

Display Significance at Planes of Fame Air Museum

Callie Maloney

Cal Polytechnic State University San Luis Obispo

8 June 2020

Contents

Introduction.....	1
A Museum in the Making.....	5
From Memory to Action.....	6
Self Reflexivity.....	8
Displays at the Planes of Fame Air Museum.....	9
Moving Forward - Future Displays.....	13
Ethics and Global Partnership.....	14
Demographics.....	20
Chronological Distance.....	23
COVID-19 Pandemic.....	24
Website Interaction.....	25
COVID Relevancy.....	26
What is Next for the Museum.....	27
Virtual Airshow.....	29
Personal Reflexivity.....	30
Conclusion.....	31
Works Cited.....	34

RESEARCH PROPOSAL

The purpose of this project is to conduct research and analyze the different methods that memorialize history for younger generations. Basing my research on the non-profit organization, Planes Of Fame, I will be observing their learning center to focus on how they make their artifacts and displays the most impactful and memorable. I will also be observing an educational event where I can document the demographics and look at the differences between gender, age groups, and ethnicity.

I will accomplish this research and analysis through observations and interviews. My interviews will be held with the Director of Development as well as with the Director of Education. By having these contacts, I feel that I can get the most genuine responses about the outcomes that this organization experiences and the types of feedback they work with. My observations will help give me a consensus of the types of children walking through the doors and who the organization reaches out to the most. It is hypothesized that history can be strategically displayed in a meaningful way that will cause younger generations to be positively impacted. Although I am focusing primarily on the impacts of history for children in general, I also want to determine if there is a correlation between certain demographics of children and their interest in history and World War II, specifically.

The significance of this project is to determine the ways that history is looked at through the eyes of children and how it can be the most impactful for them. History studies the past and the legacies of the past. Historic museums can connect things through time and it also encourages visitors to look at the connections of the past, present, and future through preservation. This project will specifically focus on World War II and what this event in history

means to children who are learning about it now. The significance in choosing Planes of Fame is because “Education has always been at the forefront of the Museum’s efforts. The preservation of aircraft and the restoration to flight of many of the world’s most important and rarest airplanes have long been teaching tools to relate the history of aviation. Museum displays and signage help to tell the important stories of our past” (Planes). This organization has a strong educational message, which is that they are passionate about learning and keeping history alive for future generations.

I hope to pursue in a non-profit organization where I can use my level of knowledge and education to make a positive difference. I have always felt passionate about non-profits because of what they stand for and their mission to help communities. I know it would have a strong impact on my life because I have always wanted to work with people and help make an impact in some way. Therefore, I have been working on my Bachelor’s degree in Sociology with a concentration in organizational business. Because I want to use my degree to get involved with a non-profit, I want my senior project to allow me to step inside of an organization where I can observe what goes on and how they reach out to their community. I think that this will allow me to get a better idea of what I would want to be doing post graduation. It can also be an educational experience for me because I can gain more insight on what goes on behind the scenes.

My senior project will help me move toward a future career because I will be making connections with a non-profit organization where I can get involved. Having the opportunity to speak with directors who are doing the same work I am striving to do in the future can be beneficial for my own perspective. I have always believed that there is still room for more

learning and this senior project can benefit me in my academic and career journey. All of this progress will give me hope and clarity as to what I want to invest in so that I can be prepared post-graduation.

ABSTRACT

History museums record and memorialize deeply affecting historical events. They offer opportunities to enhance and build on the history taught. Displayed artifacts and memorabilia can narrate significant stories from the past and provide an educational background. This paper is about the Planes of Fame Air Museum and the focus is on ways that they have significantly memorialized their collection of rare warbirds. I begin by providing background information about the founder and how his visions led him to building a successful aviation museum. The vision of Planes of Fame is to preserve aviation history through the restoration and flying of rare aircraft, and through the displays and information they impart. I argue that there are many underlying significances behind these warbird displays. I support this argument by explaining the many ways that warbirds have impacted the public. These warbirds create a dialogue between generations, they promote self-reflexivity to help us to better appreciate who we are and how we came to be, they help share the ethical and cultural qualities about the history of the war, and they allow people to identify with current world problems, such as the COVID-19 pandemic. I explain how the museum has responded to this global crisis. This includes the struggles and difficulties that the organization has faced due to closing their doors and how they have been able to survive as a museum through this struggling time.

INTRODUCTION

January 12, 1957, marked the date when Planes of Fame Air Museum, located in Southern California, became an official World War II Air Museum. The founder of Plane of Fame was Edward T. Maloney; he lived his life living and breathing everything aviation. Born in the late 1920s, Maloney was a couple of years short of being drafted into World War II. He, however, was very tuned-in to the advances made in aviation during the second world war and the role warbirds were playing to defeat the Japanese and Germans. Edward T. Maloney was an all-American man, the boy next door kind of guy. Raised in a rigorous Catholic home, he continued practicing his faith and died as a devoted Catholic. Edward was a young boy during the Depression, which turned him into a frugal man. During World War II, when Ed was in grade school, he was considered the “go to” guy for information and explanations about the war. After the war, he obtained a business degree from Claremont University. While he was studying, he was envisioning an idea that would captivate him for the rest of his life. During his time of collecting and growing the museum, he always remained very private and acted single-mindedly in his decisions and beliefs. He was tenacious in his search for airplanes from the time he started collecting and was stubbornly determined to accomplish his passions for warbirds. Edward was a person who turned his dreams into reality through hard work. His skills as a negotiator, his knowledge as a historian, and his drive resulted in him saving over 250 aircraft.

