



Preserving History through Restoration

Making difficult choices with collections

Beth Sanders, U.S. Naval Undersea Museum

Bruce Jones, Columbia River Maritime Museum

Richard Pekelney, *USS Pampanito*, San Francisco Maritime National Park Association Board of Trustees

Restoration vs Conservation

It's all about *PRESERVATION!*

Conservation:

- Prevents, stops, or slows down deterioration
- 'Do no harm'
- Allow it to be handled, stored, or displayed without further damage
- Does not attempt to return the object to its prior state
- Accepts an object's wear and tear as part of its story
- Performed by trained artifact conservators

Restoration:

- Often involves making objects functional or returning an object back to its original appearance
- Removes or covers up signs of wear and use
- Replaces or reconstructs missing or worn parts
- Lets the viewer see what the object originally looked like
- Often performed by subject matter experts, rather than conservators



Extra Challenges

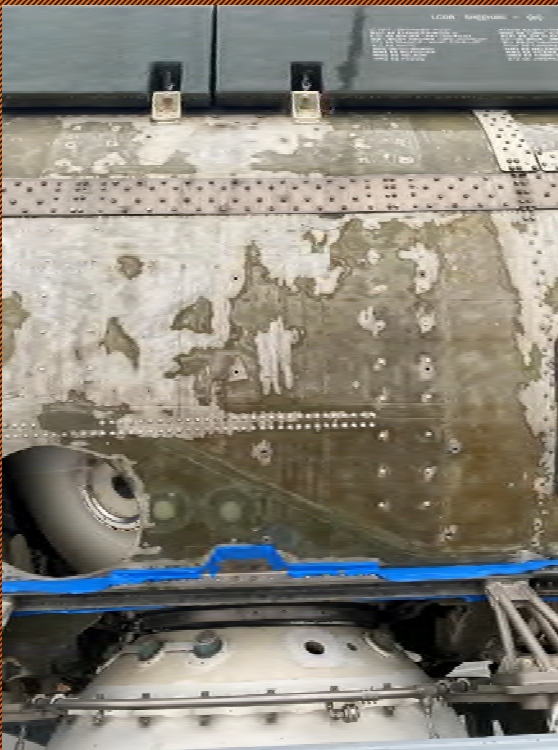
- Macro Artifacts
- Functional Artifacts
- Maritime Artifacts
- Outdoor display
- Access and accessibility
- Funding



Preserving DSRV-1 *Mystic*



How did we get to this point?



Fiberglass + Sun =



- Coating not maintained when taken out of service
- 2 collections managers vs a crew of sailors
- Outdoor display (it's too big to fit inside)
- Funding for artifact preservation projects



Who do you call?

~~Conservator~~

Museum Restoration Specialist

Plan prepared by:
National Naval Aviation Museum

Plan reviewed by:
Puget Sound Naval Shipyard
Former DSRV Pilots and Crew

Work performed by:
InFocus Marine

Work overseen by:
USNUM Collections Managers



Making Changes

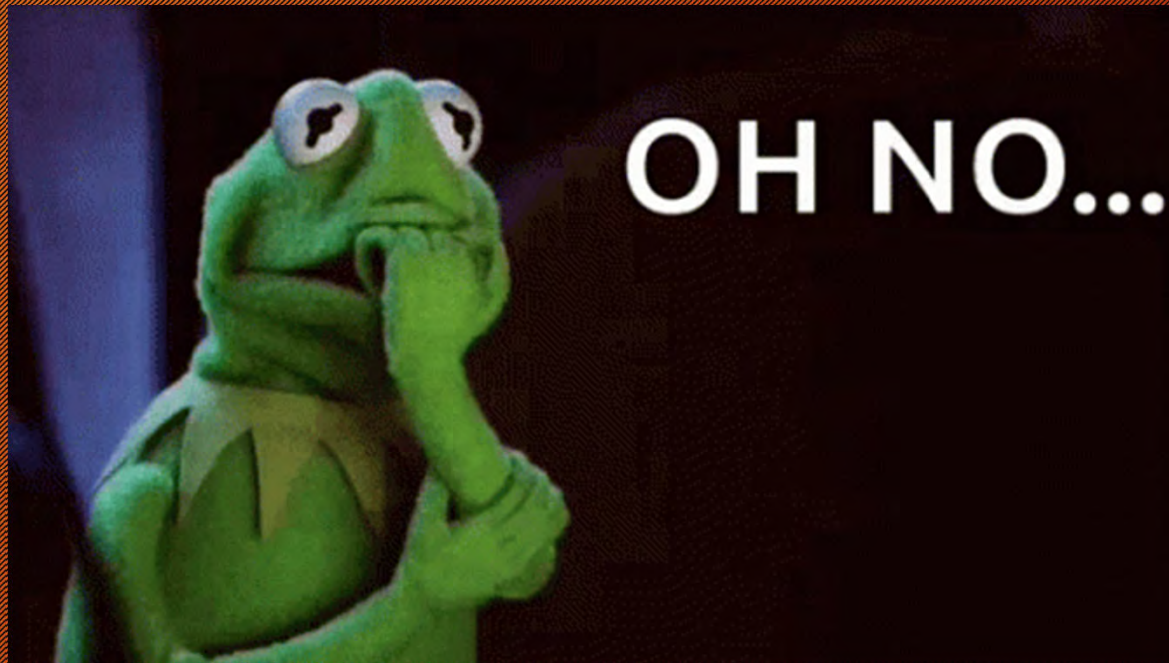
PAINTING THE PICKLE!



