first glance. That the United States defeated Japan can be viewed as inherent in the collaborative resources that resulted in such technological prowess, the atomic bomb as well as the aircraft themselves. Such feats were required of a nation united, determined to right the wrongs of a society gone astray. Such efforts dwarfed the results of the Japanese military effort, which can be understood as due to America's advantages- advantages that, when viewed through the lens of military patriotism, are almost intensely imbued with a belief in the moral integrity of the winning side. That this victory was accompanied by moral concerns due to the *Enola Gay's* payload is deprived of any rhetorical power in this exhibition.

As curator David DeVorkin notes, this narrative draws heavily on the ideology of American exceptionalism, which charges the American people with "saving the world from itself" and maintaining "a high level of spiritual, political,

and moral commitment to this exceptional destiny.”<sup>17</sup> After all, wasn’t the primary purpose of the *Enola Gay*’s mission to end a seven-year-long worldwide conflict that began at the hands of ruthless dictators and maniacal emperors? Deborah Madsen describes how the ideology of American exceptionalism promotes “a coherent view of American warfare” in which “Americans fight on the morally correct side” and “Americans are more skilled than their opponents (so might meets right).” Historian James William Gibson further argues, “American technological and logistic superiority in warfare became culturally transmitted as signs of cultural-moral superiority.”<sup>18</sup> I suggest that assumptions of American exceptionalism are embedded even within this stripped down presentation of the *Enola Gay*, resulting in a symbolism that reinforces one particular historical interpretation of the aircraft and its mission.

The strong technological component of this narrative can be traced to America’s self-identification as a nation of invention and innovation. David Nye notes the centrality of technology to the earliest American understandings of their nation. “In the American beginning,” he writes, “when the former colonies reimagined themselves as a self-created community, technologies were woven into national narratives.”<sup>19</sup> Historian Thomas Hughes goes on to describe invention as

---

<sup>17</sup> Deborah Madsen, *American Exceptionalism* (Jackson, MI: University of Mississippi Press, 1998), 2. See Madsen’s work for a discussion of American exceptionalism, from its Puritan roots to the present.

<sup>18</sup> *Ibid.*, 157-158.

<sup>19</sup> David Nye, *America as Second Creation: Technology and Narratives of New Beginnings* (Cambridge, MA: The MIT Press, 2003), 1. Nye describes the uniquely American uses of

the United States' "most characteristic activity." Homeland to the likes of Thomas Edison, Wilbur and Orville Wright, and the architects of the Manhattan Project, America is "not nature's nation, but technology's nation," he contends.<sup>20</sup> One of the central features of American identity, then, when coupled with the "controlling ideology of exceptionalism," can be used to justify "acts of violence."<sup>21</sup> It is for this reason that many veterans describe the atomic bomb, in all its technological glory and human horror, as "merciful."<sup>22</sup>

The ideology of American exceptionalism is not unique to the *Enola Gay* display. Indeed, it permeates the entire hangar and is especially palpable in the museum's opening vista, which elicits a sense of national pride in the site's visitors. As they funnel into the facility from the second-story entrance, they are confronted with the ominous SR-71 *Blackbird* and the space shuttle *Discovery* framed by the American flag. This powerfully patriotic arrangement at the intersection of the space and aviation hangar encourages museum-goers to associate these technological triumphs with American military and moral superiority (see figure 4.7).<sup>23</sup>

---

technology in foundational narratives. He tells this story through specific technologies, including the axe, mill, railroad and canal.

<sup>20</sup> Thomas Hughes, *American Genesis: A Century of Invention and Technological Enthusiasm, 1870-1970* (Chicago: The University of Chicago Press, 2004), 2.

<sup>21</sup> Madsen, 158.

<sup>22</sup> John W. Dower, "Three Narratives of Our Humanity," in *History Wars: The Enola Gay and Other Battles for the American Past*, ed. Edward Linenthal and Tom Engelhart (New York: Henry Holt and Company, 1996), 73.

<sup>23</sup> Adapted from Emily Margolis' unpublished manuscript "American Identity at 'America's Hangar': Technological Prowess and Patriotism at the Steven F. Udvar-Hazy Center."

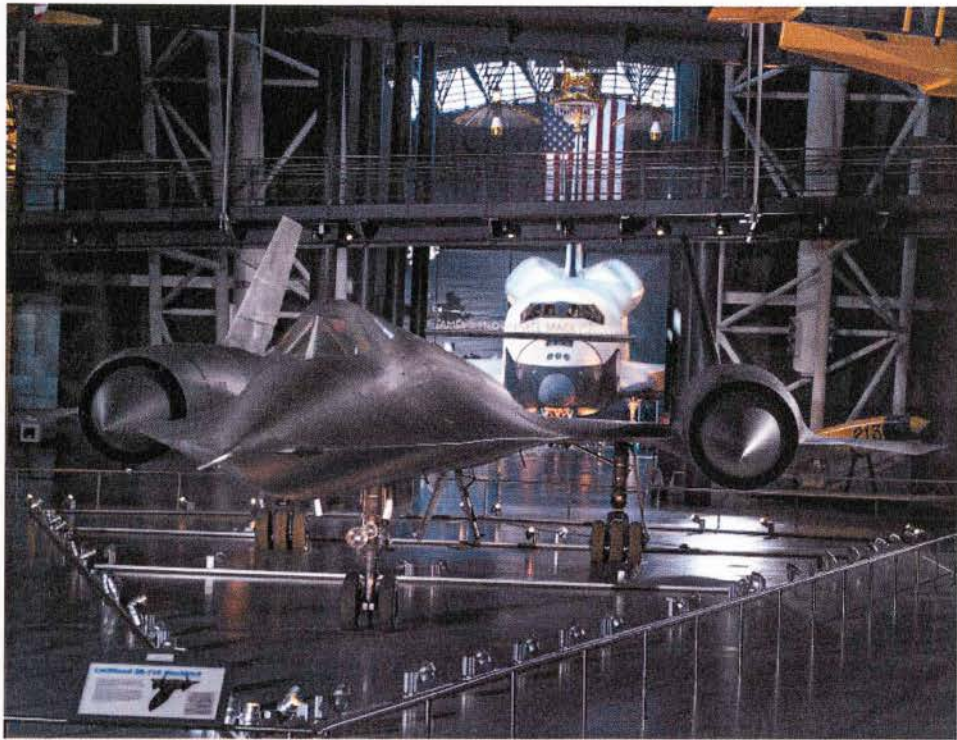


Figure 4.7: Patriotic *Blackbird-Enterprise* axis. Since April 2012, space shuttle *Discovery* has replaced *Enterprise* as the centerpiece of the McDonnell Space Hangar