During World War II, aviation firmly established itself as a critical component of modern warfare. The United States manufactured about 300,000 aircraft just before, and during the war. Fighter and bomber planes, also known as warbirds, were primarily involved in the major attacks of WWII: Battle of Britain, the Invasion of Normandy, the bombing of Pearl Harbor, and the

Hiroshima and Nagasaki atomic bombings. The fighter's design in the war was for air-to-air combat; their superior speeds and agility allowed them to gain air superiority over battlefields. As for bombers, the stocky design allowed them to go farther distances, bomb diverse areas, launch torpedos, and deploy cruise missiles. An unfortunate turning point for these warbirds occurred following the war, as the military had found itself with an immense surplus of aircraft. Storing around 150,000 proved to be too great of an expense, so companies had to get rid of their supply. The War Assets Administration and Reconstruction Finance Corporation handled the disposal of the aircraft. Aircraft located overseas were too expensive to bring back to the States, which caused them to be buried, scrapped, or sunk at sea. For aircraft located in the States, the method of "salvage and melt," was adopted. Components of the planes such as engines, armament, instruments and radios were removed from each plane, and repurposed. The remainder was cut into pieces (Military Airplane Boneyards After WWII). Edward stated in an interview, "I [Edward] was a senior in High School, and I used to drive down to Cal-Aero Field, where they were storing thousands of the old warbirds. I remember watching this 18-foot steel plate drop from a crane. It would snap a B-17 or B-24 in half just as if they were toys. It was almost sickening to watch" (Edward T. Maloney, Founder). The idea of rescuing the past inspired Edward to create his lifelong mission: preserve at least one type of each military aircraft.

Being a collector at heart, Edward found himself collecting scraps of warbirds and parts of military aircraft that were trashed. Aviation photographer, Frank Mormillo recalls in an interview, "If you went to Ed's house, which was just a few blocks away then, you would have seen pieces of airplanes in his backyard and in his garage, full from floor to ceiling with all sorts of rubbish. Literally, at that that time the P-47, the P-51A, the P-40, and the P-59 were all

dissembled in the back yard” (Lumsden). He created a network for himself, meeting others who had an interest and passion in aviation. When someone would hear about a warbird finding, they would know who to call to gather the pieces. Some people would practically give him military aircraft for free because of the lost value. The war had ended, and the United States was trying to move on from the tragedies that the Nation had faced. Wartime experiences was not something that wanted to be remembered. Only a few saw the reward in saving these rare aircraft and what they could do for future generations. Edward recognized that once these aircraft were gone, future generations would be deprived of their beauty and craftsmanship. He believed that losing these aircraft would create a knowledge gap of the important role they played during one of the most divesting conflicts in world history.

When Edward had a large enough collection, he knew he needed a bigger space to put it all; that is when the idea of starting a museum originated. He believed someone had to start a warbird museum, or it would not get done. Edward tried getting some inspiration from other museums, however, “...he was discouraged by what he saw. He visits the Smithsonian, which he recalls had some interesting airplanes in an old Quonset hut on the National Mall. He visited the Franklin Institute in Philadelphia. Everybody was pretty short on aircraft” (Lumsden). Edward had a vision that no other air museum was achieving at the time. Starting off with an initial ten aircraft, such as the German ME 109, Japanese Zero, P-38, and Yokosuka MXY-7 Ohka, he opened his museum. He proved that if there were any memories from World War II that should be carried over or worth reliving, it should be through these warbirds. Edward’s efforts enabled the public to believe this for themselves. Combining history and education, he wanted people to better understand the past in meaningful ways. Edward had a vision from the start, and was

determined enough to continue striving for this because he believed there was still a bright future for these warbirds. Staying true to his vision, the Planes of Fame mission statement still aligns strongly with Edward's plan, "... to preserve aviation, inspire an interest in aviation, educate the public, and honor aviation pioneers and veterans" (History & Mission: Planes of Fame Air Museum). Edward wanted the museum to be space to inspire the public by teaching them something new or making them think differently about the field of aviation. He wanted it to be place where people could reflect on their past and connect it to their future.

A MUSEUM IN THE MAKING

Ed Maloney opened his first museum in Claremont, California. There was a simple sign out front that read, "The Air Museum." Because it was the first private aviation-themed museum on the west coast, Edward gave it the simple name of "The Air Museum." When entering, visitors would walk through the noise of the B-29 and admission to enter was only a dollar. All of the aircraft displayed at the museum were static and non-flyable. Aviation artifacts, model airplanes, and memorabilia were on display as well. There was nothing fancy about these displays, as Edward did not have the interest in making it look the most appealing. Recognizing these warbirds in their authentic form was all Edward wanted others to see. The significance in his views of memorialization during this time was that it did not take fancy and elaborate displays to attract people. It was the historical context and the emotions that came out of seeing these rare and authentic warbirds on the ground that made the displays so impactful. Visitors who were up-close and personal to these aircraft had a full experience with what it looked like for aviation pioneers, the aces of the Great War, and the brave pilots of the Golden Age.

By 1962, the museum was growing, acquiring more aircraft and artifacts. In order to fly them, each aircraft had to be towed on city streets to the nearby Cable airport. This not only required special permits, it was a hassle because moving the aircraft could only happen in the early hours of the morning. For this reason, and the fact that maintenance and restoration work was not viable at the Claremont location, the museum elected to move to nearby Ontario Airport. Edward felt that the next step should be to relocate to an airport-based museum with more space. Occupying hangars was a significant turning point for both Edward and the warbirds because the museum now had enough space to display the collection and acquire room to conduct restoration work. The hard work and creativity that took place behind the scenes are what helped flourish the museum in terms of reaching out to the community and growing. Edward hired very few people at the beginning, and it was the work of many passionate volunteers that kept the museum running. As for the restoration of the warbirds to get them flying again, Edward hired mechanics from the National Guards to work on the aircraft. To this day, the mechanics that work on these warbirds have been loyal to the museum and their hard work and dedication comes from their passion to see these planes airborne.

