USS Orleck DD886

Conservation Plan

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PURPOSE

The intent of this document is to define high level policy for all work undertaken aboard USS *Orleck* DD886, and, coupled with the Historic Assessment and Furnishings Report and the DD886 Maintenance Plan that needs to be generated, provide principles for overseeing the upkeep and well-being of the destroyer. Guidelines within this document were based upon experience taken from efforts aboard USS *Orleck*'s sister ship, USS *Joseph P. Kennedy, Jr.* DD850 as well as amplifying information provided by the USS *Orleck* DD886 Association. It should be noted that this plan was created assuming a 100% restoration requirement for the vessel and without having been aboard DD886 since 2001. Further analysis and an update of this document is warranted after an inspection of *Orleck.*

This document, and all subordinate to it, are living documents that will be modified and changed as new procedures and findings are revealed.

This document forms part of a set and should be read in conjunction with the USS *Orleck* Museum's (or other preservation entity with custody of the vessel) general Conservation Policy and others regulating staff, volunteering and related topics.

REVISION HISTORY

REVISION	REVISION DATE	NAME
A (Initial Release)		Richard Angelini

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ENCLOSURE 1

BACKGROUND

1. Operational History. USS *Orleck* is a Gearing class Destroyer in a Fleet Rehabilitation and Modernization (FRAM) I configuration.

She was named for Lt. Joseph Orleck (22 January 1906 – 9 September 1943) who was born at Columbus, Ohio and enlisted in the Navy 23 June, 1924. Rising through the enlisted ranks, he was warranted Boatswain on 14 December, 1938, and appointed Ensign, 15 June, 1942. On 28 May, 1943 and now as a Lieutenant , assumed command of USS *Nauset* (AT–89). Lt. Orleck went down with his ship after a Luftwaffe bomber attack in the Gulf of Salerno on 9 September, 1943. A recipient of the Navy and Marine Corps Medal for rescue work during the Casablanca invasion in 1942, he was posthumously awarded the Navy Cross for his courageous firefighting and flood control efforts to prevent total loss of his ship during the Salerno assault. In his honor, DD-886 would be named USS *Orleck.*

Orleck (DD-886) was laid down on 28 November, 1944 by Consolidated Steel Corporation of Orange, Tex., and was named *Orleck* 11 January, 1945. DD-886 was launched on 12 May, 1945 and was sponsored by Mrs. Joseph Orleck, the widow of Lt. Orleck. USS Orleck was officially commissioned on 15 September, 1945 with Comdr. J. D. Andrew in command; being the last US Destroyer commissioned at the end of World War II.

Following a Caribbean shakedown, *Orleck* got underway on 20 January, 1946 for San Diego whence she steamed west, in mid-March, to join the 7th Fleet. Between 20 April and 15 August she conducted mail runs from Hong Kong to Shanghai, Tsingtao, and Taku, China, and Jinsen, Korea and also assisted in minesweeping operations in Hainan Strait. A month of exercises off Guam preceded her joining TF 77 for new operations off China and Japan.

Sailing home in January 1947, she remained on the West Coast until departing for the western Pacific in February 1948. At Eniwetok during March, she participated in Atomic Energy Commission experiments. From Eniwetok, she continued west, reporting to COMNAVFE on 5 April. On completing her second WestPac tour she turned northeast for cold weather operations off Alaska from January to March 1949. Operations off the west coast and Hawaii ended in October as the destroyer again sailed west for her annual overseas deployment. By returning to San Diego in July 1950, she just missed the outbreak of hostilities in Korea.

On 18 February, 1951, *Orleck* sailed for her first of many combat operations. Joining United Nations forces off the east coast of Korea, she remained off that peninsula until June, alternating carrier escort duties (TF-77) with shore bombardment missions (TF-95). Retiring to Okinawa during June, she returned to the combat zone in July and again operated with both TF 77 and TF 95.

Arriving back at San Diego 15 October, she trained destroyer crews and conducted individual and squadron exercises until her next return to the Far East in late June 1952. Arriving at Sasebo on the 26th, she soon joined TF 95 for blockade and logistics interdiction missions. On 15 July, while patrolling to the south of Yang-do Island, she became a charter member of the force's

Train Busters Club. Planning and patience had put her in the right position to smash a North Korean supply train as it passed between two tunnels. Duplicating the feat on the 27th she kept up her offensive tactics until reassigned, first to carrier duties with TF 77 and then to TF 72 for Taiwan Strait patrol. She returned to Korea 8 October and during the remaining two months of her tour again alternated between TFs 77 and 95.

After Korea, *Orleck* rotated regularly between duty in WestPac and training exercises off the west coast. In the Far East when the Tachen Islands crisis arose, she patrolled off those islands until relieved just prior to their evacuation in February 1955.

In May 1960, *Orleck*'s rotation schedule changed and she joined DesRon 3, the first squadron to be homeported in the Western Pacific since before World War II. Based at Yokosuka for 27 months she operated primarily with fast carrier forces and served three tours with TF 72. In August 1962, she returned to the west coast for Fleet Rehabilitation and Modernization (FRAM). The FRAM I overhaul and conversion brought on board the newest in technical equipment and weaponry, including ASROC and DASH.

From November 1963 to June 1964, the "new" destroyer, homeported at Long Beach, conducted training exercises with the 1st Fleet off the west coast. Then rotated back to Yokosuka, she joined TF 77 in the South China Sea as American commitments to the Republic of South Viet Nam escalated. Into October she escorted carriers in the Gulf of Tonkin, then returned briefly to Japan before taking up patrol of Taiwan Strait. From Taiwan she sailed to the Philippines, thence to the Vietnamese coast for TF 77 operations until June. Detached for a month, she joined TF 130 to assist in the recovery of the Gemini IV space capsule.