Making Changes



Public Opinion



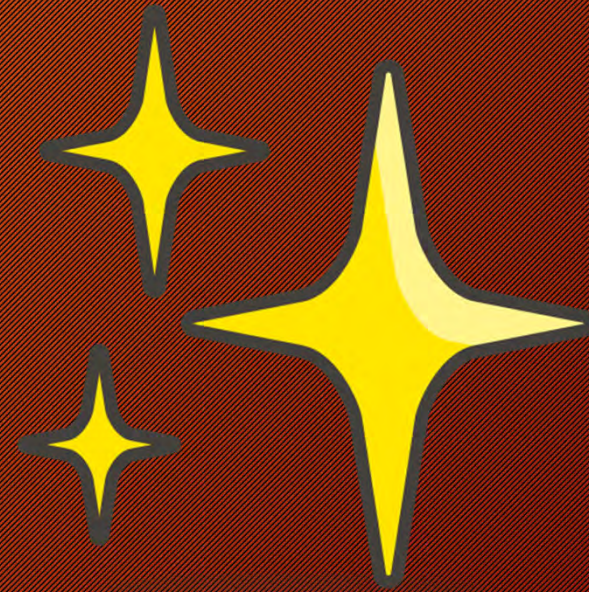
Public Opinion



End result

Two years later, Mystic still sparkles!

- Vendor is local and paint job is warrantied
- Report documents areas of damage and work that was done
- Extensive photography throughout process
- Visitors appreciate the history of the vehicle, and aren't distracted by its condition
- Value of the restoration project as incentive to fund a structure over vehicles
- We can anticipate the scale, cost, and periodicity of repainting