Although NASM contends “the Hazy project, by its very nature, is fairly apolitical,” the physical layout of the space and artifacts do make significant statements about America’s military past- it is not only the written word that can communicate meaning and sub-text.<sup>24</sup> Limiting the text to “facts” is simply not the same as refraining from interpretation. Whether or not the reading of the exhibition that I have presented in this chapter was intended by the museum, it is one possible narrative communicated to visitors. In the next chapter I explore visitor responses to the display of the *Enola Gay* and draw conclusions about the way historians and museum visitors interpret the past.

---

<sup>24</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

## Chapter 5

### Recovering Visitors' Voices

#### 5.1 Introduction

In approaching this project it was important to me that I recover the voices of the museum visitors. The Smithsonian is popularly known as "America's Attic," but in the case of "The Last Act," it seemed to me that only the anti-nuclear aunts and conservative uncles had a say in what relics could come down into the living room. According to historian Paul Boyer, the *Enola Gay* affair revealed a "considerable chasm between the methodology of historians and the way many Americans think about the past, especially the portion of the past encompassed by their own experiences and memories."<sup>1</sup> This couldn't be farther from the truth. As I understand it, "The Last Act" exposed the ways in which special interest groups think about and harness the past for contemporary purposes. The average American was simply not represented in this story.

Since the end of World War II, a variety of nationwide opinion polls have revealed the prevalence of more moderate feelings about the bomb than those expressed by the Air Force Association, the Committee for a National Discussion of Nuclear History and Current Policy, and the Japan Confederation of A- and H-Bomb Sufferers. Historian Barton Bernstein concludes that, "interpreted collectively, these polls indicated wide differences within the American public, with most

---

<sup>1</sup> Paul Boyer, "Whose History is it Anyway? Memory, Politics, and Historical Scholarship," in *History Wars: The Enola Gay and Other Battles for the American Past*, eds. Edward Linenthal and Tom Engelhart (New York: Henry Holt and Company, 1996), 134.

Americans endorsing the use of the bomb, most believing its use had been moral, and most preferring that another way had instead been tried to produce Japan's surrender."<sup>2</sup> Curator Michael Neufeld notes, "there was a lot of ambivalence about the atomic bomb [among the American public, but] those who were ambivalent were not as emotionally engaged."<sup>3</sup> For this reason, there was no one to advocate for the museum's more than six million patrons, whose opinions on the bombing were as diverse as the American population itself.

In this chapter I try to give voice to those who were drowned out by the special interest groups the last time the *Enola Gay* went on display. I hope that their responses to the aircraft at the Udvar-Hazy Center will shed light on ways to improve the exhibition. Although the museum-goers were not consulted in the construction of the exhibition, their feedback can still enhance the visitor experience and help the museum "increase the public's understanding of, and involvement in, the development of aviation and spaceflight," as mandated in its mission statement.<sup>4</sup>

---

<sup>2</sup> Barton Bernstein, "The Struggle Over History: Defining the Hiroshima Narrative," in *The Bombing of Hiroshima and Nagasaki: Judgment at the Smithsonian*, ed. Philip Nobile (New York: Marlowe and Company, 1995), 203-204.

<sup>3</sup> Michael Neufeld (NASM Curator) in discussion with the author, April 10, 2013.

<sup>4</sup> "National Air and Space Museum Press Kit," *National Air and Space Museum News and Events Press Room*, accessed 3 December 2011, [http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview\\_nasm.cfm](http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview_nasm.cfm).

## 5.2 Visitor Comments Received by the National Air and Space Museum

There are two primary means by which visitors can provide feedback to the National Air and Space Museum. In addition to completing comment cards on-site, museum-goers can contact Visitor Services staff electronically with their suggestions and inquiries. NASM does not actively solicit or preserve visitor responses, however. The sources discussed below were kindly assembled by the Visitor Services staff for the purpose of this research project. I am working with seventeen electronic responses to and inquiries about the *Enola Gay*, as well as feedback on two paper comment cards.<sup>5</sup> Earlier comments must have been registered, but the museum did not save them, perhaps because they were deemed historically unimportant or because the volume of visitor feedback complicates their preservation.

When I first began my inquiry into visitor responses to the *Enola Gay* exhibit at the Udvar-Hazy Center, curator Michael Neufeld sent me the following poem, which he had recently received from a Washington, D.C.-area amateur poet:

Enola Gay

One can step quietly past the silver machine hung mid-air,  
admire her wingspan

extending above all the other warplanes  
in the Boeing hangar, a mother eagle

shielding her young, this fortress named  
by a pilot for his own mother,

and can note the excruciating precision of her cockpit,

---

<sup>5</sup> NASM redacted all identifiable information from the electronic responses, including names and e-mail addresses. The comment cards were completed anonymously.



reflective surfaces gleaming and precise,  
and know nothing about Little Boy, the payload inserted  
into her bay in the Tinian darkness,  
nothing of the white roses and red roses  
burning in the ruins,  
nor of the clocks stopped forever in their towers  
at 8:15 a.m. Japan Time.<sup>6</sup>