FROM MEMORY TO ACTION

Eventually, Planes of Fame outgrew the museum they acquired in Ontario, California. After twenty years of building a strong foundation for the restoration and remembrance, Edward moved the museum to Chino, California, where it is currently located. Chino Airport provided the museum a facility where it could grow and fly aircraft with very little trouble. The move to Chino also saw the Museum adopt a new name, combining “The Air Museum” and the “Planes of Fame” into the “Planes of Fame Air Museum.” A number of hangars have been built since

opening the Chino location to house both the flying non-flying collection. The current aircraft collection spans the time of the Wright Brothers first controlled flight of 1903, through the First World War (1914-1918), the Golden Age of Aviation (1919-1938), and the Second World War (1939-1945), the Jet Age (1945-1960), the Vietnam era (1960-1974), and even the early space age. The majority of the collection is rooted in the Second World War period. By the 1990s, the collection hovered around 150 aircraft, too large for the Chino operation. A second facility was necessary. Land was purchased and a single hangar was constructed along Arizona highway 64 at a small airport a few miles from the southern entrance to the Grand Canyon. This facility currently houses 40 aircraft.

The museum held their first airshow in 1980, and this is what really separated them from other museums. They shifted from being a static aircraft museum to being the first to have flyable warbirds for the public to see. The P-40 Warhawk was one of the warbirds that was restored to fly for the Air Show. This P-40 takes recognition for shooting down a Japanese Fu-Go Balloon Bomb off British Columbia. The Mitsubishi A6M5 Zero was another rare aircraft that was on display and flown in the Museum's show. Edward obtained the Zero in 1951 as it was being sold for scrap. To this day, this Zero is the only authentic flyable example in the world. Restored to flying condition, this fighter is powered by its original Nakajima Sakae 31 engine. As a sign of respect, the museum restored this aircraft using the same color scheme and markings it showed in combat for the Imperial Japanese Navy during the war.

The Planes of Fame airshow was not something that was forgotten for many who came out to see these warbirds up-close and in the air. With the majority of aircraft in the collection coming from this time period, visitors to the Museum in the early decades of its operation had a

familiarity with these aircraft. Either they were themselves connected to this period and events, or they had immediate family members who had been connected to the war and had heard stories of this era from them. These displays were incredibly impactful for them because it was a connection to their past that they had not experienced since the war. Following the war, it is suggested that, "...so many combat veterans may have suffered in silence after their return from the war. They returned to a soon thriving economy, which may have distracted some combat veterans, at least temporarily, from their war experiences" (Anderson, 2003, pg. 54). For some Veterans, coming to the Air Museum was a way to find some closure with the war; it was a safe space filled with empathy and appreciation. The Museum became a voice for so many Veterans because it was place where their efforts were recognized and respected. An article discussing veterans and their coping with PTSD explains that, "By telling his story the veteran gives it meaning, and in so doing gains control over his symptoms" (Langer, 2011, pg. 56). Some veterans who were able to unite at the museum found an outlet that allowed them to gain this control back. It also gave the public a chance to look through the eyes of a war veteran and recognize in some depth what they saw during combat.

SELF-REFLEXIVITY

The presentation of rare and historic artifacts help us to better appreciate who we are and how we came to be. The Planes of Fame Air Museum has shown to link self-reflexivity closely by its community members and visitors from around the world. Seeking out someone's reflexivity means understanding their true self and their position in society. For many veterans, a part of their identity forms from their wartime experiences. Veterans often comment that they never felt so attached to their identity of being a War Hero until they were reconnected with their

past by the war memorabilia and displays the Museum offers. Especially for Aces and fighter pilots, reuniting with aircraft that they climbed into and risked their lives in can allow them to re-identify themselves as someone who has tremendous patriotism and bravery for our country. Self-reflexivity can also take place within families because these memories can help create a new dialogue amongst family members. The displays of the Museum's warbirds have shown to promote deeper connections and brought relationships together. Some grandchildren had no knowledge that their grandparents fought or flew alongside these warbirds. The realization of this can reshape the identity of themselves and how they view each other. By telling the stories of those who helped mold this industry and those who sacrificed to help preserve our freedoms, they bring the human element into all the museum's efforts.

Self-reflexivity also means acknowledging other cultures and cultural practices to learn more about oneself. The Museum did not limit their collection to only U.S. aircraft, and there are significant displays of aircraft from all sides of the war. To Edward, the restoration of warbirds was the most important. He did not care if the planes he collected were from the enemy side or not. Edward displayed these warbirds because it was how all of these nations significantly advanced into making rare and powerful weaponry. It further explores the significance behind every type of aircraft. On display at Planes of Fame, and presented at the Living History Flying Day on January 4, 2020, is the Focke-Wulf Fw 190. This aircraft is known to be the best fighter warbird in World War II, making this aircraft one of the mainstays of the German Luftwaffe. The Museum has kept the original color scheme and the notorious swastika symbol on the tail of the plane. Although this can seem like an offensive symbol to some public members, the Museum

demonstrates their acknowledgment of history and the importance of awareness from other cultures.

DISPLAYS AT THE PLANES OF FAME AIR MUSEUM

Through displays, through graphics, using stories, and presentations, Planes of Fame builds a structure that has relevance, importance, and value for generations to come. Every display, and the materials contained within each display points to one or more of these four cornerstones: preservation of aviation history, inspirational messages related to aviation, educational content revolving around aviation, and memorializing and honoring aviation pioneers and aviation Veterans. In some areas of the Museum, guests get extremely close to the aircraft, allowing them to walk completely around an aircraft and examine it, touch it, photograph it and experience it for its size, complexity, and material construction. In other areas of the Museum, a simple rope line is all that separates visitors from the aircraft, still allowing for close examination and photographs. At present, there are more than 80 separate display cases at the Chino location. Scale models comprise the majority of these displays, an estimated 5,000 of these are visible to guests. These are presented in glass-enclosed display cases located along the perimeter of the hangars. Intermixed with the model displays are an occasional case featuring memorabilia and artifacts. The Grand Canyon facility features approximately 45 display cases. The contents of these are a combination of artifacts, scale models, and personal memorabilia. These individuals conduct guests throughout the Museum upon request or serve to answer questions and tell stories related to the Museum collection. This human interaction provides the Museum with a more dynamic and personal approach to understanding the collection. By “leading” with stories about people, whether they be the men and women who designed and built

an aircraft, the men and women who may have flown a particular aircraft, the individuals who set records or achieved remarkable things with an aircraft, any of a number of possible variants, these are the stories that will allow today's audience to make a more substantial connection with aviation history and the Museum's offering. In this scenario, the aircraft becomes the tool used by human beings to realize a measure of achievement. There is great freedom to this approach. It expands the Museum's opportunities to present information. Every aircraft offers literally thousands of possible human-focused stories. These stories may be didactic, they may be inspirational, or they may instill pride, patriotism, or inclusiveness through stories of race, age, or gender.