In July she returned to Vietnam to provide escort and plane guard services to USS *Oriskany*. Shore bombardment and gunfire support activities followed as the destroyer participated in operations "Starlight", a regimental attack involving amphibious, helo-borne and ground operations in the Chu Lai area, and "Pirania", a similar assault at Van Tuong. In late September she departed the gun line only to return the next month to support the last "Dagger Thrust" operations at Lang Ke Ga and Phu Thu.

Spending Christmas in Japan, Orleck was back off Viet Nam in January 1966 for surveillance operations followed by 30 days bombardment duty in the Chu Lai-Tam Ky area during operation "Double Eagle". In mid-March she returned to Japan, whence she headed for the west coast, again to be homeported at Long Beach. She remained on the west coast for overhaul and local operations until departing for Vietnam 19 September, 1967. Assigned first to Yankee Station in the Tonkin Gulf, she alternated plane guard duties with surveillance of a Russian electronic intelligence "trawler". At the end of January 1968, as the Tet offensive reached a climax she shifted to gunfire support duty off Vung Tau. She remained in that area until setting a homeward course on 17 February.

Arriving at Long Beach in March, she departed 31 July for her third tour as a non-rotated unit of the 7th Fleet. Asian based at Yokosuka, she was off Vietnam by 13 September to support the 9th R.O.K. Infantry in the Cam Ranh Bay-Nha Trang area. She spent much of the remainder of the year off that embattled coast in roles which ranged from blockade and interdiction of Viet Cong logistic vessels in the I Corps area to gunfire support south of Saigon. Into the next decade of the

1970s she continued to conduct similar missions in support of Allied operations in and around Vietnam.

After operating as a reserve ship late in her career, *Orleck* was decommissioned on 1 October, 1982 and stricken from the Naval Vessel Register on 6 August 1987. However, DD-886 was transferred to Turkey on her decommissioning day and received modifications at the Long Beach Naval Shipyard. Now operating as *Yücetepe* (D 345), this destroyer served another 16 years in various missions on the sea. In August 2000, *Orleck* was returned to the United States to serve as a memorial in Orange, TX by the Southeast Texas War Memorial and Heritage Foundation.

After various mishaps and Hurricane Rita in September 2005, *Orleck* was severely damaged and needed repairs. After repairs, *Orleck* was ready to return to her pier but the City of Orange refused to allow her to return due to lack of museum success. On 6 May, 2009, the Lake Charles, Louisiana City Council voted in favor of an ordinance authorizing the City to enter into a Cooperative Endeavor Agreement with the USS *Orleck* Naval Museum, Inc. On 20 May, 2010, the ship moved to Lake Charles, Louisiana and opened for display on 10 April 2011.

ORLECK earned four battle stars for action in the Korean Conflict as described in Table 1 below as well as the United Nations Service Medal, Korean Service Medal, and China Service Medal.

Table 1. DD886 Korean War engagements

Engagement dates	Battle Star
Feb- Apr 51	First UN Counter Offensive: 25 Jan-21 Apr 51
Apr- Jun 51	Communist China Spring Offensive: 22 Apr-08 Jul 51
July- Nov 52	Korean Defense Summer-Fall: 1 May- 30 Nov 52
Dec 53	Third Korean Winter: 1 Dec - 30 Apr 53

ORLECK earned 14 battle stars for action in the Vietnam Conflict as described in Table 2 below as well as the Republic of Vietnam Campaign Medal, Republic of Vietnam Gallantry Cross Unit Citation, Armed Forces Expeditionary Medal (Vietnam), and Vietnam Service Medal.

Table 2. DD886 Vietnam War engagements

Engagement dates	Battle Star
Mar 64 - Mar 65	Vietnam Advisory Campaign: 15 Mar 62 - 7 Mar 65
Mar - Nov 65	Vietnam Defense Campaign: 8 Mar - 24 Dec 65
Jan- March 66	Vietnam Counteroffensive: 25 Dec 65 - 30 June 66
Sep 67 – Jan 68	Vietnam Counteroffensive Phase III:1 Jun 67 - 29 Jan 68
30 Jan – 17 Feb 68	Tet Counteroffensive: 30 Jan – 1 Apr 68
Sep - Nov 68	Vietnam Counteroffensive Phase V: 1 Jul – 1 Nov 68

Feb 68 – Jan 69	Vietnam Counteroffensive Phase VI: 2 Nov 68 – 22 Feb 69
Mar – May 69	Tet 69 Counteroffensive: 23 Feb – 8 Jun 69
July- Oct 69	Vietnam Summer-Fall 1969: 9 Jun – 31 Oct 69
Nov 69 – Apr 70	Vietnam Winter-Spring 1970: 1 Nov 60 – 30 Apr 70
May 70	Sanctuary Counteroffensive: 1 May – 30 Jun 70
Sep - Nov 71	Consolidation I: 1 July – 30 Nov 71
Dec 71	Consolidation II: 1 Dec 71 – 29 Mar 72
Dec 72- Jan 73	Vietnam Cease-fire: 30 Mar 72- 28 Jan 73

With the total award of 18 battle engagement stars for USS *Orleck* DD-886, she must be considered one of , if not the most, highly decorated naval ships still afloat in the world today. Her steady action on the gunline in Vietnam warrants her special mention in the annals of history and she should be considered the premier combat ship of the Vietnam era in existence.

