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REMEMBERING THE ARIZONA

BY

JOHN F. ALLEN

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REMEMBERING THE ARIZONA

**BY
JOHN F. ALLEN**

There are few dates in history as vividly remembered as December 7, 1941. In his address to Congress the next day, President Franklin Roosevelt prophetically proclaimed it as “a date which will live in infamy.” It was the date Japan attacked the United States’ fleet in Pearl Harbor and triggered the American entry into World War II.

The backbone of the fleet was the battleships named after the states in the union. The USS Arizona was one of them. Described as a small city gone to sea, her 14 inch guns could fire a shell 20 miles. However, the era of the battleship was all but past. It was the beginning of the age of the aircraft carrier. The 350 planes of the Japanese Navy, launched from a task force of six carriers and a large group of escort ships 230 miles north of Oahu, were about to prove it. After successfully traveling undetected across 4000 miles of the Pacific Ocean, they delivered a devastating blow to the United States.

The Utah was sunk with 58 lives lost. The Oklahoma capsized trapping hundreds on board. 429 died. Some of those who died on the Oklahoma actually survived for weeks but could not be rescued from their entrapment. Then, a few minutes after 8 that morning, one of five armor piercing bombs dropped from an incredible 9,500 feet struck the Arizona between gun turrets one and two, igniting the forward ammunition magazine. To all those who heard it, the sound of the explosion was unforgettable. The shockwave was so powerful, it was even felt by the Japanese pilots flying the bombers two miles overhead. The ship sank upright in minutes, taking with it the lives of 1177 officers and sailors. It burned for three days.

Of all the ships damaged or sunk on that Sunday morning, all were refloated and repaired except the Utah, Oklahoma and Arizona. In order to keep her from being a hazard to navigation, the Utah was dragged away from the channel towards the shore of Ford Island in the center of Pearl Harbor, where she rests today. After a three year effort, the Oklahoma was turned upright at the rate of one degree per day, refloated and towed to the mainland for repair. Unfortunately, she sank in a strong Pacific storm encountered during the voyage.

The Arizona was a total loss. Its superstructure was removed and the great ship was left where she lay as the memorial and tomb for her 1177 crewman. To this day, oil can be seen on the surface still leaking from the hull.

In 1950, it was decided that the American flag would again fly over the Arizona. However, by 1956, it was determined that it was no longer safe to perform the daily ceremony aboard the remains of the ship. A campaign was launched to raise the funds to build a permanent memorial for the Arizona. Funds were raised both publicly and privately. Congressional and state support was obtained as well as other activities including a benefit performance by Elvis Presley, which raised \$64,000.00.

Architect Alfred Pries was selected to provide a solution to the highly sensitive issue of the memorial's design. Indeed, this sensitivity continues to this day regarding virtually every aspect of the memorial and the USS Arizona. More letters to Congress and the National Park Service are received concerning this site than for any other in America.

The memorial was completed at a cost of \$532,000.00, and formally dedicated on May 30, 1962. I remember watching these ceremonies on television and the feelings they inspired in my parents, both of whom had served during the war. The memorial was constructed over, but not on the ship itself. It stands 184 feet long and 36 feet wide, narrowing in the center to 27 feet. Visitors are transported to and from the ship by launches provided by the United States Navy.

As more and more visitors came, it became obvious that many did not fully appreciate the historical significance of the memorial. Some hardly knew it was a cemetery or much about the 1941 attack. In 1980, a visitor center including two 150 seat theatres was added. Operated by the National Park Service, the memorial and visitor center have become an important landmark. With over 1.5 million visitors each year, it remains one of the most visited and sensitive sites operated by the Park Service. It has become the most visited destination in Hawaii.

The Navy produced the original documentary film. It was to be shown to visitors just prior to their boarding the launches to the ship itself. This original film used both actual footage of the attack as well as a fair amount of "Hollywood" footage from a 1943 propaganda film entitled

DECEMBER 7TH. Over the years, many objections were voiced concerning the original film. Some thought it didn't properly prepare visitors for the fact that they were visiting a national cemetery or the significance of Pearl Harbor and that it was "a product of the cold war mind set." As time went on, more was learned about the events leading up to and including the 1941 attack. It was found that the film contained inaccuracies. When I viewed the film, I was personally uncomfortable with the sense I had that it sometimes seemed like an advertisement for the Navy. In any event, it was easy to see why, in 1990, it was decided to replace the film. The hope was to have the new film completed in time for the 50th anniversary of the attack in 1991.