As part of a grant received from the California Humanities, non-profit funded by the State of California to promote an understanding of the shared heritage and diverse cultures within the state, Planes of Fame created a permanent exhibit entitled, "*Working Together: Aircraft Production in Southern California 1938 – 1945.*" The exhibit was developed in 2019 and opened in early 2020. Comprising four glass-enclosed display cases located within the Foreign Hangar at the Chino campus, the exhibit focuses on the critical role that Southern California played in producing a majority of the military aircraft flown during World War II. During the period of 1938 – 1945, over 85,000 (28 percent) of all allied aircraft were physically built in Southern California and 41 percent of all aircraft flown during the war were designed here. Seven major manufacturers and thousands of smaller companies worked twenty-four hours each day, seven days a week to turn out the parts, sub-assemblies, and finished aircraft needed by the U.S. military and its allies during the war. Workers in the early stages of the time were predominantly male, but as their skills were required for military service, women and people of

color took their places at the factories. For many women (who at one point comprised 60 percent of the aircraft factories' workforce) and for many minorities, these opportunities opened doors for the first time that had been closed to them. The production activities changed the dynamics of the area, there were vast housing shortages, public infrastructure was impacted, and lifestyles changed. Recognizing that the majority of visitors to the Museum were unaware of this chapter in our local history, the display needed to encompass a number of variables. The museum wants the display to be immersive. By this, they wanted people to mentally enter a "set piece" that evoked the time and atmosphere of the factories of the period. To accomplish this, they made each display case resemble the materials found within various factories. Thus, a steel beam connects all four separate cases to unify them into one whole storyline. Presented on this beam are the individual stories of the seven major manufacturing companies and several smaller ones. Each display case features a different backdrop: one is constructed of old, rustic wood siding, another features a brick wall, a third features a corrugated metal wall, and the last features a concrete wall. We felt that the more attention to detail we paid in the "set design" the more immersive the audience would feel. Thus the floor of each display case is made of poured concrete while the ceiling is rustic wood. The use of scale aircraft models were presented in a way unique for the Museum. These aircraft represent the output of the various Southern California factories. Each is mounted on a clear plastic dowel to make them appear to be flying within the case. Each aircraft is represented by a small graphic panel that identifies it, tells where it was manufactured, how many were manufactured, and what each individual aircraft cost to build.

From a content standpoint, the first case needed to provide the background and context of the world's march to war. This was accomplished through a series of graphic panels with photographs, as well as various props that tell the historical backstory. The second case represented the cooperation and collaboration of the companies that built the aircraft and the shift in dynamics associated with the massive ramp up in production. Perhaps the most telling compliment that they have consistently heard is, "I had no idea that all of this went on in my own backyard." Others have shared stories of family or friends that they knew who worked in similar ways during the war. This tells the Museum that they have succeeded in presenting a chapter from the past in an approachable and engaging way. By bringing the story from a macro level all the way down to a personal level, they have been able to tap into people's inherent interest in their fellow human beings while also connecting them to a little known chapter from the past. The takeaways from this is that the more immersive the museum can make a display, the more people will "escape" into it. Once they do this, chances are much improved that the content provided will be more fully explored. They believe that as a result, the visitors will walk away with a learning experience that was both enjoyable and more meaningful.

MOVING FORWARD - FUTURE DISPLAYS

The museum wants to move away from the conventional displays of scale model aircraft in favor of displays that teach, inspire, and provide historical context through stories, visual elements, scale models, artifacts and memorabilia working together. The goal is to present these materials in an enticing way. They want to provide content focused on human actions and personalities that resonate the world of today. The Pond Hangar, for example, is one of the most popular hangars at the museum. The museum is striving for the Pond Hangar to tell specific

stories related to aviation during the Second World War (1939-1940). These include a nod to the Cal-Aero Flight Academy which was a primary and basic training school located at the Chino Airport from 1940 until 1944. In collaboration with the 91st Bomb Group Association, will be dedicated an entire wall to telling the stories of members of this bomb group in Europe during WWII through their missions, mishaps, and experiences. A degree of visitor interactivity is planned. This display wall will also serve as an introduction to what is planned as the “B-17 Experience” which will involve docent driven interaction at the location of the Museum’s Boeing B-17 aircraft. Other displays within the hangar will tell of the accomplishments of various combatants from the war while flying specific aircraft. Another hangar called the Enterprise Hangar, will be refreshed to include more stories of the U.S. Navy and Naval Aviation during the Second World War. A combination of enhanced graphics and visuals will be incorporated with the current collection of memorabilia and artifacts to give visitors a more in-depth understanding of the unique characteristics and role that naval aviators played in World War II. Whether through personal and individual stories or through the more significant, dramatic story arcs of historical events, the guiding principles to be used to determine theme, content, and presentation of displays at the Planes of Fame Air Museum are found within the Museum’s mission statement.