2. SPECIFICATIONS. The data elements in Table 3 apply to ship characteristics of DD886.

Table 3. DD886 Ship Specifications.

Class:	*Gearing*
Builder:	Consolidated Steel Corporation, Orange, Tx
Laid down:	28 Nov 1944
Launched:	12 May 1945
Commissioned:	15 Sept1945
Decommissioned:	1 Oct 1982
Length:	390’-6” overall
Beam:	40’-10” extreme
Draft:	13’ design; 14’-7” maximum; 26 Tons/inch Immersion
Displacement:	2175 Tons (light ship); 3460 Tons (full load)
Complement:	18 Officers and 270 Enlisted
Boilers:	4 Babcock and Wilcox (565lbs Pressure; 850 F temperature)
Turbine sets:	2 General Electric sets (High Pressure, Low Pressure, and Cruising Turbines)
Reduction Gears:	2 Delaval (design) Locked Train, Double Reduction made by GE
Speed:	36.5 Knots (Standard Displacement)
SHP:	60,000 (30,000 per shaft)
Frame Spacing:	21”

ENCLOSURE 2

PAST WORK AND PRACTICES

1. INTRODUCTION. Upon completion of service to the US Navy in October 1982, *Orleck* began a process of modernization and upgrade to meet fleet challenges for Foreign Service within the Turkish Navy. When *Orleck (Yücetepe* (D 345)) was retired from Turkish service, an extensive parts reclamation program commenced that removed minor furnishings and equipment with some items eventually being returned prior to her return to the USA in August 2000. This stripping of DD886s Vietnam era historic fabric from 1982 to 2000 left the destroyer without much of her original equipment and appearance though the in-service modifications ensured her survival. The equipment removal coupled with hull corrosion and a lack of resources by preservation groups has dictated the ship's physical appearance and presentation going forward.

Many efforts by Tin Can Sailors, the USS *Orleck* Association, past museum personnel, and supporters of the destroyer made forward progress in acquiring equipment and historic artifacts to replace previously removed items to improve the visitor experience aboard DD886. However, the level of equipment removal, the deteriorated condition of the vessel, lack of a restoration plan, and the general lack of resources were the catalyst for the misrepresentation and delay in progress of various areas of *Orleck*. While the difficulty undertaking initiatives aboard DD886 in the early days as a museum were unfortunate, the framework for a large scale restoration for the vessel still exists. It is paramount that guidelines and this plan be utilized to move the vessel forward.

The below notations and points provide a general overview of the major changes and issues aboard the destroyer over the past decades.

a. The main challenge faced when preserving a structure primarily made of steel and aluminum is that of corrosion due to the natural elements and the effects of electrolysis. During her time since retiring from the Turkish Navy, it is not known what types of anti-corrosion measures *Orleck* has undergone. It is known that both her SQS-23 Sonar dome and the propellers with a portion of the main propulsion shafts have been removed. In general, it is understood by many in the museum industry that the removal of the bronze propellers from DD886 may actually reduce electrolysis issues. A cathodic protection system that is intended to protect metal plating up to four feet under the waterline is required to be put in place to combat the effects of electrolysis. Planned maintenance on a periodic basis needs to be instituted to look for grounds on both the FWD and AFT switchboards. Currently, no known protection or procedures for cathodic protection are in place.

b. Maintenance records of work undertaken were never officially catalogued or documented resulting in the loss of museum history.

c. Paint schemes and details throughout the vessel adhere to those of her Turkish service and do not meet US Navy practices.

d. The Sonar Equipment Room, Chief's Berthing, CIC, Radio Central, Radio Transmitter Room, Sickbay, most Office Spaces, and Post Office are examples of areas aboard DD886 that had equipment and furnishing removals due to Turkish operational requirements or stripping. In addition, photographs of *Orleck*'s main machinery spaces show a possible removal of the cruising turbine and associated throttle wheel on the main throttle board of the engineering rooms.

e. Exterior additions of Chaff launchers, a blast shield on the forward section of the 01 level torpedo deck, gun boots on the 5"38 mounts, and the outright removal of various antenna posts are examples of modifications completed to DD886 while in Turkish service. However, the basic configuration and outfitting of the ship is present to return *Orleck*'s exterior appearance to a Vietnam era US Navy configuration.

f. It is not known whether Water tight integrity and historical configuration has been compromised due to utility routing or visitor access routes in the vessel. In addition, electrical and electronic systems may have been wired with non-military specification cabling and added on to original circuits. It is recommended that this be checked as other museum ships have made these mistakes including DD850.

g. Artifacts from WW2 or more modern vessels were incorporated into compartment displays and mixed in with the original historic fabric without photographic or documented evidence of usage aboard this type vessel during the target presentation timeframe of 1967-1973. Also, some of these artifacts have been installed in the wrong orientation or method to those that were typically aboard *Orleck* and this class of destroyer.

h. Many of the ship's original systems were brought to working order to support the preservation of the vessel. It is understood that systems of the ASROC launcher, 5"38 gun mounts, MK37 Gun director, the capstan, and other aspects of DD886 are in various stages of operation.

i. Minor changes by the US Navy to include more modern air conditioning units, modern bunks, the removal of oil heaters due to the conversion of DD886 operating on Navy distillate rather than oil may hinder 100% return of the vessel to its late 60s configuration.

ENCLOSURE 3

ETHICS OF CONSERVATION

1. INTRODUCTION. Conservation refers to the process of documentation, analysis, cleaning, and stabilization of an object.