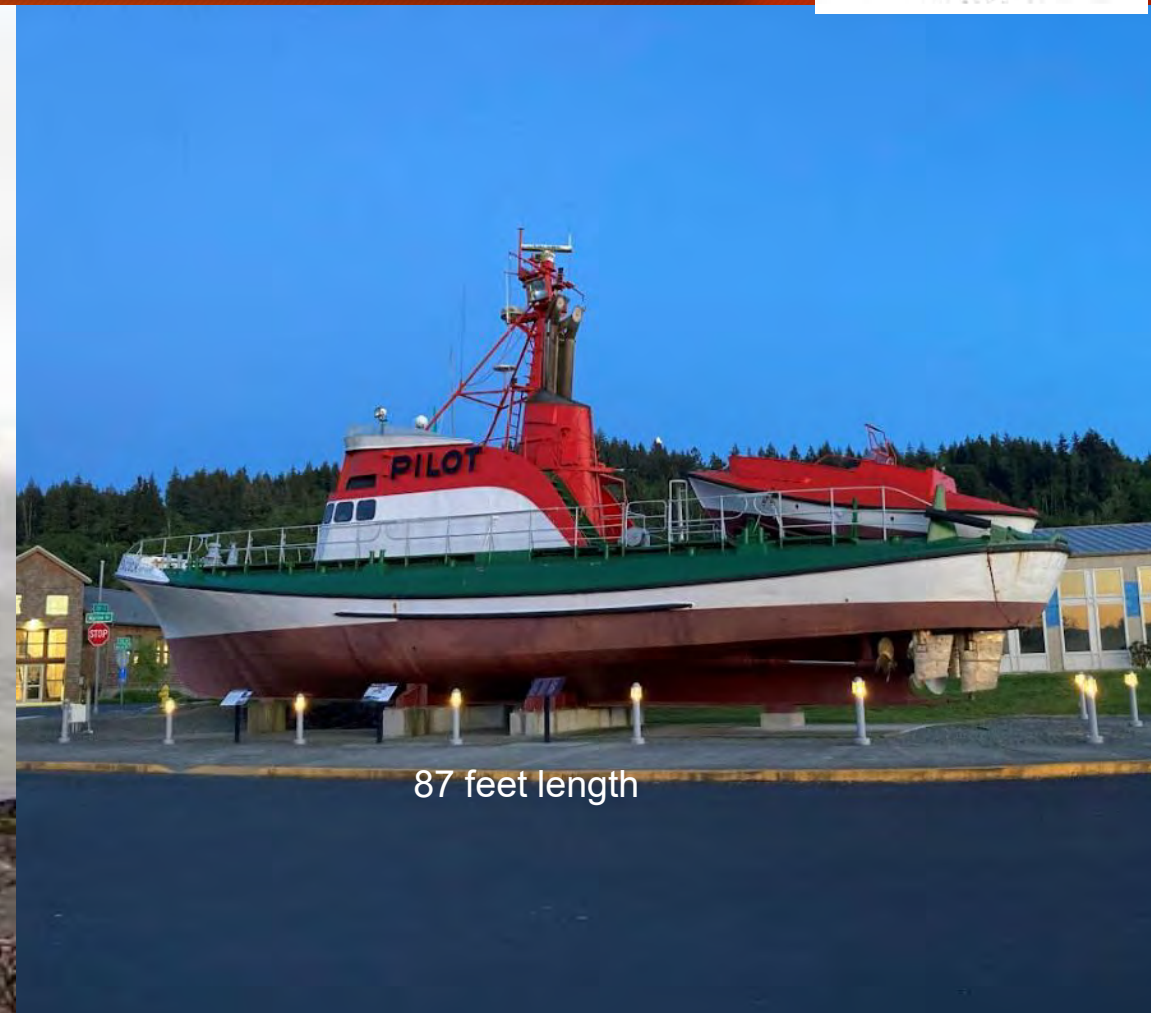


Outdoor Attractions: Lightship Columbia, Large Navigation Buoy, Pilot Boat Peacock Floating vs Land Installation



128 feet length

40 feet W X 40 feet H



87 feet length

Land or Water Display? 2 Giant Cranes and Pilings to Bedrock vs Periodic Drydock Visits