ETHICS AND GLOBAL PARTNERSHIP

The Museum has an ethical and moral obligation to represent the displays of warbirds. They achieve this in a un-bias manner that casts no blame or shame on certain types of aircraft. What remains to be the utmost importance to the Museum is appreciating them for the machines that they are. It was not about sides or who the aircraft fought against; it was instead the contribution made, good or bad. It is a privilege for Planes of Fame to unify with other countries

in the hopes of creating unique displays for the whole world to view. Planes of Fame's mission to educate the public provides historical context on World War II and aviation. The Museum is conscious of providing an ethical framework. "...exhibitions are powerful representations and are responsible for shaping the public's perception in many unintended ways" (Exhibition Ethics, 2004). These presentations can really make an impact on how someone views history. Seeing a warbird up-close and acknowledging that these powerful machines changed the course of the war is something people hold onto.

Having such a diverse collection of warbirds, the Museum has the opportunity to teach on a larger scale about the Nations involved in the war. Planes of Fame's Mitsubishi A6M5 Zero is a warbird that the Museum takes pride in despite it being an enemy machine. This Zero was assigned to the Japanese Naval Air Corps, but it was seized by the U.S. military in 1944 and brought to NAS North Island in San Diego along with a handful of other Zeros. It then was shipped to NAS Patuxent River, Maryland, where several navy pilots flew the aircraft, including the famous aviator, Charles A. Lindbergh.

The Mitsubishi A6M5 Zero is showcased countless times to the public, where the public can look at the airplane and see it fly. The Museum draws in speakers, such as pilots, historians, and authors, to talk about the significance of this aircraft. This warbird is recognized mainly at Planes of Fame; however, it is also showcased in its original birthplace. Since it has been restored, the Zero has made three successful trips back and forth to Japan. This aircraft goes on display at the Yoyogi Parade Grounds in the Shibuya Ward of Tokyo. In 1979, the Zero took a six-month flying tour around Japan, which was the first time a Zero had been flying since World War II. In 1995, the Zero, along with Planes of Fame's North American P-51D Mustang, was sent

across the Pacific for a flying tour around Japan, named "*Flying as Friends*." By the third trip, the display of the Zero was evident to be the most impactful. Visitors from around the world traveled to see the warbird in person. Japanese natives were able to create a link between generations of their family and feel a sense of closeness to their relatives who were involved in the war. The history behind the Zero and other Japanese warbirds made an impact on younger generations. Many were unaware of the stories and history behind their relatives who fought alongside this aircraft. The display renewed the aircraft's relevance to the different generations, whether they were affected by the war or had heard of the war. In this case, the Museum has shown that the American and Japanese share strong bonds, and have a deep mutual respect for the history of the two Nations.

Duxford, Cambridgeshire, is another location where Planes of Fame was a part of a global partnership. In the Museum's collection, a rare warbird is the Boeing P-26A Peashooter, which was the world's first all-metal fighter and monoplane in the US Army Air Corps. There are only two of these warbirds left, the other survivor of this type is on display at the Smithsonian's National Air and Space Museum. Making the trip was the first time a P-26 had ever visited Europe.

DEMOGRAPHICS

As the Planes of Fame Museum continues to grow, they have adapted new strategies as a way to gain wider audiences. Aviation museums are notoriously known for their visitor demographics being predominately male. How museums can diversify and attract different demographics is crucial. The attractions are especially vital for younger generations, as they are the generations that will be future visitors and donors. Although war memorabilia from World

War II is not as relevant to younger generations, it is the ways of involvement that can make a difference. Planes of Fame's Aviation Discovery Center dedicates its efforts towards friendly hands-on activities designed to encourage aviation recognition. These activities include identifying parts of an aircraft, analyzing various aircraft types, and learning the lingo used by pilots and air traffic controllers through the Pilot alphabet. Young visitors are also able to put all this knowledge together and fly a Museum aircraft using the Flight Simulators found within the center.

Representation of women in aviation is not strong, and they are a group that is underrepresented in aviation about their proportion in society. It has been stated that, "...the concern accorded regarding the underrepresentation of women in the aviation faculty of higher education is overshadowed by concern for the underrepresentation of women in all aspects of aviation" (Luedtke & Bowen, 1993). During World War II, women executed an active role in aviation and aviation education. More than 1,100 young women, all noncombat volunteers, flew almost every type of military aircraft, including the B-26 and B-29 bombers. These women are recognized as the Women Air Force Service Pilots or WASP for short. They transported new planes long distances from factories to military bases and egress points across the country. These female pilots also tested newly overhauled aircraft and hauled targets to give ground and air gunners training, shooting with live ammunition (Stamberg, 2010). Opportunities for women in aviation did not come easily and were established on decades of struggle, determination, and perseverance. Similar to Edward Maloney, he, too, had to seek-out determination and perseverance when no one else saw the value in flying these warbirds. A goal for Planes of Fame is to increase visitors, demographics, and inclusivity as the museum grows. They must continue

to open new doors for different visitors to feel welcome at the museum to spark an interest in aviation history and technology.

Planes of Fame's annual Hangar Dance is an excellent example of how they are attempting to bring in newer audiences to the museum. The event consists of a big band orchestra, live musical performances, World War II aircraft, and military vehicles, and a 1940's costume contest. The Swing Era had begun in the 1930s when Americans were trying to forget the Great Depression. Swing became more popular as the decade went on; this escape of entertainment continued to be an outlet for many Americans during the Second World War. The new music coming along was fast and upbeat, which caused people to dance fast and have fun. Although music and dance have evolved over the decades, swing dance continues to represent an outlet that Americans turned to during the hard times of the war. Hosting an event like this for the public to attend where they can step back into the 1940s era, surrounded by rare and authentic WWII aircraft, makes it that much more impactful. Stepping back in time to remember the 1940s style dancing and fill the hangars with the beautiful sounds of the live orchestra is an experience that is not forgotten.