2. CONSERVATION OBJECTIVES

a. To preserve the structural and historic fabric of the ship and her fittings, generally based on her 1967-1973 configuration.

b. To display artifacts in their correct context with respect to location and era.

c. To present USS *Orleck* DD886 in her best possible state, in order to give an understanding of the operation, character and habitability of a WW2 era destroyer modernized for duty during the Vietnam War period.

d. To manage changes made to improve the quality of the visitor experience and minimize risks, whilst maintaining the character and integrity of the ship.

e. To manage changes made to maximize income generation prospects aiding the long term sustainability of USS *Orleck* DD886.

f. To present an educational experience to visitors, whether formal or informal learners, that reflects the living and working environment of the ship's company during the target presentation period of 1967-1973.

g. To maximize all resources at the disposal of USS *Orleck* DD886.

h. To maintain a record of all conservation work carried out.

3. CONSERVATION DEFINITIONS

a. Preservation. The act or process of applying measures to sustain the existing form, integrity and material of USS *Orleck* DD886. It may include stabilization work, where necessary, as well as planned maintenance.

b. Restoration. The process of accurately recovering the form and details of USS *Orleck* DD886 as they appeared at a particular time. This may entail removal of later work, or replacement of missing or damaged earlier work.

c. Reconstruction. Returning the ship or its contents back to an earlier known state which may involve introducing new materials.

d. Maintenance. The planned cyclic processes used to protect the condition of the hull, fixtures, fittings and exhibits.

e. Historic Fabric. The material remains of the vessel, components of it or materials incorporated in a subsequent historic period.

f. Integrity. The authenticity of *Orleck's* historic identity.

4. CONSERVATION PRINCIPLES

a. The defining characteristics of USS *Orleck* DD886 will be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize the vessel shall be avoided.

b. USS *Orleck* DD886 is recognized as a physical record of her time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other vessels, shall not be undertaken.

c. The ship changed over time, both during her operational life and her time as a museum.

d. Those changes that have acquired historical significance in their own right shall be retained and preserved.

e. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize the vessel shall be preserved.

f. USS *Orleck* is subject to a program of preventive maintenance. Historic features and their materials which have deteriorated shall be repaired rather than replaced. Where the severity of deterioration requires removal of a distinctive feature, the replacement shall match in design, color, texture and other visual qualities and, where possible, material. Wherever possible, and practicable, any material or piece of unique equipment so removed or part thereof should be tagged and saved for later reference.

g. If retention is not practicable, replacement of missing features shall be substantiated by historical, physical, or pictorial evidence.

h. Every reasonable effort shall be made to protect and preserve physical evidence of features previously removed, replaced, altered, or otherwise affected in the course of the ship's history.

i. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used except as a last resort to prevent further damage. The surface cleaning of the ship and her fittings, if appropriate, shall be undertaken using the gentlest means possible.

5. CONSERVATION PRACTICE

a. All work carried out on USS *Orleck* will be in accordance with the policies laid out in this conservation document.

b. Prior to any repairs or alterations being started, a new file is to be created, or if the subject has a work record, appended for the entity. It should contain a survey detailing the materials used, manufacturers, the state of the materials and references to all documentation available. Photographic records should be made at this time to support the survey. This will become a dynamic document used to record all work carried out in the future.

c. All preservation, restoration and visitor access work will be planned to minimize damage to, or removal of, the original fabric.

d. Where possible repairs should be made using historic fabric and traditional repair methods. If this is not possible on the grounds of health and safety or cost, then the process used should be reversible.

e. Asbestos is known to be present in USS *Orleck.* The asbestos register (to be created) is to be consulted prior to any work taking place. Great care should be taken to avoid damage to the encapsulation systems in use on the ship. If exposed asbestos is found in any area, it should be documented and put into the asbestos register maintained on the curator's server.

f. All surveys and records of work accomplished will be saved on the curatorial server at the museum by location and area.

g. Over coating of paint systems should be used as a last resort. Painted surfaces should be washed down as a general treatment. Where painting is carried out, it is to be in accordance with the scheme of painting and in agreement with the Curator.

h. Additional general guidelines for implementation of the conservation principles discussed within this section can be found in Appendix 6.

ENCLOSURE 4

RESOURCES

1. INTRODUCTION. There are many resources available to the conservation team to fulfill their mission. These include the following sources of information.

2. MUSEUM STAFF.

a. Management Team

b. Curatorial Dept.

c. Maintenance Dept.

3. VETERANS AND VOLUNTEERS

a. Past military servicemen willing to help interpret the ship and aid educational initiatives; especially members of the USS *Orleck* Association and Tin Can Sailors.

b. Interested individuals, who carry out maintenance and repair duties on a formal part-time basis. They work to the conservation plan under the guidance and management of permanent staff members and volunteer leadership.

4. CONSERVATION PLAN. A prioritized list of projects planned but awaiting adequate resources in order to be started as well as the defining document on the basic principles required for the preservation and restoration of USS *Orleck.*

5. HISTORIC ASSESSMENT AND FURNISHINGS REPORT. A detailed overview of the state of vessel and its compartments to include their past, present and future planned usage. This entails historic background of the operation and typical layout of each space during the chosen 1967-1973 target presentation date. This document needs to be created.