Indoor Boats - Little Maintenance Required - Space Limitations



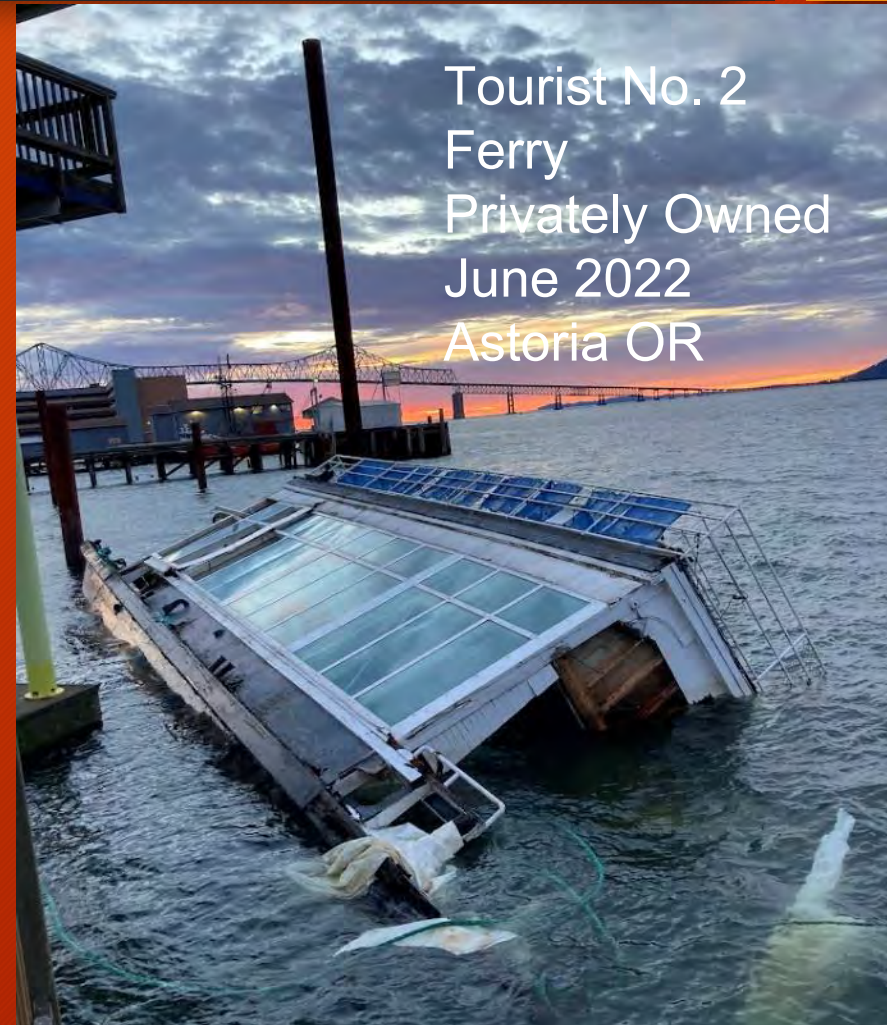
Storage Warehouse - Protection not Conservation



Most Boats are Like People, Their Natural Lives Come to an End.



It's OK to Let Them Go. Unrealistic Expectations Lead to This:



Tourist No. 2
Ferry
Privately Owned
June 2022
Astoria OR

Large Nav Buoy (LNB)



Sacrificial Zinc Cathodic Anodes Fight Corrosion



Inside the Large Navigation Buoy - Unsafe for Public



LNB - Historical Accuracy - Cost





Lightship Columbia



Lightship Columbia



Lightship Columbia



Lightship Columbia















Lightship Columbia Mooring Arrangement Safety vs Historic Authenticity



Comparison



USS Blueback
(OMSI Portland)