This powerful piece speaks to the poet's experience at the Udvar-Hazy Center as he observes the shining aircraft and its dominating physical presence. The poet's description of the "mother eagle" of the hangar echoes my gendered reading of the exhibition, as well as the flock-like quality of the artifact arrangement. He also notes the absence of seemingly significant details of the *Enola Gay's* history, including a discussion of the plane's atomic ordnance and the destruction it wrought on Hiroshima. In discussing these beautifully phrased sentiments, Neufeld noted that the poem was a "kind of a canary in the coal mine" and that "there may be more people out there that have that kind of reaction, except we don't have that in any systematic form."<sup>7</sup>

The records from Visitor Services confirm Neufeld's suspicions. The nineteen total responses fall into two primary categories: a desire for additional information and expressions of personal connection or ownership. Requests in the first group vary from abstract to concrete. The poem, which expresses a specific interest in the weapon and its human cost, falls into the latter subset. Similarly,

---

<sup>6</sup> Martin Dickinson, e-mail message to the National Air and Space Museum.

<sup>7</sup> Michael Neufeld (NASM curator) in discussion with the author, April 10, 2013.

one retired member of the United States Coast Guard specifically inquired about the Long Range Navigation (LORAN) equipment on the aircraft.<sup>8</sup> A family genealogist wanted to know more about the escort planes on the Hiroshima mission, suspecting a relative may have participated in the event.<sup>9</sup> At least two individuals requested interior tours of the *Enola Gay*. One was an 11-year-old who asked for permission to film the inside of the aircraft for his YouTube channel. He wrote, "our goal is to promote our history by showing things on any particular subject that the general public does not get a chance to see."<sup>10</sup> Others made direct recommendations for improvements to the exhibition. On a comment card received in March 2011, an anonymous visitor wrote, "it might be useful to have a life-size model of 'little boy' under the fuel carriage. This would give a better understanding of the plane, the bomb hatch, and the small scale of such destructive weapons."<sup>11</sup> Finally, one irate patron wrote, "shouldn't you have a bit more in the signage on such hideous exhibits?"<sup>12</sup>

Four of the commenters praised the docent presentations. I choose to read these expressions of gratitude as evidence of a satisfied need for further knowledge. One parent described the docent as "thorough" and "highly

---

<sup>8</sup> E-mail message to the National Air and Space Museum Visitor Services, March 4, 2013.

<sup>9</sup> E-mail message to the National Air and Space Museum Visitor Services, March 25, 2011.

<sup>10</sup> E-mail message to the National Air and Space Museum Visitor Services, December 20, 2012.

<sup>11</sup> Comment card to the National Air and Space Museum Visitor Services, March 16, 2011.

<sup>12</sup> E-mail message to the National Air and Space Museum Visitor Services, October 10, 2011.

knowledgable [sic],” noting, “the tour was a great educational experience for the whole family.”<sup>13</sup> An unidentified visitor wrote:

I just had to drop a note of thanks for a wonderful tour led by Dick H... I find it hard to express how meaningful it was to have him share his passion for and stories about the collection and his life... All of his stories and anecdotes were great, but if I were to pick one example that had the most impact on me personally it would be his perspective on the *Enola Gay*. As we were standing there taking in the gravity of what this plane did, my mind was processing the horrors it inflicted. At that point, Dick described his situation: he was on Saipan after having moved up the chain of islands with the only remaining step being to attack Japan itself, a deadly prospect. The dropping of the bombs and the end of the war likely saved his life and the lives of his fellows in the Pacific theater. That is an incredibly powerful perspective I don't think I would have thought about had it not been for Dick.<sup>14</sup>

I found this note especially significant because, in despite of the aircraft's iconic status, the visitor was able to consider alternative perspectives on its history through a docent-facilitated experience. This stands in contrast to Crouch's assertion that “people are going to know how they feel about that airplane before they get to it.”<sup>15</sup> The moments spent in front of the *Enola Gay* can profoundly alter the way people feel about the controversial aircraft and about our history.

The other category of responses amounts to claims of ownership of the plane, motivated by personal and family histories. One man wrote to the museum with the offer to donate a photograph from the airbase on Tinian Island where the *Enola*

---

<sup>13</sup> E-mail message to the National Air and Space Museum Visitor Services, March 19, 2011.

<sup>14</sup> E-mail message to the National Air and Space Museum Visitor Services, December 28, 2011.

<sup>15</sup> Tom Crouch (NASM curator) in discussion with the author, April 10, 2013.

*Gay* had been stationed in advance of the Hiroshima mission.<sup>16</sup> Another visitor interested in an interior tour of the aircraft justified his request through his wartime service as a B-29 mechanic on the island of Guam.<sup>17</sup> Other claims to the *Enola Gay* were more dramatic, such as one request to return the aircraft to Walker Air Force Base in New Mexico, where the plane had been briefly stationed during the war.<sup>18</sup> All of these requests speak to the personal significance of this aircraft, despite the fact that the individual connections are second-degree at best.

These sources are useful for providing a general outline of public responses to the aircraft. The visitors to the Udvar-Hazy Center represent a small subset of the American population, however. As the facility is not easily accessible, as noted in chapter four, due to its distance from the city center and the lack of public transportation in the area. Consequently the Udvar-Hazy Center is a special destination for history buffs, aviation enthusiasts, retired military personnel, and their families, as well as students and chaperones on school field trips. The subset of visitors that pause to complete a comment card or make the effort to write to the museum after returning home represent only the most enthusiastic or offended of this group.

---

<sup>16</sup> E-mail message to the National Air and Space Museum Visitor Services, January 26, 2013.

<sup>17</sup> E-mail message to the National Air and Space Museum Visitor Services, April 18, 2012.

<sup>18</sup> E-mail message to the National Air and Space Museum Visitor Services, February 19, 2011.