6. DRAWINGS, MANUALS, AND OTHER TECHNICAL RESOURCES. It is not known at this time the extent of the technical resources aboard for use in restoration of the vessel. However, the following is believed to be available:

a. USS *Orleck* Booklet of General Plans (Turkish Configuration)

b. Damage Control Plates (for communications, piping systems, general layout, etc) for USS *Orleck*, if they exist.

c. Access to the extensive Gearing class Destroyer resources of the USS *Joseph P. Kennedy Jr*.

7. PHOTOGRAPHS. Photography is one area in which evidence of paint schemes, compartment configurations, and ship condition is documented. The following provide guidance to the conservation team and are expected to reside on the curator's server for accessibility:

a. Hundreds of vintage cruise books were published in the 1967 to 1973 period by almost all 98 Gearing class Destroyers. These historic snapshots in time show daily operations, color schemes, equipment layout, and other key indicators in the presentation of DD886. Specifically for ORLECK, the crew published a cruise book for 1967-1968, 1971-72, and 1972-73 which define features relevant to the target presentation period.

b. Private, mostly color, slides and photographs from crewmembers from DD886 and sailors of sister ships are easily available. When images do not exist of a particular DD886 space, sister ship photographs are invaluable due to similarities in layout, equipment allowance, and paint scheme.

c. A photographic survey of each compartment, piece of equipment, and unique design feature of USS *Orleck* will reside on the curator's server at the museum. This database of images needs to be created.

d. Photographs from past volunteer efforts detail changes in the vessel.

e. Photographs and video taken by Mike and Rich Angelini (USS *Joseph P. Kennedy Jr* volunteers) aboard ex-USS *Steinaker* DD863 in 2006 during a research trip in Mexico to capture the sight and sounds of the last operational *Gearing*-class destroyer.

8. MAINTENANCE PLAN. The USS *Orleck* Maintenance Plan and Guidelines is a dynamic working document for instruction in the daily operation and care for the destroyer. Not following this plan may result in lack of care or detrimental results to the vessel as a whole or its historic fabric. This document needs to be created.

9. ASSESSMENT SURVEY AND MAINTENANCE RECORD. These surveys provide condition and work history for all components and areas of the ship. These are backed up using digital photographs as a reference. They shall reside on the curator's server.

ENCLOSURE 5

PROFESSIONAL AND ETHICAL STANDARDS

1. INTRODUCTION. When treatment is accorded to an object, it can include both conservation and restoration.

a. Conservation refers to the process of documentation, analysis, cleaning, and stabilization of an object. The main objectives of the cleaning and stabilization are protection against, and prevention of, adverse reactions between the object and its environment.

b. Restoration refers to the repair of damaged objects and the replacement of missing parts. A specimen may undergo both conservation and restoration, but in all cases the former has priority over the latter.

2. RESPECT FOR INTEGRITY OF OBJECT

a. The preservation of the diagnostic attributes of the object being conserved is of utmost importance in selecting a conservation treatment. The object should retain as many diagnostic attributes as possible after work is completed.

b. All actions taken by the curatorial staff should take into account the integrity of the structure or object being processed. Regardless of the subject's condition or value, its aesthetic, historic, archaeological, and physical integrity should be preserved.

3. COMPETENCE. It is the curator's responsibility to undertake the planned treatment of objects within the limits of their abilities.

4. STANDARDS. With every historic or artistic work the curator undertakes to conserve, regardless of his opinion of the object's value or quality, he will work to the highest standard of treatment. Although circumstances may limit the extent of treatment, the quality of the treatment should never be governed by the quality or value of the object.

5. SUITABILITY OF TREATMENT. The curator should not perform or recommend any treatment which is not appropriate to the preservation or best interests of the object. Any treatment, even if less expensive, extensive, or time consuming should be avoided if there is a possibility of damaging the artifact.

6. REVERSIBILITY

a. In general, all treatments should be reversible. This requirement recognizes that a conservation treatment may not last indefinitely nor remain superior to all future techniques.

b. Curators are to make every effort to apply the principle of reversibility in the selection of

treatments. Curators are to avoid the use of materials which may become so intractable that their future removal could destroy the object.

c. No treatment should be used that will result in damage to the object if it has to undergo further treatment. The option to re-treat is to remain open, because the continued preservation of the object is then assured.

d. If the curator has only one chance to preserve the artifact, then non-reversible techniques may need to be considered.

7. LIMITS OF RESTORATION. In compensating for damage or loss, a curator may apply varying degrees of restoration. This is not to improve or change the known character of the original.

8. CONTINUED EDUCATION. As far as practical, curators should strive to keep abreast of current knowledge in their field. A methodology of Continual Professional Development should be adopted so that the curator can provide the best treatment circumstances permit.

ENCLOSURE 6

CONSERVATION PROJECTS

1. INTRODUCTION. Conservation projects will be undertaken by a team as directed by the Curator and Facilities Manager. Each team will have a nominated Team Leader responsible for ensuring the work is undertaken and documented as laid down in this document.

2. DOCUMENTATION.

a. It is essential that comprehensive documentation is produced and maintained:

1. To provide a historical record

2. To keep track of progress

3. Ensure continuity of a project

4. As a basis for future conservation

b. The prime documentation will consist of Surveys (see paragraph 3 below), photographs and drawings. All applicable documentation will be held on a server maintained by the curator and details of filing conventions are in Appendix 1 - Assessment Survey and Maintenance Record Instructions

3. SURVEYS. To ensure the future preservation of historic artifacts, detailed documentation of all work undertaken is essential. The prime document is the Assessment Survey and Maintenance Record form (see Appendix 2).

a. A survey will be completed for each asset prior to commencement of work, and this will be supplemented by sub surveys, photographs and drawings of various parts of the asset as the project progresses. Where no previous conservation documentation for an asset exists it will be the responsibility of the Team Leader to agree to a suitable creation of the asset record with the curator.

b. The surveys should be updated regularly to create a record of the condition of the asset and of work undertaken to conserve it. The documents will be stored in the Survey folder for the asset being conserved on the server.