USS Texas

Lightship Columbia Gangway Measure Once Cut Twice



Outdoor Nautical Objects - That Would Otherwise Rot in Junkyards



The Future? Decisions, Decisions





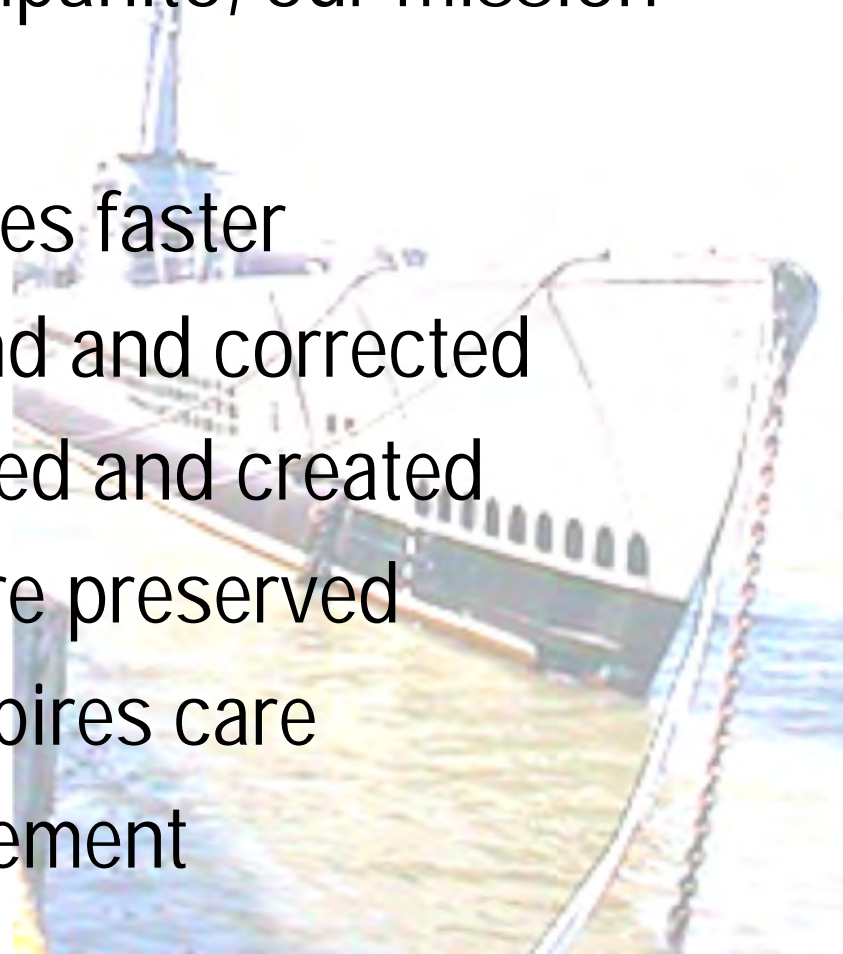
Operating Historic Fabric in a Museum

Aboard the USS Pampanito

Rich Pikelney, Oct 2022

Restoration Rationale

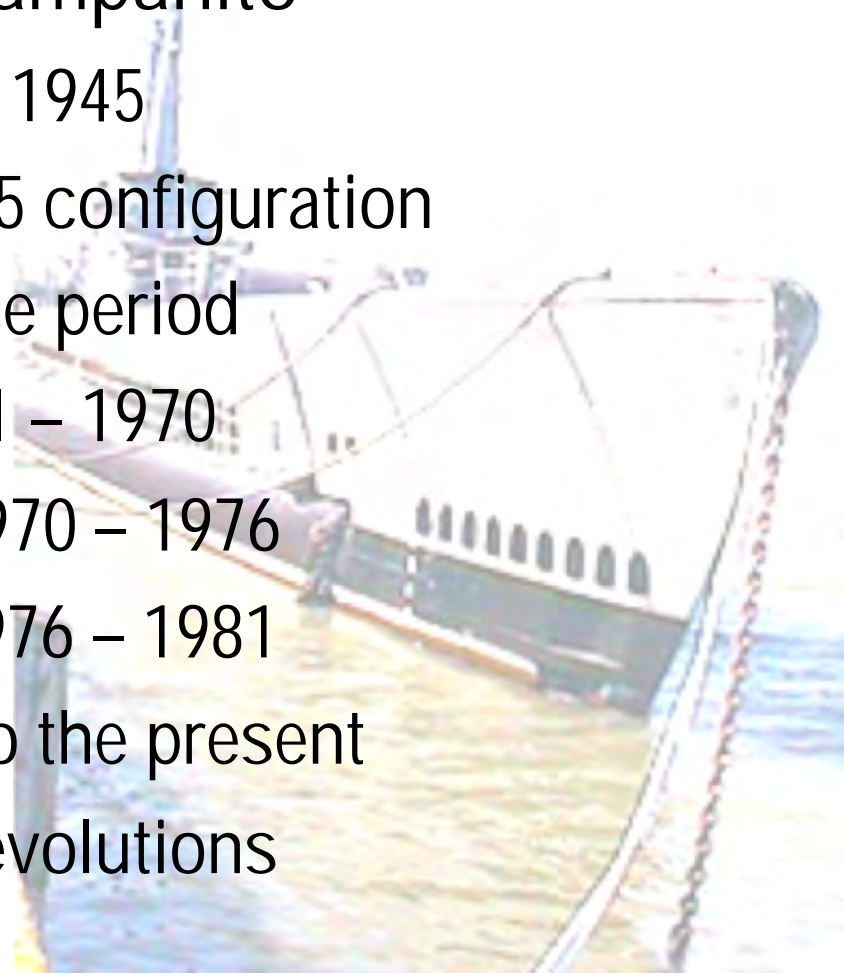
- ✚ Short history of USS Pampanito, our mission
- ✚ Prove Completeness
- ✚ Idle equipment deteriorates faster
- ✚ Safety Problems are found and corrected
- ✚ Documentation is collected and created
- ✚ Endangered resources are preserved
- ✚ Operating equipment inspires care
- ✚ Interpretation and engagement



Restoration Rationale

✦ The History of the USS Pampanito

- 6 War Patrols from 1943 – 1945
- Laid up in Summer of 1945 configuration
- 1956 Drydock maintenance period
- Reserve Trainer from 1961 – 1970
- Open for fleet stripping 1970 – 1976
- Storage and Vandalism 1976 – 1981
- Museum ship from 1982 to the present
- Since 1982, six dry dock evolutions