### 5.3 Social Media Responses to the *Enola Gay* Exhibition

Communication technologies have radically changed since the *Enola Gay* affair. The Internet, and especially social media platforms it now supports, allows every visitor to voice their opinion and share their experiences. A search of Twitter posts using the search term “#enolagay” revealed ten public tweets related to the aircraft’s display at the Udvar-Hazy Center. Many more remarks may exist in private Twitter feeds or without the identifying hashtag. Most of the open tweets reflected a sense of excitement upon viewing this historic plane. The generic statements such as “Got to see the plane that dropped the atomic bomb on Japan” and “The REAL Enola Gay. Unbelievable. This baby changed the entire world with one bomb” acknowledge the aircraft’s iconic status without revealing the author’s position on its controversial history.<sup>19</sup> All of these posts include a photo of the *Enola Gay* taken by the user at the time of his or her visit. The Twitter commenters represented in this study flocked to the museum from near and far, and included teens and adults.

One tweet deviates from this pattern. Posted by Eric Singer, who collaborates with Peter Kuznick of the Committee for a National Discussion of Nuclear History and Current Policy, the tweet links to a Philadelphia *Inquirer* article titled “*Enola Gay* exhibit prompts outcry The restored bomber will go on display today, with no mention of the 140,000 people killed.” Singer introduces the

---

<sup>19</sup> Sarah Buono, Twitter post, May 18, 2012, 11:09 pm, [https://twitter.com/sarah\\_buono/status/203698844582682624](https://twitter.com/sarah_buono/status/203698844582682624). Ian McCourt, Twitter post, December 12, 2012, 5:08 pm, [https://twitter.com/Ian\\_McCourt/status/278999813767454721](https://twitter.com/Ian_McCourt/status/278999813767454721).

link with the message, "Boycott #Smithsonian: still displaying #EnolaGay, Hiroshima plane, without context as 'magnificent achievement.'"<sup>20</sup> Given Singer's association with Kuznick's Committee, he cannot be considered a member of the public for the purposes of this study. His comments may speak to a number of museum-goers, however. Both Singer and I lament the decontextualization of the *Enola Gay*. While he recommends protesting the museum, in the next chapter I suggest ways to improve the exhibition through greater public engagement with NASM.

Aside from Singer's remarks, the other tweets acknowledge the user's museum visit, but do not offer any clues to his or her interpretation of or experience with the aircraft. Perhaps these responses can be explained in terms of the limitations of the platform. Twitter constrains users to a maximum of 140-character long messages; it is not conducive to diatribe and debate, although some individuals utilize Twitter in this way. I would be interested to expand this search to Facebook posts. With the possibility of long-form communication, Facebook posts may offer greater insight into the visitor experience. Blogs may also offer similar benefits.

#### **5.4 Popular History-Making**

My preliminary study exposed two primary trends in the visitor experiences with the *Enola Gay* exhibit at the Udvar-Hazy Center. First, visitors desire greater historical and cultural context for the aircraft. Second, the plane

---

<sup>20</sup> Eric Singer, Twitter post, April 16, 2011, 10:06 pm, <https://twitter.com/ericssinger/status/59452643369693184>.

evokes powerful personal and family memories, which visitors are eager to share. These findings fit with national patterns of popular uses of history.

In her plenary address to the Joint Meeting of the History of Science Society and the Society for the History of Technology, historian Katherine Pandora laments that the historical profession views “members of the public as historically deficient,” lacking an interest in and knowledge of the past.<sup>21</sup> In the mid-1990s, historians Roy Rosenzweig and David Thelen embarked on a nationwide survey to challenge the deficit hypothesis. Thousands of Americans participated in telephone interviews with graduate student volunteers about how they use and understand the past. Rosenzweig and Thelen describe their research methods and provide a detailed commentary on their data in *The Presence of the Past: Popular Uses of History in American Life*.

This landmark study revealed that Americans “make the past part of their everyday routines and turn to it as a way of grappling with profound questions about how they live.” The survey respondents “did not view the past as distant, abstract, or insignificant” and in fact “dedicate[d] considerable time, money, and even love to historical pursuits.”<sup>22</sup> Additionally, they often “blurred [the line] between ‘personal’ and ‘national’ pasts,” turning “national events into settings for

---

<sup>21</sup> Katherine Pandora, “What Have We to Do with Mr. Everyman, or He with Us?: Reflections on Professionalism, the Public, and the Digital Age,” (presentation, Joint Meeting of the History of Science Society and the Society for the History of Technology, Minneapolis, MN, November 3-6, 2005).

<sup>22</sup> Roy Rosenzweig and David Thelen, *The Presence of the Past: Popular Uses of History in American Life* (New York: Columbia University Press, 1998), 18 and 34.

personal stories."<sup>23</sup> Many of the visitors to the Udvar-Hazy Center who contacted the museum about the *Enola Gay* connected the aircraft to personal or family experiences. The *Enola Gay* seemed to represent all of World War II, especially the war in the Pacific Theater, and evoked personal accounts of this challenging period in America history.

NASM curator Roger Launius provides a useful framework for understanding popular hierarchy of historical accounts. He explains:

The first is a sphere of personal experience, containing events that individuals participated in personally or that had salience in their individual lives... Less immediate but still resonating with Americans is a sphere of history that is not intimate to the individual but that is known through members of the family, close friends, and mentors. The third sphere is the past that has no special connection through loved ones or personal experience.<sup>24</sup>

National accounts of American history fall into Launius' third sphere. Rosenzweig and Thelen also found that these large-scale stories were less compelling to the American public. "The absence of conventional historical narratives and frameworks surprised us," they write. "The narratives of American national progress- the landing of the Pilgrims, the winning of the American Revolution, the writing of the Constitution, the settling of the West- that have been told for generations in grade school classes and high school textbooks" did not feature prominently into the survey responses.<sup>25</sup> To this list of events we could add the

---

<sup>23</sup> Rosenzweig and Thelen, 22.

<sup>24</sup> Roger D. Launius, "American Memory, Culture Wars, and the Challenge of Presenting Science and Technology in a National Museum," *The Public Historian* 29(1), 23-24.