4. PLANNING. A plan should be drawn up as early as possible that identifies the major tasks to be undertaken and highlights any issues that need resolution before progress can be made. The plan should be updated regularly to reflect additional tasks identified and to mark progress. The plan should be stored in the Survey folder for the asset being conserved.

5. ITEMS REMOVED FOR CONSERVATION. Before items are removed either a photograph should be taken or a drawing made to facilitate subsequent re-instatement. Each item removed should be labeled and a record maintained that indicates the current status and location. No items should be removed without prior discussion with the curator. Loose items (e.g. fixing bolts) should be placed in a suitably labeled container until required for re-assembly. An Excel spreadsheet can be used for this purpose, and the document stored in the Survey folder for the asset being conserved. Any items being removed from the vessel for work at a contractor shop or another facility will be recorded and approved by the curator or an appropriate designee by completing the DD886 Property Removal Form in Appendix 5 along with photographs of the item. This information will be maintained by the curator or appropriate designee.

ENCLOSURE 7

USS *ORLECK* PROJECTS AND ACCESS

1. INTRODUCTION

a. At present a majority of the vessel is open for public access and viewing though it is believed that a guided tour may be the prevalent method. Areas which are not open are excluded for various reasons: difficult access, safety, vandalism concerns, or appearance issues.

b. Resources for the conservation of the ship are finite and a balance has to be struck between restoration and maintenance. Various projects have been identified as significantly important to the ongoing policy of returning USS *Orleck* back to her US Navy identity, increasing access, and improving the visitor experience. Along with a prioritized listing of future projects, a planned timetable is in Appendix 3.

c. Preserving USS *Orleck.* in her present condition is a delicate balance, taking into account the safety of visitors and staff, the availability of appropriate materials and their fixings, and the ability to use traditional methods of repair and cost. The need to supplement income with various initiatives that include overnight programs and visitation by reunions groups must be taken into account in all planning for the vessels presentation.

d. In most circumstances, access to certain spaces, areas, or equipment is restricted. Generally, a request to the curator or appropriate designee is required before admittance to or work done to any space or unit of equipment. Appendix 4 lists the recommended levels of restriction by compartment aboard *Orleck* based upon a similar plan utilized on *Joseph P. Kennedy, Jr.*

APPENDIX 1

ASSESSMENT SURVEY AND MAINTENANCE RECORD MASTER

Vessel: *USS Orleck DD886*			
DATE		NAME	
DESCRIPTION			
LOCATION			
MANUFACTURER			

Applicable Documentation	
Type D/B/P	**Title**

MAJOR COMPONENTS	**MATERIAL**	**STATE**

GENERAL CONDITION	

DAMAGE

Structural, Major	
Structural, Minor	
Biological	
Chemical	
Surfaces	
Disfiguring	
Old Repairs	
Dirt	
Missing	

Actions Required

Priority	**Work required.**

Special Display Requirements:

Maintenance Actions Taken:

APPENDIX 2

ASSESSMENT SURVEY AND MAINTENANCE RECORD INSTRUCTIONS

1. INTRODUCTION. This form is for use as an initial assessment of compartments and equipment as well as documenting work progression over time. It will be used as a tool for prioritizing future projects and as a record of general state of the vessel.

This will be followed up by a detailed plan for work to restore or conserve individual items of equipment or even whole compartments. An electronic copy of the master Assessment Survey and Maintenance Record will be in digital form on computers aboard DD886 and the curator's server. It may be easier for the recorder to print these documents out and fill them in by hand while working within a particular space or item. The fields on the record to be filled out are defined as:

a. Date: Date survey was undertaken.

b. Name: Name of the person carrying out the survey.

c. Description: A very brief description of the piece of equipment or space.

d. Location: The name of the compartment or area, as it appears in the DD886 Damage Control Book or Damage Control plate.

e. Manufacturer : Usually found on makers plate.

f. Applicable Documentation: List drawings, books, photographs etc. Use drawings database for reference and use ranges for listing. D-Drawing, B-Book& P-Photograph

g. Major Components: A straight forward list of the main parts of the object. For small objects this will not be necessary.

h. General Condition: An overall evaluation of the object taking all components and materials into consideration.

i. Damage: List any major areas of damage or deterioration under the headings provided.

j. Actions Required**:** This will be agreed with the curator and management prior to any work. The priorities are time based; being:

1. Immediate; works required to prevent total destruction.

2. As soon a feasibly possible; work required to stabilize problems, which will escalate quickly if not treated which makes these items a top priority for planning purposes.

3. Within a years timeframe; minor repairs which can be made with minimum impact on planned maintenance and restoration initiatives.

4. Work which can be programmed into the three/five/ten year plan. A Regular monitoring regime to be put in place until a permanent repair or stabilization is affected.

k. Maintenance Actions Taken: This section should list the date, people involved, and work performed on the particular item or space. Previous entries should not be deleted but new additions appended at the end to enable work tracing.