As this event has continued to grow, the museum incorporated the name "Planes of Fame Hangar Dance & WWII Warbird Party." Although it has grown size, now reaching up to 500 guests, the event aims to honor and preserve the heritage upon which it was founded. While the warbirds are the main attraction for many who attend these events held by the museum, it is the community, volunteers, and dancers that make it so memorable. This is one way that sets the museum apart from other aviation organizations because of the many living history aspects that Planes of Fame provides. This event promotes the culture that was formed during the war that

helped keep people distracted and entertained. Planes of Fame continues to help carry on the traditions of past generations and preserve our country's history. (Hangar Dance: Planes of Fame Air Museum). Merging this cultural influence and bringing it into the modern-day makes the experience more real and unique.

CHRONOLOGICAL DISTANCE

The evolution of warbirds and where they are today goes beyond the realm of just flyable aircraft. It is how they have reached into a more widespread culture and history and touched the lives of those who aren't frequent fliers or connected to aviation. While the museum has shown to preserve and honor many of their warbirds by maintaining the authenticity of the aircraft, the advancements of modified warbirds have helped draw in different crowds of interested. Air Racing is a favored sport because it attracts not only those involved in aviation but also interests in superior speeds and horsepower. On display at the museum is "Voodoo," a highly modified North American P-51 Mustang that became the Unlimited-Class champion of the Reno Air Races.

Its trademark color scheme colors of orange, purple, and lime green gave way to an all-white uniform for its last race at Reno in 2017. Voodoo was donated to Planes of Fame in 2017 and now holds the title as the World's Fastest Piston Engine Aircraft.

The Air Racing era was born in the 1960s when the community for advanced aviation began. The Reno Air Racing Association is one organization that supports these advancements. Their purpose is to provide an air racing and air show event that commemorates and perpetuates the world's fastest motorsport. Like the Planes of Fame Museum, the Reno Air Racing Association honors the military, inspires youth, and aims to strengthen the community, economy,

and culture. According to the Reno Air Racing Association, it is an institution known for drawing in aviation enthusiasts from around the world. Over the past ten years, the event has attracted more than 1 million spectators and generated more than \$600 million for the region's economy. Whether there is an interest in modern warbird racing or the historical importance of warbirds, this field of aviation allows for a variety of passion and interest to come together.

Combining this high-speed sport full of motorsport enthusiasts and bringing in people passionate about the war creates a vast audience. The display of Voodoo at the museum represents the support behind aviation modifications and advancements. When touring the museum, visitors can walk down a timeline of evolution for warbirds. Going from one hangar that contains a 1903 Kitty Hawk Flyer to a highly modified P-51 is a visual representation of how warbirds have evolved and stayed relevant in this modern age.

COVID-19 PANDEMIC

From the time that Planes of Fame opened in the 1960s, they have been able to achieve unforgettable responses from the community and supporters due to their large display of rare aircraft. The physical senses that arise when witnessing these warbirds in action are what draws in the attention. Hearing the rumble of the engine starting up, the smell of the exhaust fuming the air, and the power of the wind hitting as the propellers are moving hundreds of miles per hour is memorable. For the first time, Planes of Fame closed their hanger doors to the public. March 2020 is an important date that has effected the museum in many ways. COVID-19, a deadly virus, hit the world on a global level that changed everyone's lives. Life has been shut down since this outbreak occurred, and the uncertainty of when things will pick up is still out there. The pandemic has resulted in unprecedented economic, social, and health-related challenges that

require decisive and resilient leadership from museum directors and boards. In times of crisis and aftereffect, the museum's core standards and ethics are more important than ever. Not only has this outbreak affected complex organizations and has put the economy on hold, but it has also severely affected museums' physical aspects. As the coronavirus pandemic stretches on, museums across the United States are struggling to respond to the rapidly changing situation. Institutions of all sizes face uncertain futures, with no specific date for when the crisis might subside.

WEBSITE INTERACTION

While Planes of Fame has been grappling with sets of challenges, their ability for responding is vital. Every organization requires vision, is it how it navigates through the challenges of succeeding in the business climate. The museum has the opportunity to set itself apart from other aviation museums by keeping a strong vision in mind. While they are not able to do the things they are used to doing, they are adapting and finding new methods to increase revenue and stamina from the public. Their interactive website is one way the museum has continued to show off the warbirds and give meaning behind these rare aircraft. Looking at the website's main page, there is an updated message notifying the public to the current status of the museum. While navigating through the website, many educational opportunities can come about even when the warbirds cannot be seen in person. Under the collection tab, there is the option to view flying and static aircraft, restoration projects, a vast collection of military vehicles, and information on the 475th Fighter Group. The museum also provides online resources such as the library and model room. Ed Maloney was a lifelong modeler and understood that scale models provide an opportunity to teach, to preserve, and to stimulate deeper understanding of aviation

and aeronautics. Model room artisans help preserve the museums collection of thousands of scale models, nearly 7,500 built and un-built models.

COVID RELEVANCY

During World War II, life for the home-front changed dramatically across the country for Americans, every day. Food, gas, and supplies were rationed. The uncertainty of the war and the end-result kept society fearful. People became more intensely dependent on radio and media updates for news of the fighting overseas. Entertainment was also a massive outlet for people to escape from the reality of the war. Popular entertainment was a way to spread propaganda about the nation's enemies. The COVID-19 pandemic shares similar qualities with World War II. Across the nation, people started rationing their supplies and resources, and social media and news outlets are the primary sources of information to relay current updates. There is uncertainty when this pandemic is going to get better, and we are learning more about the virus every day. Due to global-wide mandatory lock-downs, society had to stay at home and abide by state and government rules. As a tech-focused society, social media and entertainment are profoundly consumed. The issue with this is that media can manipulate and dramatize news and information. "The social media platforms benefit from misleading information because these stories and posts are often 'too good to be true' that readers and viewers will reply, like, forward, and retweet them" (Suciu, 2020). Much like propaganda, modern media has a way of distorting information and is used as a form of entertainment. With misguided information, all the world can really focus on is doing their part in the effort of stopping the spreading of the pandemic.