Restoration Rationale

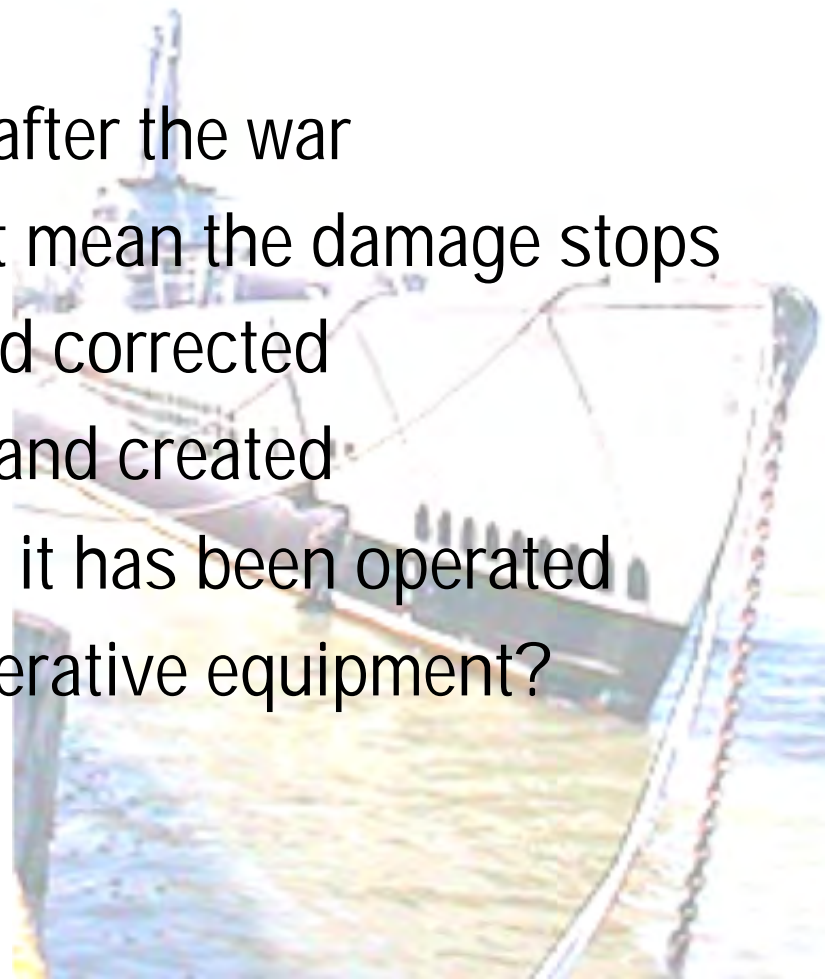
- ✦ Our Mission is to Bring Maritime History to Life
 - Preservation
 - Research
 - Interpretation



Restoration Rationale

✦ Prove Completeness

- Damage and loss started after the war
- Being a museum does not mean the damage stops
- Safety problems found and corrected
- Documentation collected and created
- Not proven complete until it has been operated
- How can you assess inoperative equipment?