When one recalls the controversy surrounding the Smithsonian Institution's plans for an exhibit of the bomber Enola Gay, it is easy to understand how producing a film about Pearl Harbor would be a daunting task. The American Film Studies Center in New York and producer Lance Bird were chosen. Bird talked about the importance of the film: "The most important thing about this film was that it prepare people for the emotional experience of being at Pearl Harbor...because people sometimes literally show up there with coolers of beer thinking they are going to a Disneyland kind of experience."

One of the first decisions made was that the new film was to contain only authentic footage and photographs. No "staged" or special effects would be included. Because of the sensitivities involved, Bird explained: "We are all doing a very difficult thing. We are making a major motion picture to be shown at the most controversial site the National Park Service manages." Museum curator Bob Chenoweth, assisted by historian Daniel Martinez, was charged with drafting the initial storyline as well as acting as liaison with the film company. He noted in an interview, "It's a place where nearly 1200 people lost their lives in an instant. There should be a certain amount of respect and reverence and reflection... when people go out there."

As time went on, an increasing number of groups and individuals, both on a national as well as a local level, became involved in oversight capacities. Differing views of how the story should be told emerged. One of the most basic differences was the approach of the Park Service and the memorial staff (some of whom are Pearl Harbor survivors), that the film should be a narrative, telling the story in terms of a larger historical perspective. The film company as well as some military/veteran advisors thought a more personal approach, telling the story through personal experiences, was more appropriate. In the end, the narrative approach was chosen. But further challenges remained throughout the production. The final script was revised 27 times over a period of one year.

When it came time to do the soundtrack, a search was begun to locate authentic recordings of the planes and ships seen or heard in the film. Many of these came from the National Archives. Original newsreel soundtracks would be used whenever possible. Original music would be

written and scored. An array of sound effects for things like water hoses seen in the background was recorded, edited and assembled. Finally, the critical choice of a narrator had to be made.

There were, of course, some of the more obvious choices: Walter Cronkite, Robert Mitchum, Richard Widmark. In fact, Mitchum was the first choice. When it turned out that he was not available, producer Bird began thinking of a woman's voice - perhaps the wife of a Navy survivor. But ultimately, Bird thought of actress Stockard Channing. He noted that, "Her voice carries a deep, lilting quality that conveys a sense of historical inevitability and sadness about Pearl Harbor and the ensuing course of the war." Channing accepted. She then began a thorough study of the history and events surrounding the attack. She wanted to express as best she could, the significance and emotion of the film.

The soundtrack was mixed in two formats, Dolby SR optical as well as discrete six-channel sound including subwoofers and stereo surrounds. The premiere of the final 23 minute film, which runs without credits, took place on December 2, 1992 and was received with generally laudatory reviews. Many were impressed with the producer's success in "meeting the stated goal of navigating between the poles of 'Japan-bashing' and 'justification'."

However, the overall cost of the film proved to be so high that the hopes of refitting the theatres and presenting the film with the discrete six-channel soundtrack would have to wait for another time as well as additional fund raising. National Park Service senior producer Tom Kleiman, opened the film using the matrixed optical soundtrack with the original sound systems and put the six track print master in a vault.

During the years that followed, I was doing many installations in Hawaii for Consolidated Amusements. I began to hear about the theatres at the Arizona Memorial. Since Consolidated was contracted to maintain the equipment, I expressed my interest in providing the new sound systems that were desired by the Park Service. Indeed Consolidated's projection and sound director, Wesley Inouye, had written to the Park Service recommending that they install two of our largest HPS-4000™ sound systems.