While the pandemic has been weakening the economy and placing a tremendous burden on people's lives, it has allowed Planes of Fame to reiterate how struggle and perseverance can

lead to strength. From the time that Edward opened the museum's doors, the museum has survived with hard work and dedication. The museum always had to fight tooth and nail for success, and that is how they have been able to keep their doors open every day. For historians who are well-versed in the war and its effects, they can identify with this global crisis on a more significant level. The similarities make this crisis more real and empathetic. This can also have an effect on younger generations who have not experienced a global crisis such as this widespread pandemic. For those who have not dealt with hardship or fearfulness, it can allow someone to reflect full circle on the hardships that Americans dealt with when fighting for their country.

WHAT IS NEXT FOR THE MUSEUM

Since the Covid-19 outbreak, the vision for Planes of Fame is to be on survival mode. The museum lost about two-thirds of our projected income from the year due to major event cancellations. Their goal is to do what they can to fulfill their mission and not entirely deplete their resources.

That includes cutting programs and projects, long term, to ensure their core mission objectives remain strong. The museum has faced many changes since the pandemic; the museum operational reserves are being depleted at an alarming rate. In the short term, the museum galleries and indoor spaces are closed, events are canceled, and many income opportunities have been lost. These short term losses are going to result in long term changes. In the long term, programs and projects have to be cut to ensure the museum's core mission objectives stay strong. For example, the library program is excellent, but they cannot afford it right now at the expense of doing an annual on an aircraft or paying the utility bill.

Although physical aspects of the museum have been lost when closing their doors, such as displays and guided tours, Planes of Fame have been brainstorming new ideas to keep this aspect alive. The museum's Youtube channel has been revived and has seen great success and audience engagement. In just the last month, they have had 351,524 views. The YouTube channel is always something the museum wants to pursue but did not have time. This is the perfect opportunity to explore this new type of programming. The channel's remarkable achievement is that they are consistently reaching an audience far beyond those who could have physically come to the museum. Only 60% of viewers live in the US, 40% are international viewers. Meaning they are driving mission fulfillment far beyond the museum's walls, and that is exciting to continue pursuing in the long run.

Plans for the museum are at a halt in regards to what they are going to do next. At this point, they are just keeping a close eye on the news and our local health authority for regulation updates. The museum is slowly canceling events as their dates come closer, and in reality, they do not see any significant events this year. Even if the museum could legally put on events, the risk of no one showing up and the organization wasting resources, like time and money, would be worse. It is better to be conservative and focus on sure bets. One thing they are going to be looking at next is preparing self-guided curriculum plans for homeschooling parents. Reasonably so, school field trips are not possible right now, but hopefully, this will create a learning opportunity for kids. Shifting the museum to a more technological environment has been a challenging task. It would be like just sticking a person and a plane in a room and expecting the user to get some value out of it. Context is essential, especially when talking about vintage aircraft. Our Living History Flying Days are our most successful museum program because they

pair the planes with the educational presentations and personal interviews. If we can find a way to leverage virtual reality technology to deliver similar meaningful programming, then we would move forward.

VIRTUAL AIRSHOW

The Coronavirus pandemic may be grounding the real air show at Planes of Fame; however, this does not stop the museum from putting on an unforgettable event. Never done before, Planes of Fame's 2020 Air Show will be completely virtual, launching a series of unique live stream events hosted on Facebook and other social media platforms. This will give the museum's visitors and members a chance to watch these warbirds in action from their homes as a way to maintain social distance. While the museum can never replace the physical aspects of a real airshow, they are excited about the opportunity to connect with their community and visitors from all over the world on a new level. While this airshow will be shown virtually, the museum's primary goal is to continue honoring the history, contributions, and sacrifices of our Veterans. The two-day event will feature over fifty historic aircraft, including the B-25 Mitchell Bomber, P-38 Lightning, P-47 Thunderbolt, and P-51 Mustangs. They plan for various performers and pilots to come out and do what they do best, getting crowds excited to see these planes in the air. These pilots will talk about the warbirds they are flying and the unique airplanes qualities. They will also share some messages and footage to viewers about their favorite past performances. Some of the performers will include: USAF F-16 Viper Demo and Heritage Flight, WWII Airborne Demo Team Paratroopers, the P-51 Mustang Voodoo, and Pacific, European, Korean, and Vietnam Flight Displays. Other planned airshow events will include a behind-the-scenes video montage of some of the airshow volunteers, as well as a montage of some very memorable

air shows over the years. There will also be a special panel discussion with some of their honored Veterans.

PERSONAL SELF-REFLEXIVITY

Learning about the history and significance of warbirds has reshaped my perceptions of honor, perseverance, passion, and the power of education. The amount of determination that Edward Maloney had for aviation is an inspiring story, and he wanted people to enjoy and appreciate warbirds as much as he did. He inspired me to have an interest in aviation and war memorabilia. I have discussed how warbirds impact people and why they are used as incredible displays to share the many stories of the war. A time that I was exceedingly inspired by these rare aircraft was when I was flying in one. I had the opportunity to fly in the North American B-25 Mitchell Bomber. As I was sitting in the jumper seats behind the cockpit, I began putting myself in the shoes of a young soldier waiting bravely for battle. For someone who is in their early 20's, I recognized that my age was not far from the young soldiers who were drafted in the war. This realization allowed me to re-identify myself with the life I have and the opportunities I have been given because men and women fought for my freedom. Flying in the B-25 bomber also allowed me to recognize that I would not be able to take in these experiences if it was not for Edward Maloney. His dedication allowed me to see his vision and what he worked so hard to accomplish. The aftermath of COVID-19 has also opened my eyes to what can happen when tragedy strikes in the world.