<sup>25</sup> Rosenzweig and Thelen, 9.



bombing of Hiroshima. Although my study was not comprehensive, only one response- the poem- spoke of the national narrative of military prowess that I contend is communicated in the physical layout of the exhibition. In light of the workings of popular history-making, the embedded interpretation of the *Enola Gay* at the Udvar-Hazy Center, if apparent to the visitors, is rendered unimportant in their interactions with the aircraft.

Rosenzweig and Thelen would also be unsurprised by the demand for more historical, political, and cultural context in the *Enola Gay* exhibition. Their survey respondents “thought that the history they heard about in the classroom was too neat and rosy.” From their own life experiences, they had come to “see the ambiguities [and] multiple perspectives” as characteristic of the past.<sup>26</sup> The visitor comments show that the *Enola Gay* display at the Udvar-Hazy Center falls short of the complex rendering of the past that the public expects.

## 5.5 Continuing Research and Conclusions

This inquiry omitted an important, albeit informal, means of feedback: interactions with docents. I would be interested to interview docents at the Udvar-Hazy Center to learn more about their interactions with visitors, including the comments and questions that arise in conversation with museum guests. Further research could also include on-site visitor surveys, conducted through the Smithsonian Office of Policy and Analysis. Additional data is required to get a clearer picture of the range of responses to the *Enola Gay* as it is displayed at the

---

<sup>26</sup> Rosenzweig and Thelen, 111 and 90.

Udvar-Hazy Center. While Dickinson's poem echoes my interpretation of the exhibition, it is unclear how many others share this experience.

Additionally, I would like to further explore visitor responses on social media platforms. While private Twitter and Facebook accounts cannot be viewed without "following" or "friending" the users, respectively, any communication made with the National Air and Space Museum may be visible. In the future I will search for relevant tweets directed "@airandspace," NASM's Twitter handle. Additionally, I will look for *Enola Gay* related posts on NASM's Facebook page. I hope to locate blogs through Google's blog search or through blog discovery tools like Alltop and Blog Catalog.

In the next chapter I offer recommendations for improvements to the exhibition that reflect both the results of my study, as well as Rosenzweig and Thelen's findings about popular uses of history. I believe these suggestions will benefit both the visitors and the museum. I will say now, however, that it would also be advantageous for NASM to systematically collect and retain visitor responses to all of their exhibitions, whether electronic or paper.

## Chapter 6

### Moving Forward

#### 6.1 A Learning Moment

Standing nose to nose with the *Enola Gay* is certainly a powerful, if not emotional moment, both for museum-goers and for the staff of the National Air and Space Museum. This Boeing behemoth, brilliantly shining like a beacon of righteousness as it towers over enemy aircraft, elicits a sense of national pride and technological optimism in the visitors who flock to “America’s Hangar.” To the museum’s curators, however, the aircraft is a reminder of a dramatic political controversy that changed the way they practice and present history. The *Enola Gay* also represents to them an unfulfilled promise to educate the public about the complex cultural and political consequences of aviation.

This moving experience is not a time for learning, except for those individuals ignorant of the dramatic conclusion of World War II. The decontextualized displays at the Udvar-Hazy Center, a product of the open storage function of the facility, leave history-hungry visitors unsatisfied. As evident in the feedback received by NASM’s Visitor Services staff, the museum guests feel a strong connection to the aircraft and wish to learn more about its place(s) in private and public narratives of American history. These findings are in agreement with the broader trends revealed in Roy Rosenzweig and David Thelen’s national study of popular uses of history in American life. The authors note that the survey respondents “wanted to participate in the larger

past, to experience it, to reach into history by reaching outward from their lives. They wanted to personalized the public past.”<sup>1</sup>

I conclude this thesis with suggestions for ways to make the exhibit more compatible with methods of popular history-making, while remaining true to the museum’s goals and objectives. I believe that a few additions to the exhibition can transform the visitor experience into a personal and educational one, for everyone from the disinterested teen to the history buff. I make my recommendations with the plane’s controversial nature and contentious exhibit history in mind. I believe that participatory, user-driven activities can enhance the visitor experience, while meeting the museum’s needs. This discussion is inspired by my exploration into museum studies, as well as my experience as an intern at both the National Air and Space Museum in downtown Washington, D.C., and the National Museum of American Jewish History in Philadelphia.

## **6.2 An Exhibit Reimagined**

Rosenzweig and Thelen’s national survey suggests that the American public has a great interest in and desire to connect with the past, as well as the analytic skills to do it. The survey respondents revealed an especially strong sense of history in the presence of historical artifacts. In fact, “artifacts brought

---

<sup>1</sup> Roy Rosenzweig and David Thelen, *The Presence of the Past: Popular Uses of History in American Life* (New York: Columbia University Press, 1998), 115.

[them] closer to experiences from the past than even eyewitnesses could.”<sup>2</sup> In most history museums, objects are presented with some context, which helps transport visitors to another time and place. The visitor experience at the Udvar-Hazy Center differs greatly from other history museums, however, as the decontextualized displays encourage technological appreciation rather than historical understanding.

Over the last decade the museum community has embraced participatory exhibition designs, which engage visitors in personalized environments where they “create, share, and connect with each other around content.” The museum provides “scaffolding” for the participatory experiences in the form of “supportive resources, tasks, and guidance upon which learners can build their confidence and abilities.”<sup>3</sup> This “scaffolding” defines acceptable means and forms of contributions. Experience shows that in a well-designed exhibition, a single response leads to individual reflection, while the overall effort can ignite a wider dialogue in local and online communities.

In his afterword to *The Presence of the Past*, Thelen advocates for a “participatory historical culture.”<sup>4</sup> I also believe that participatory activities

---

<sup>2</sup> Rosenzweig and Thelen, 106.

<sup>3</sup> Nina Simon, *The Participatory Museum* (Santa Cruz: Museum 2.0, 2010), <http://www.participatorymuseum.org/read/>. In this work Simon presents a theory of participatory learning derived from studies of Internet usage habits and describes applications of this theory in museum exhibitions across the world.