2. SUBMITTING THE ASSESSMENT SURVEY AND MAINTENANCE RECORD.

a. All documentation for any given space should be included in a folder named for the compartment number or , if external, by frame and location The documentation should comprise two sub folders on the server, Surveys and Photographs/Drawings, to be placed in a general folder for each individual compartment and area aboard the vessel. Work done on an individual unit of equipment or fitting within a compartment should have its own record and placed within the folder that it belongs.

b. File names should be kept as brief as possible commensurate with intelligibility. File names should not contain spaces, but may utilize the underscore (_) to aid comprehension. (e.g. galley_comp.doc could identify the galley compartment) and be stored in Word format, with the .doc extension

c. Records printed out and filled in by hand should be kept in a secure location and submitted in electronic form at the first opportunity.

APPENDIX 3

DD850 FORWARD PLAN AND PRIORITIES

1. INTRODUCTION. In order to progress the conservation effort aboard *Orleck.* a forward looking plan with realistic goals along with set priorities should be followed to enable all team members to understand and contribute to a joint effort in the ships preservation. This listing below is based upon the assumption that the ship needs complete restoration back to her US Navy configuration.

2. DD886 FORWARD PLAN. The forward plan identifies the need for restoration and preservation of compartments and areas in a planned timeframe to enable the collection of appropriate resources for completion of the project. With maintenance issues related to structural problems and presentation upgrades to enhance the visitor experience as the primary drivers, this plan should be used as guidance pending the qualifications and finances in hand to accomplish all tasks in accordance with this document and those referenced herein. Of note, many of these tasks could be undertaken with ease during a shipyard overhaul period. Nomenclature below with the name of a space or area refers to general conservation requirements for presentation and preservation. General exterior painting and preparation efforts should be continuous and progressed through the timeframe guidance found in the DD886 Maintenance Plan and Guidelines document.

a. Three Year Plan

1. Pilot House

2. Combat Information Center

3. Begin rehabilitation of all enlisted berthing spaces for future camping experiences

4. Radio Central

5. Application of ‘886’ hull numbers forward and aft on both port/stbd side

6. Removal of Chaff launchers.

7. Application of ‘ORLECK’ to fantail.

8. Check all electrical, ventilation, and plumbing systems for use.

9. Removal of blast shield on forward end of 01 Level torpedo deck.

10. ASROC, torpedo, and DASH deck painting

11. Captain’s Sea Cabin

b. Five Year Plan

1. Mess Decks
2. Steam line
3. Wardroom Pantry
4. Radar Room
5. Mt 51 and Mt 53 internal and external painting
6. Chart Room
7. DivCom
8. Wardroom
9. Machine Shop/Shipfitter's Shop
10. Sickbay

c. Ten Year Plan

1. DASH Hangar
2. Forward Engine Room
3. ASROC Magazine
4. Forward Fire Room
5. After Officer's Country
6. ASROC Control Station
7. Ship offices on main deck.
8. Paint all interior passageways
9. Fabricate squadon insignia's for DesRon 3

APPENDIX 4

ACCESS TO EXHIBIT SPACES

1. INTRODUCTION. With the limited resources and time available to commit to conservation efforts aboard *Orleck* coupled with the need to present a clean, sharp appearance to our visitors, access to various exhibits and/or compartments on the vessel must be restricted. Cleanliness, courtesy, and respect for the vessel must be adhered to at all times. It must be remembered that the destroyer is a museum first and foremost as well as a memorial to those who served in our armed forces. DD886 is a unique object and each piece of equipment, each compartment is a time capsule that can, with a careful approach, tell us a story of what has happened. A delicate balance must be in place in which conservation efforts, the use of various sections of the vessel by various groups, and the visitation requirements to our customers cannot conflict. Disregarding minor changes to the vessel, the ship must always represent the target presentation timeframe of 1967-1973. This section of the document will provide a listing of those spaces which should be under curatorial control and the level of control applied. Having not seen these spaces firsthand since 2001, the below may need to be modified based on the unique environment and atmosphere presented by the *Orleck* and the museum.

2. DISPLAY SPACES. These compartments aboard the ship are for the purpose of static display and presentation to our customers to be indicative of the appearance of the vessel from 1967-1973. At the discretion of the curator or appropriate designee, guests may enter, photograph, or view these spaces while accompanied by a qualified person. Work on equipment within or the space as a whole by staff or volunteers must first be approved by the curator or as appropriate. These spaces include:

a. Pilot House

b. Combat Information Center (CIC)

c. RADIAC Locker

d. Post Office

e. Ship's Store

f. Laundry

g. Wardroom Pantry

h. Chart Room

i. Mk 25 Fire Control Room

j. Ordnance Workshop

k. 400Hz Motor Generator (MG) Room

l. Scullery

m. ASROC Control Station

n. Fuel and Oil Test Shack

o. Engineering Office and Damage Control (DC) Central

p. Deck and Gunnery Office

q. Division Commander's Stateroom

r. Captain's Sea Cabin

s. Mt 51, Mt 53 and associated handling rooms

t. Forward Diesel Generator Room

u. Restored cleaning gear, linen, or parts lockers on display.