At around this time Kleiman and Park Service technical director, Eric Epstein began to evaluate speaker systems for use in all Park Service theatres. They felt their theatres had a poor reputation for sound and that they had to do something about it. They asked about 20 different speaker companies to submit samples. Salesman were not allowed. Thanks to Consolidated's recommendation, I was also asked to send a sample. And I was also not invited to their listening tests. In fact, I knew relatively little of the extent of their search for speaker systems. Not only did they listen from a professional perspective, they also set up listening tests/comparisons for secretaries and other non-technical staff during lunch hours. Not long after, I was informed that

our speaker (the smallest we offered at the time) had been chosen as “head and shoulders above all the rest.”

The first installation we did for the National Park Service was their new visitor center in Salem, Massachusetts. Widely known as the location of witch trials in the 17th century, Salem and its surrounding Essex County were once one of the most important shipping, leather and textile centers in the world. A new three projector film (similar to Cinerama) outlining this history was being produced. I was given the assignment to design and build the sound system for the new theatre. Frankly, while I was impressed with the overall plan for the theatre, I found myself in the position of informing the client that more money was needed to improve construction and acoustic details. It was difficult. The front wall of the theatre had to be rebuilt three times before I was satisfied. I thought they might never speak to me again.

When the new Salem theatre opened with its new film, Tom Kleiman and Eric Epstein were on hand. It was a great success for all concerned. During dinner one night, Tom unexpectedly began talking about the theatres at Pearl Harbor. He told me that he had come to Salem with hopes of hearing a sound system of the quality he had envisioned for their most important theatres in Hawaii, and that he had found what he was looking for. I said that with the obvious importance of the memorial to the country, and because of the personal feelings it evokes in so many, including members of my own family, I would be honored to be allowed to contribute.

The first thing I needed to do was visit the theatres during my next trip to Hawaii. I discovered that not only did the speakers need replacement, but also the entire chain of electronics for the sound systems as well as the equipment needed for the foreign language and hearing impaired listeners. To avoid any last minute surprises, I also asked for a copy of the six-channel print master.

Because these prints are run every 1/2 hour, everyday for years, it was my intention to use DTS as the main soundtrack format. Since DTS uses CD-ROMs to store the soundtrack, they offer the most durable soundtrack medium in the history of motion picture sound. It is ideal for special venues since there is no digital soundtrack on the film that could be subject to wear or damage.

Unfortunately, the only soundtrack master that could be found was for the original film. The print master for the new film could not be located.

After some anxious moments, the materials were found. We then sent the original magnetic print master to DTS to be transferred to a disc. When I was finally able to play it on my reference system at General Cinema's Framingham, MA facility, I noticed several problems with the sound that would need to be fixed. For openers, the overall level was low. In addition, the treble

balance was slightly dull. Worst of all, there were several times when the narration was drowned out by the sounds of aircraft and explosions. What was also apparent to me was that it was an otherwise excellent mix. The thought of redoing such a mix at this point was almost scary. Even if all the elements could be found, it was unlikely a new mix could be done that would be faithful to the original. And the cost would be substantial.

Fortunately, in having a discrete six-channel master, I had another option. I decided to rerecord (copy) the print master making only the corrections needed to the tone and overall balance of the six channels. The original intent of the mixers was to create a sound throughout most of the film that is best described as a "documentary" style - somewhat subdued in contrast to Stockard Channing's narration. The main exception to this was the moment of the explosion of the Arizona itself which had been somehow captured on film. This silent footage had only been recently discovered, just prior to the making of this film. The sound for the explosion was intended to be powerful but not necessarily excessively loud. It turns out that the actual explosion was indeed not noted for its loudness but rather for its enormous concussion. It was obvious to me that this was the intent of the mix and that it fell short of its goal. In addition to re-mastering the film, I wanted to see if I could fulfill what I thought was the intent of the producers with regard to this most pivotal point of the entire film.

I suggested a budget for the sound systems, installation, re-mastering as well as a new answer print and new theatre prints, of \$160,000.00. Within two years, the funds (some private) were raised and the process began.