<sup>4</sup> Rosenzweig and Thelen, 190.

can greatly enhance the visitors' experiences with the *Enola Gay*, and that the suggested activities can be easily incorporated into the existing display. As I see it, the exhibit would remain largely unchanged, save for the addition of electronic kiosks for visitor responses. These stations, similar to the ones throughout the museum providing virtual tours of aircraft interiors, would be installed on the railings on the ground floor and bridge around the *Enola Gay*. The kiosks, which offer "scaffolding" for the exercise, would follow a blog-style format and prompt visitors with a variety of questions. Visitors would have an opportunity to respond to the prompts, comment on other posts, and add topical tags to both. The kiosk content would be synched to a website, allowing individuals unable to visit the museum to join the conversation.<sup>5</sup> The kiosks would be self-sustaining, with in-person and online participants tagging posts and moderating the conversation by marking inappropriate content for review by museum staff. If the museum wished to take greater control over the content, it could implement a time delay to allow for staff approval before the posts are published.

The museum's primary responsibilities would include maintaining the website and physical equipment, reviewing comments tagged as questionable, and selecting the prompts. Not only will the prompts shape the visitor experience, but they will also generate information of historical interest.

---

<sup>5</sup> This was inspired by the "Contemporary Issues Forum" at the National Museum of American Jewish History, where visitors are invited to upload their responses to provocative prompts to the museum's website before posting them on the gallery walls.

Questions such as “what does this aircraft mean or represent to you?” and “how does this exhibit make you feel?” would be meaningful to both museum-goers and historians. Most of the social interaction will occur virtually, so the respondents will feel free to express themselves with minimal self-censorship. During the controversy over “The Last Act,” the opinions of special interest groups dominated the national conversation about the exhibit. The individual reflections collected at the kiosk or on the companion website will give voice to any and all parties, allowing for the reconstruction of a more nuanced understanding of the *Enola Gay*'s place in American memory. While some of the responses to the aircraft may be historically inaccurate, they will still be historically significant. The popular mythologies created around the *Enola Gay* are integral to the plane's history and legacy.

As seen with mostly self-moderated sites such as Wikipedia, false information does not persist online for long.<sup>6</sup> “Expert” visitors to the site or kiosk would be able to counter misinformation with reasoning and resources. The website can also pick up where the museum labels and docents leave off. While the volunteer docent tours are engaging, they only add detail to the incontrovertible series of names and dates presented in the labels.<sup>7</sup> On the

---

<sup>6</sup> In a 2005 study in *Nature*, the accuracy of Wikipedia articles was found to be comparable to entries in the *Encyclopedia Britannica* (Daniel Terdiman, “Study: Wikipedia as accurate as Britannica,” CNET News Consumer Services, 15 December 2005, accessed 21 April 2013, [http://news.cnet.com/2100-1038\\_3-5997332.html](http://news.cnet.com/2100-1038_3-5997332.html)).

<sup>7</sup> The author attended docent presentations of the *Enola Gay* on July 11, 2012 and February 15, 2013. The volunteer docents, many retired military or commercial

electronic platform, however, NASM staff could post additional historical resources, including relevant primary and secondary source materials. This would require little additional research for museum staff, as most of this information was collected in preparation for "The Last Act." The presence of this material would also enhance the authority of the exhibition, as Rosenzweig and Thelen note that their survey respondents favored "presentations of the past that were grounded in primary sources."<sup>8</sup>

NASM and its visitors stand to benefit from implementing a more participatory exhibit. I believe that the decontextualized display at the Udvar-Hazy Center, while appropriate for an open storage facility, is also, in part, a response to the uproar over "The Last Act." While the lack of interpretation has been criticized, the facts about the aircraft and its mission have not been challenged. My proposed changes allow for the presentation of different perspectives and interpretations without explicit museum endorsement. Special interest groups would find it difficult to challenge the diversity of opinions expressed by NASM's many visitors. Additionally, the groups that charged the museum with "sins of omission" could not renew these claims, as the visitors would help fill in the gaps in content and interpretation.

---

pilots, are responsible for preparing their own scripts. The docents complete a rigorous training course with museum staff and curators.

<sup>8</sup> Rosenzweig and Thelen, 100.



The information collected can help historians better understand the ever-changing legacy of the *Enola Gay*, myths and all. Historian David Glassberg notes, “the analysis of public history as popular culture, emphasizing the multiplicity of possible meanings for each historical image, suffers from the same limitation as the analysis of public history as political culture: neither approach tells us much about how actual people respond to the history they see and hear.”<sup>9</sup> In my revised exhibit, historians would have an opportunity to collect the sometimes-elusive visitor responses in a historically relevant way. The feedback would also help the museum identify patterns of misinformation and create programs and publications aimed at interrupting the propagation of false ideas.

The suggested participatory elements would create a space for social interaction and discourse. The American people have never had an opportunity to collectively digest the atomic bombing of Hiroshima and its aftermath. Since Truman’s announcement of the event, through the decades of media censorship, to the inaccessibility of government documents, the details of the event have not been publicly fleshed out. As exemplified by the cancellation of “The Last Act,” any attempt at a national discussion has been squashed. Rosenzweig and Thelen’s results show, however, that Americans are interested in and capable of assessing the physical destruction and

---

<sup>9</sup> David Glassberg, *Sense of History: The Place of the Past in American Life* (Amherst, M.A.: University of Massachusetts Press, 2001), 16.

historical consequences of the Hiroshima bombing. NASM could provide a desperately needed space for this public discourse.