Restoration Rationale

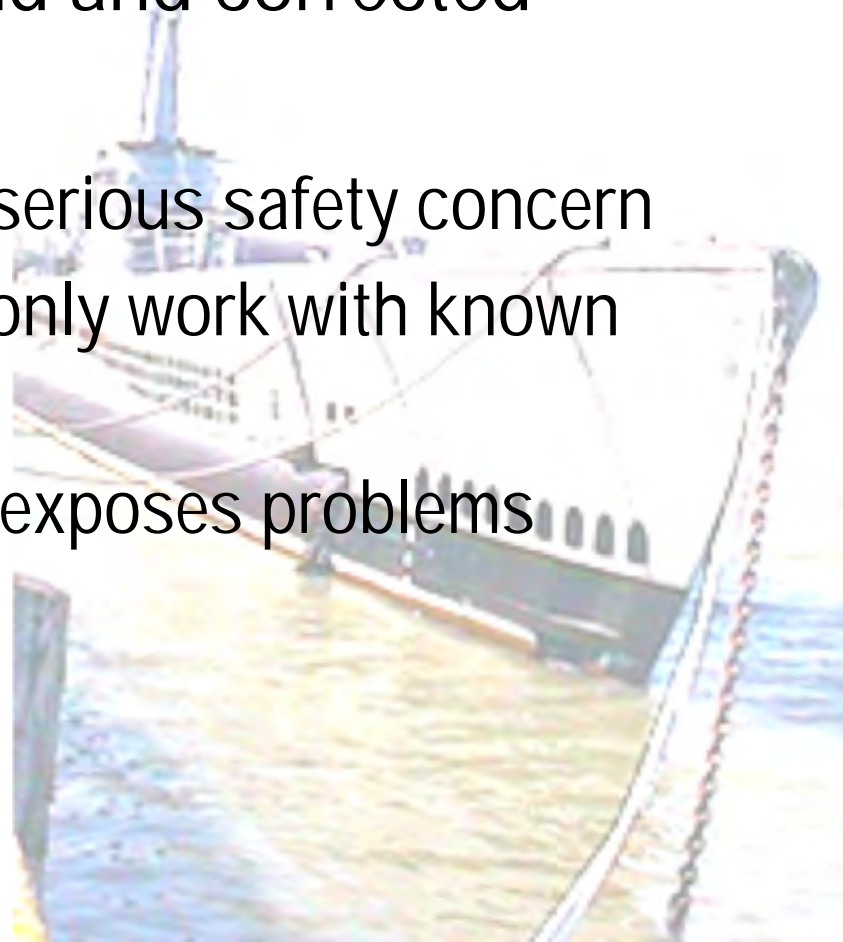
- ☛ Idle equipment deteriorates faster
 - Lubricants displaced by moisture = corrosion
 - Material creep
 - Movement to access for coatings and lubrication
 - Harder to see failure

Operating Equipment Gets Maintained



Restoration Rationale

- ✦ Safety Problems are found and corrected
 - Electrical problems
 - Mechanical failures are a serious safety concern
 - Hazmat containment can only work with known materials
 - Access to difficult places exposes problems
 - Visitor proofing





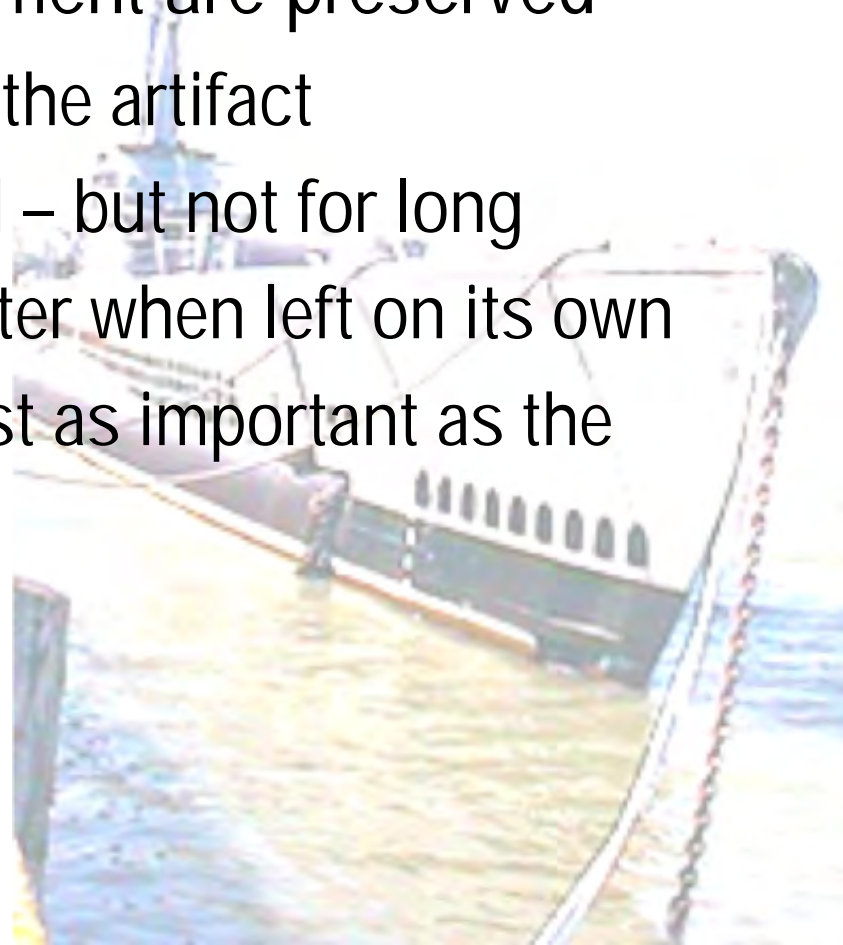
Restoration Rationale

- ✦ Documentation is collected and created
 - Collection of documentation for the future
 - Restoration identifies the required documents
 - Many documents contain errors that are only corrected by actually using the information for restoration