v. Crypto room

w. After Diesel Generator Room

3. MINIMAL ACCESS SPACES. These compartments aboard the ship are dual purpose in which display and presentation to our customers as well as meeting operational requirements exist. Work on equipment within or the space as a whole by staff or volunteers must first be approved by the curator or as appropriate. Utmost respect and attention to cleanliness must be adhered to for the privilege of continued usage of said space and must be left in the condition found. These spaces include:

a. Radio Central and Secure Teletype Room

b. Radar Transmitter and IFF Room

c. Interior Communications (IC) Room

d. All four Main Engineering Spaces

e. Electronics Technician Shop and Auxiliary Radio

f. Radio Transmitter Room

g. Ship's Office

h. Operation's Officer Cabin

i. Captain's In-Port Cabin

j. Barbershop

k. Anchor Windlass Space and Bosun Locker

l. Fox Division Berthing

m. First Division Berthing

n. Supply Office

4. ALL PURPOSE SPACES. These spaces as utilized by overnight groups, toured by visitors, or used by groups working or using the vessel in some form. Work on equipment within or the space as a whole by staff or volunteers must first be approved by the curator or as appropriate. Cleanliness, courtesy, and respect for the vessel must be adhered to at all times.

a. Galley

b. Chiefs Quarters (berthing, head, pantry, and lounge area)

c. Mess Decks

d. Steam line

e. Junior Officer's Stateroom

f. Engineers Berthing

g. After Berthing

h. After Officer's Quarters

i. FWD and AFT Heads

j. All passageways

k. DASH Hangar/First class Petty Officer's lounge

l. ASROC Magazine

APPENDIX 5

DD886 PROPERTY REMOVAL FORM MASTER

Vessel: *USS Orleck DD886*
Quantity:
Item Description:
Name of Individual removing item from Property (with address and phone number):
Location where item was removed:
Location where item will reside (address):
Reason for removal:
Current Condition of item:
Planned Return Date:

Approval of removal was granted by:

APPENDIX 6

GENERAL IMPLEMENTATION GUIDELINES

1. INTRODUCTION. While not all inclusive, the following general guidelines referenced from the National Park Services', "*Standard for Historic Ship Preservation Projects*" should be applied to the conservation effort aboard the destroyer.

a. Fabricating covers over the vessel to prevent incursion of rainwater through leak in decks, cabin tops, etc.

b. Providing for air circulation below decks through use of fans, blowers, windsails, etc.

1. Providing ventilation to interior spaces through active or passive means, paying particular attention to forepeak, afterpeak, lockers, under-counter areas, and other spaces normally closed off from air circulation.

c. Removing loose scale or corrosion from metal surfaces; sealing and coating with appropriate protective coating.

d. Relieving hogging, sagging, and shear forces caused by improper distribution of ballast, fuel, water, etc., after consultation with a naval architect.

e. Eliminating the causes of standing water on decks, deckhouse tops, etc. Cleaning, repairing, or replacing, if required, deck drains, scuppers, etc.

f. Providing exposed boats with weatherproof covers that permit air circulation.

g. Making provisions for drainage and ventilation of boat interiors.

h. Ensuring that water is not permitted to enter gun tubes or sensitive mechanisms.

i. Providing covers for elements such as breech mechanisms, gun muzzles, etc.

j. Ensuring that gaskets and seals on control boxes, mechanism covers, etc., are in good condition; replacing, if necessary.

k. Providing weatherproof covers, if appropriate, for protection of deck equipment, armament, or exposed machinery such as capstans, windlasses, binnacles, etc.

l. Flushing and draining all piping and related fixtures not required for management or operation of the vessel.

m. Flushing and draining water and fuel tanks if not required for use. Cleaning, scaling, and

coating inside and out if possible.

n. Isolating electrical circuits not required for management or use of the vessel. Eliminating ground losses, shorts, etc., from active circuits.

o. Drying out, if required, and cleaning corrosion from electric motors, electrical panels, switch boards, etc. Applying appropriate moisture- and corrosion-inhibiting products to motor and generator commutators, armatures, electrical contacts, etc.

p. Complying with health and safety codes in such a manner that character-defining spaces, features, and finishes are preserved.

    1. Working with local code officials to investigate alternative life safety measures or variances available under some codes so that alterations or non-historic additions to the vessel can be avoided.

    2. Designing and constructing boarding ramps, ladders, stairs, gangplanks, etc., that do not require alteration, displacement, or removal of historic fabric or character-defining features of the vessel. Access over rails or bulwarks, or through existing gangways or ports, etc., is recommended.

    3. Designing and installing new lighting, electrical, mechanical, security, and fire suppression systems and devices in such a manner that character-defining spaces and features are preserved, and historic fabric and finishes are not damaged, displaced, or unnecessarily obscured.

q. Keeping all topside areas free of dirt and grime, especially in areas where accumulated dirt will hold moisture, thus contributing to decay.

r. Providing low heat in interior spaces to retard moisture and to prevent freezing, condensation, etc.

s. Thoroughly cleaning ducts, air passages, blowers, fan housings, etc., to remove corrosion and/or accumulated dirt. Recoating, if required.

t. Repairing or, if necessary, replacing deteriorated or missing deckhouse tops and sides, deck planks, deck plates, etc., with new material of the same composition, size, scale, and method of fastening as the original.

u. Wherever possible, locating service functions such as mechanical equipment, offices, bathrooms, etc., in spaces originally used for those purposes; otherwise, placing these in non-character-defining spaces of the vessel.

v. Removing, when not essential for safety or maintenance of the restored vessel, machinery, electrical equipment, piping, wiring, etc., that is non-historic or inappropriate to the vessel.

w. Avoiding installation of exhibits, interpretative panels, etc., to such an extent that the size and scale of spaces is lost, or that features indicative of the vessel's historic use are obscured or overwhelmed.

x. Providing live interpretation by interpreters, guides, or docents who have a sound knowledge of the history of the vessel, its use, the principal features of its construction, its preservation treatment, etc., emphasizing to all interpreters the absolute necessity for presenting accurate information to visitors.