Finally, the exhibit will help the museum bridge the generational gap among museum visitors. In a 2007 article in *The Public Historian*, NASM curator Roger Launius ponders, "when the World War II generation passes from the scene and the majority of twentieth-century history depicted in the museum fades deeper into the past, will the museum become less popular, less salient, less inviting?" He continues:

there are dark areas in this sphere of historical understanding that may be further illuminated through public presentations of the past, but for most people, these dark areas, however well interpreted, will never enjoy the salience reserved for events with personal significance.<sup>10</sup>

I believe that my suggestions will help keep the *Enola Gay* and other artifacts at the Udvar-Hazy relevant. This self-directed and self-sustaining discussion will always be of interest to the visitors whose contemporary concerns and personal connections drive the interactive exhibition.

### 6.3 Concluding Remarks

Let me conclude by noting that this research project was motivated by an attempt to explain my experiences, as a historically-trained visitor, at the Udvar-Hazy Center. Like the awestruck museum-patrons interviewed in the *Washington Post* and *New York Times*, I too am filled with a sense of reverence

---

<sup>10</sup> Roger D. Launius, "American Memory, Culture Wars, and the Challenge of Presenting Science and Technology in a National Museum," *The Public Historian* 29(1), 24-25.

and patriotism on my visits to the facility. Upon viewing the space shuttle *Discovery* for the first time, with a small American flag painted on its worn heat tiles and an even larger one unfurled behind the shuttle's main engines, I nearly welled up. As a historian of technology, I could not reconcile this patriotic feeling with my knowledge of the controversial histories of the shuttle and other artifacts in the hangar. My inquiry has led me to uncover a physically embedded narrative of American exceptionalism, which I suspect is responsible for drawing out these grand emotions.

In this paper I have presented a history of the Udvar-Hazy Center, with special focus on the legacy of "The Last Act." I believe the specter of this cancelled exhibit influenced many aspects of the facility, especially the display of World War II aviation and the *Enola Gay*. I offered my historical interpretation of the exhibit as an attempt to understand the consequences of the plane's current presentation. I then presented an analysis of visitor feedback, directed to the museum and published online, and placed it in the broader discussion of the place of the past in American life. Finally, I offered suggestions for the improvement of the exhibition in light of the visitor responses and with special sensitivity toward the *Enola Gay's* controversial exhibition history.

I hope this project will help public historians emerge from the shadow of the *Enola Gay* affair. I believe that popular responses to the aircraft's current display can both improve museum exhibitions and increase historical

understanding of the plane's popular legacy. In the case of the *Enola Gay* at the Udvar-Hazy Center, the participatory activities that I suggested can help the museum achieve both objectives at once. These recommendations are relevant to any artifact in any museum, however. But first historians must recover the voices of the American public.

## Bibliography

- Allen, Catherine. "The Steven F. Udvar-Hazy Center." *Technology and Culture* 45, no. 2 (2004): 358-362.
- Alperovitz, Gar. "Historians Reassess: Did We Need to Drop the Bomb." In *Hiroshima's Shadow: Writings on the Denial of History and the Smithsonian Controversy*, edited by Kai Bird and Lawrence Lifschultz, 5-21. Stony Creek, CT: The Pamphleteer's Press, 1998.
- Bernstein, Barton. "The Struggle Over History: Defining the Hiroshima Narrative." In *The Bombing of Hiroshima and Nagasaki: Judgment at the Smithsonian*, edited by Philip Nobile, 127-256. New York: Marlowe and Company, 1995.
- Bird, Kai and Martin Sherwin. *American Prometheus: The Triumph and Tragedy of J. Robert Oppenheimer*. New York: Vintage Books, 2006.
- "Boeing B-29 Superfortress 'Enola Gay'." *National Air and Space Museum Collections*. Accessed 1 March 2013.  
<http://airandspace.si.edu/collections/artifact.cfm?id=A19500100000>.
- Boyer, Paul. "Whose History is it Anyway? Memory, Politics, and Historical Scholarship." In *History Wars: The Enola Gay and Other Battles for the American Past*, edited by Edward Linenthal and Tom Engelhart, 115-139. New York: Henry Holt and Company, 1996.
- "Building on the National Mall Fact Sheet." *National Air and Space Museum News and Events Press Room*. Accessed 3 December 2011.  
[http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview\\_nasm.cfm](http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview_nasm.cfm).
- Buono, Sarah. Twitter post. May 18, 2012, 11:09 pm.  
[https://twitter.com/sarah\\_buono/status/203698844582682624](https://twitter.com/sarah_buono/status/203698844582682624).
- Campbell, Richard H. *The Silverplate Bombers: A History and Registry of the Enola Gay and Other B-29s Configured to Carry Atomic Bombs*. Jefferson, N.C.: McFarland and Company, 2005.
- Capaccio, Tony and Uday Mohan. "How the U.S. Press Missed the Target." In *Hiroshima's Shadow: Writings on the Denial of History and the Smithsonian Controversy*, edited by Kai Bird and Lawrence Lifschultz, 364-375. Stony Creek, CT: The Pamphleteer's Press, 1998.
- Correll, John T. "New Horizons for Air and Space." *Air Force* 84, no. 3 (2001): 43-47.