As with many of our installations, my reference theatre at Framingham has the distinction of being suitable for mixing. Indeed, I had recently enlisted the cooperation of Sony Pictures Studios as well as Sony Cinema Products, and produced a live demonstration of film-mixing right in this theatre. The digital version of my own HPS-4000™ trailer had been mixed in this theatre along with General Cinema's new "Candy-Band" trailer. Mixing in a theatre like this is made practical by the use of very compact Tascam DA-88 eight-channel digital cassette recorders. By using three of these as source machines and a fourth for recording, one has a miniature 24 track rerecording facility. After borrowing a 32-channel mixing console and a few other things, I had all I needed to do the job.

The one complication, of course, was to find the effects required to fill out the sound of the main explosion. I selected the bass tracks of some special low frequency sound effects as well as explosions, and mixed them together with the existing tracks to add the power I was looking for.

Up to this point, I was completely unaware of the intense oversight the producers of this film had undergone throughout every stage. The Park Service had decided to allow me to do the re-

mastering without any supervision. This is something that I now realize was very unusual. In fact, it would have been helpful if someone could have been available to advise me as to the intent of the mixers and producers, rather than having to essentially rely on my instincts.

Fortunately I was able to enlist the help of the Framingham theatre's assistant manager, Jennifer Putzbach, who had majored in audio recording. She provided me with a valuable second set of ears and proved most helpful. The new master was finished in one night. Not only were the level and tone issues corrected, the missing lines were now easily heard and understood, some for the first time.

One thing a mixer gets to do is hear the same thing over and over again. Any less-than-satisfactory sequences or performances by an actor or, in this case, a narrator, quickly become tiresome. In listening to this film, I began to appreciate how really excellent it is. In listening to Ms. Channing's reading of the script, I agreed with so many others who have complimented her flawless reading and inflection. Her work in this film is truly extraordinary.

Once finished, the new six-channel print master was sent to Bill Hunter and Jim Fulmis at DTS for a new disc. This allowed me to review the soundtrack without actually making a print. All was well and we headed for Hawaii. In addition to technical support provided by Consolidated's Scott Bosch and Alan Sakaida, the installation was carried out by the local National Park Service staff at the Arizona Memorial. Ray Eselu, Peter Abang, Merry Petrossian, Betty Polli and projectionist Daniel Warner along with Eric Epstein did a superb job under a tight schedule made more difficult by the need to keep at least one theatre operating at all times. Park superintendent Kathy Billings ensured we had everything we needed to stay on schedule.

Both of the theatres were equipped with our flagship XL class HPS-4000™ sound systems, the largest and most powerful in the world. The screen speakers were our new 545-4 four-way systems. The subwoofers were our equally new 545-W units. The surround speakers were our SR-70 three-way units, each located with the use of our proprietary Allen Surround Array™ formulas. These were all driven by Dolby CP-500 processors, two DTS players per system (the second unit for foreign languages) and four BGW GTB-HPS power amplifiers, equipped with special two stage input gain controls for optimizing the signal to noise ratios of every channel.

Sadly, Tom Kleiman did not live to hear his dream for the new film fully completed. He passed away a few months before we were able to finish the installations. He knew, however, that we were in the final stages and that it would finally come to pass as he had envisioned.

Begun in 1990, the new film HOW SHALL WE REMEMBER THEM? is now presented to over 1.5 million visitors from around the world every year in the way it was intended. Comments

about the new soundtrack and new sound systems have been unanimous in their praise. For myself, the most gratifying of these came from Arizona Memorial historian Daniel Martinez when he told me that I had indeed succeeded in delivering the soundtrack they had hoped to produce but never really heard, until now. I replied that it had been my honor to help.



Park officials confirm that the effect this film has on those who see and hear it has been enhanced by the new quality and clarity of the sound. When thinking about presentation, it's significant to note the importance of quality sound, whether it be a 23 minute documentary or a two hour feature.

Over half a century since it occurred, the events of that day at Pearl Harbor are still remembered with profound emotion, reflection and sadness. As we near the end of the film, we see both American and Japanese mourners visiting the Arizona Memorial. We are told how, "People from all over the world honor young men they never knew, whose lives were taken from them on December 7, 1941."

My thanks to Tom Kleiman and Eric Epstein for their trust as well as for this once-in-a-lifetime opportunity. My thanks also to historian Daniel Martinez and author Dr. Geoffrey White for their valuable help in preparing this article.

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