Although this pandemic is not at the same degree as World War II, I have experienced the world shutting down, businesses closing, in shelter lock-downs in place, and the actions of people who are scared and uncertain for the future. I have watched people lose their jobs, not

have a place to live, and lack necessary resources like toilet paper and food. While this has all been very surreal and scary, it has allowed me to identify with crises from the past. I have been able to do this by connecting my millennial generation with the greatest generation. Throughout my life, I had never experienced a global crisis as massive as this pandemic that had personally affected my family and I. When 9/11 struck in New York, I was too young to understand what happened and how it reshaped the world. For the most part, I was raised in a safe bubble, having access and opportunity to education, hobbies, and social life. Technology has also played a role in my life from the start. The Millennial generation has been able to take action during a worldwide crisis because old and new technology has been crucial to keeping the world running during these times. In regards to different generations, “Millennials become the first generation in history for whom digital technology platforms are the essential mediators of social life and information acquisition. Millennials have not had to adapt to technology because it is all they’ve ever known. They have a knack for technological adaptability” (Jenkins, 2017). Virtual reality is slowly becoming the new norm for communication, whether it is to talk to friends and family or to keep a business running. As Planes of Fame is switching over to virtual reality, this enables my involvement in the organization, where I can play a part in keeping this organization relevant to my generation and younger generations. This includes joining in on live video chats via social media, donating funds or purchasing items from their online gift shop, and mentioning them on various platforms.

CONCLUSION

Museums tell stories of people overcoming odds, forging new lives, or improving our standards of living. Planes of Fame Air Museum has been built on the vision, ideas, and hard

work of thousands of individuals. From a young age, Ed Maloney had an affinity for aviation. He saw potential in these warbirds, and he believed that one day they would be recognized. Because of this, he wanted the museum to provide an educational component or, at the very least, an aesthetic or artistic purpose. The museum helps foster this lifelong pursuit of knowledge. For younger visitors, flying aircraft creates an experience that static displays or history books could never match. Targeting a broader audience is a goal for Planes of Fame. They continue to achieve this through their events, displays, and by communicating with the public. The importance of younger generations getting involved is crucial because they will continue this journey for inspiration and passion in the aviation world.

The museum has proved that there are many underlying significances behind these warbird displays. The presentation of rare and historic artifacts help us to appreciate better who we are and how we came to be. Stories of the past can be told by these aircraft, and future stories can be created after seeing them. The wide variety of warbirds helps share the ethical and cultural qualities of the history of the war. The collection makes up all sides of the war, including Pacific, European, and Japanese. Similar to Edward's strong efforts in keeping the museum's doors open, Planes of Fame is continuing to push towards success through this COVID-19 pandemic. Although physical aspects of the museum have been lost when closing their doors, such as displays and guided tours, Planes of Fame have been brainstorming new ideas to keep this aspect alive. They are reaching new levels of technology that are helping them advance to reconnect with their community and fans worldwide. Overall, the museum preserves aviation history through the restoration and flying of rare aircraft, and through the displays and information, they impart. It is the flying aircraft, and seeing and hearing them come alive again

makes the museum so remarkable. The sights, sounds, and smells of working aircraft renew powerful memories of what was like in World War II. As a Museum, we can no longer afford to have our eyes focused only on the past. We must also be the bridge that connects the past to the present to enable our visitors to visualize and shape the future.

Works Cited

- About The Reno Air Racing Association: About Us. (n.d.). Retrieved June 08, 2020, from <https://airrace.org/about/>.
- Americans, Japanese: Mutual Respect 70 Years After the End of WWII. (2020, May 31). Retrieved June 05, 2020, from <https://www.pewresearch.org/global/2015/04/07/americans-japanese-mutual-respect-70-years-after-the-end-of-wwii/>.
- Anderson, D. (2003). On the occasion of the 15th Anniversary of War, Literature & the Arts. *War, Literature & the Arts: An International Journal of the Humanities*, 15(1/2), 1.
- Edward T. Maloney, Founder. (n.d.). Retrieved June 05, 2020, from <https://planesoffame.org/about/founder>.
- Exhibition Ethics - An Overview of Major Issues. (2014). *Journal of Conservation and Museum Studies*, 12(1), 4. doi:10.5334/jcms.1021213.
- Hangar Dance: Planes of Fame Air Museum. (n.d.). Retrieved June 08, 2020, from <https://planesoffame.org/events/hangar-dance>.
- History & Mission: Planes of Fame Air Museum. (n.d.). Retrieved June 05, 2020, from <https://planesoffame.org/about/history-mission>.
- Jenkins, R. (2017, July 10). The Complete Story of the Millennial Generation. Retrieved June 08, 2020, from <https://www.inc.com/ryan-jenkins/the-complete-story-of-the-millennial-generation.html>.
- LANGER, R. (2011). Combat Trauma, Memory, and the World War II Veteran. *War, Literature & the Arts: An International Journal of the Humanities*, 23(1), 50–58.

- Luedtke, J., & Bowen, B. (1993). Determinants of Underrepresentation of Women in Aviation Education. *Journal of Aviation/Aerospace Education & Research*. doi: 10.15394/jaaer.1993.1102
- Lumsden, M. (n.d.). Ed Maloney's Mission. Retrieved June 05, 2020, from <https://www.airspacemag.com/history-of-flight/ed-maloneys-mission-24413816/>.
- Military Airplane Boneyards After WWII. (n.d.). Retrieved June 05, 2020, from <https://www.airplaneboneyards.com/post-wwii-military-airplane-boneyards.htm>.
- Stamberg, S. (2010, March 09). Female WWII Pilots: The Original Fly Girls. Retrieved June 08, 2020, from <https://www.npr.org/2010/03/09/123773525/female-wwii-pilots-the-original-fly-girls>.
- Suciu, P. (2020, April 17). COVID-19 Misinformation Remains Difficult To Stop On Social Media. Retrieved June 08, 2020, from <https://www.forbes.com/sites/petersuciu/2020/04/17/covid-19-misinformation-remains-difficult-to-stop-on-social-media/>.