- Correll, John T. "The Nation's Hangar." *Air Force* 87, no. 3 (2004): 23-29.
- Correll, John T. "The Smithsonian and the *Enola Gay*: A Retrospective on the Controversy 10 Years Later." *Air Force Special Report* (2004): 3-32.
- Daso, Dik. "The National Air and Space Museum Spreads Its Wings." In *Smithsonian National Air and Space Museum: An Autobiography*, edited by Michael Neufeld and Alex Spencer, 326-387. Washington, D.C.: National Geographic, 2010.
- Daston, Lorraine and Peter Galison. *Objectivity*. New York: Zone Books, 2007.
- Daston, Lorraine and Peter Galison. "Objectivity and its Critics." *Victorian Studies* 50, no. 4 (2008): 641-677.
- Dower, John W. "Three Narratives of Our Humanity." In *History Wars: The Enola Gay and Other Battles for the American Past*, edited by Edward Linenthal and Tom Engelhart, 63-96. New York: Henry Holt and Company, 1996.
- Doyle, Debbie Ann. "Historians Protest New *Enola Gay* Exhibit." *Perspectives* 41, no. 9 (2003).  
<http://www.historians.org/perspectives/issues/2003/0312/0312new4.cfm>.
- Dudley, Robert S. "*Enola Gay* II." *Air Force* 86, no. 12 (2003): 3.
- Ezell, Lin. *Building America's Hangar: The Design and Construction of the Steven F. Udvar-Hazy Center*. London: GILES, 2004.
- Glassberg, David. *Sense of History: The Place of the Past in American Life*. Amherst, M.A.: University of Massachusetts Press, 2001.
- Glod, Maria. "The Biggest Arrival at Dulles; Flight Fans, Protesters Come for Museum Opening." *Washington Post* (Washington, D.C.), Dec. 16, 2003.
- Gosling, F.G. *The Manhattan Project: Making the Atomic Bomb*. DOE/MA-0002 Revised. Washington, D.C.: Department of Energy, 2010.
- Harwit, Martin. *An Exhibit Denied: Lobbying the History of Enola Gay*. New York: Springer-Verlag, 1996.
- Hughes, Thomas. *American Genesis: A Century of Invention and Technological Enthusiasm, 1870-1970*. Chicago: The University of Chicago Press, 2004.

- Hunter, James. *Culture Wars: The Struggle to Define America*. New York: BasicBooks, 1991.
- Japan Confederation of A- and H-Bomb Sufferers Organizations, "Letter to Mr. John R. Dailey and Mr. George W. Bush," Last modified 5 November 5. <http://web.archive.org/web/20051206204957/http://www.ne.jp/asahi/hidankyo/nihon/english/enolagay-sign.html>.
- "John R. 'Jack' Dailey." *Newsdesk: Newsroom of the Smithsonian*. Last modified 1 April 2012. <http://newsdesk.si.edu/about/bios/john-r-jack-dailey>.
- Kaplan, Richard. "Objectivity in American Journalism." In *The Routledge Companion to News and Journalism Studies*, edited by Stuart Allen, 25-37. New York: Routledge, 2011.
- Kelly, Cynthia C. "Preserving the Manhattan Project." *American Physical Society Forum on Physics & Society* 39, no. 4 (2010). <http://www.aps.org/units/fps/newsletters/201010/kelly.cfm>.
- Kennicott, Philip. "After an Age of Rage, Museums Have Mastered the Display of Commotional Restraint." *Washington Post* (Washington, D.C.) May 31, 2009.
- Launius, Roger D. "American Memory, Culture Wars, and the Challenge of Presenting Science and Technology in a National Museum." *The Public Historian* 29, no. 1 (2007): 13-30.
- Linenthal, Edward and Tom Engelhart, ed. *History Wars: The Enola Gay and Other Battles for the American Past*. New York: Henry Holt and Company, 1996.
- Madsen, Deborah. *American Exceptionalism*. Jackson, MI: University of Mississippi Press, 1998.
- Maxwell, Ted and Tom Crouch. "The World's Most Popular Museum." In *Smithsonian National Air and Space Museum: An Autobiography*, edited by Michael Neufeld and Alex Spencer, 260-325. Washington, D.C.: National Geographic, 2010.
- McCourt, Ian. Twitter post. December 12, 2012, 5:08 pm. [https://twitter.com/Ian\\_McCourt/status/278999813767454721](https://twitter.com/Ian_McCourt/status/278999813767454721).
- Nichols, K.D. *The Road to Trinity*. New York: William Morrow and Company, 1987.
- National Air and Space Museum. *America's Hangar: The Steven F. Udvar-Hazy Center*. Washington, D.C.: Smithsonian Books, 2003.

"National Air and Space Museum Director Donald Engen Dies in Glider Accident." *National Air and Space Museum Press Room*. Last modified 14 July 1999. <http://airandspace.si.edu/events/pressroom/releaseDetail.cfm?releaseID=103>.

"National Air and Space Museum Press Kit," *National Air and Space Museum News and Events Press Room*. Accessed 3 December 2011. [http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview\\_nasm.cfm](http://www.nasm.si.edu/events/pressroom/presskits/museumkit/overview_nasm.cfm).

"National Air and Space Museum Press Kit: Steven F. Udvar-Hazy Center Fact Sheet." *Newsdesk: News Room of the Smithsonian Institution*. Accessed 12 December 2011. <http://newsdesk.si.edu/about/stats>.

Novick, Peter. *That Noble Dream: The "Objectivity Question" and the American Historical Profession*. Cambridge, UK: Cambridge University Press, 1988.

Nye, David. *America as Second Creation: Technology and Narratives of New Beginnings*. Cambridge, MA: The MIT Press, 2003.

Olson, Elizabeth. "Enola Gay Reassembled for Revised Museum Show." *New York Times* (New York, N.Y.), Aug .19, 2003.

Pandora, Katherine. "'What Have We to Do with Mr. Everyman, or He with Us?': Reflections on Professionalism, the Public, and the Digital Age." Presentation at the Joint Meeting of the History of Science Society and the Society for the History of Technology, Minneapolis, MN, November 3-6, 2005.

Polmar, Norman. *The Enola Gay: The B-29 that Dropped the Atomic Bomb on Hiroshima*. Washington, D.C.: Brassey's Inc., 2004.

Porter, Theodore. *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton, NJ: Princeton University Press, 1996.

Redding Jr., Robert. "'Cathedral to Aviation' Set to Open." *Washington Times* (Washington, D.C.), Dec. 6, 2003.

Rhodes, Richard. *The Making of the Atomic Bomb*. New York: Simon and Shuster, 1986.

Rosenzweig, Roy and David Thelen. *The Presence of the Past: Popular Uses of History in American Life*. New York: Columbia University Press, 1998.

Rotblat, Joseph. "A Social Conscience for the Nuclear Age." In *Hiroshima's Shadow: Writings on the Denial of History and the Smithsonian Controversy*, edited by