The documentation often does not fully express function

Restoration Rationale

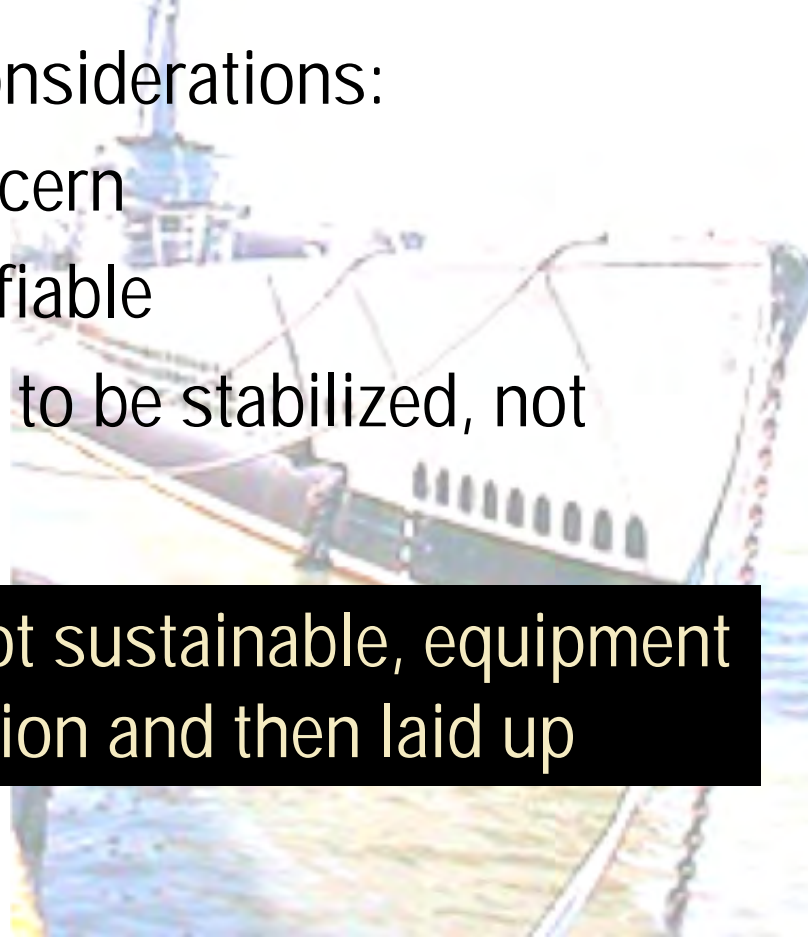
- ✱ Both knowledge and equipment are preserved
 - Preserve both the art and the artifact
 - Old timers are still around – but not for long
 - Equipment never gets better when left on its own
 - Preserving the skills is just as important as the equipment





Restoration Rationale

- ✦ Operating equipment inspires care –
However there are considerations:
- ✦ Safety is always the first concern
- ✦ Consumptive use is not justifiable
- ✦ Dangerous equipment needs to be stabilized, not operated.



When long term operation is not sustainable, equipment is often brought to operation and then laid up

Restoration Rationale

☀ Interpretation

- Visitors see details
- Facilitate understanding
- Fun
- Inspiration

How do you get Inspired?



Gyrocompass Example

Gyro as we found it...



Gyrocompass Example

Found New – Old Stock Parts



How the Restoration Was Done

**The
art
of the
Gyrocompass...**

Passed on...



How the Restoration Was Done

First time since 1972 a wheel has been balanced...



How the Restoration Was Done

Drydocked for Maintenance 6 times as a Museum



How the Restoration Was Done

Summer 1945



How the Restoration Was Done

Summer 2021



Questions?

rpekelney@maritime.org
<https://maritime.org/sub>
<https://maritime.org/pres>

