

NAVAL HISTORY STEM-H LESSON PLAN

LESSON PLAN: The Nuclear Umbrella – Still Here After the Cold War

DEVELOPED BY: John Clark, science teacher and military historian, Deltona High School, Deltona, FL
2012 Naval Historical Foundation STEM-H Teacher Fellowship

ACTIVITY: Cold War Gallery Scavenger Hunt

OBJECTIVE: Students will learn about key events that occurred during the Cold War and develop a timeline of event based on the Navy's involvement. Students will also learn how advances in technology contributed to American victory and impacted our everyday lives as new military technology was converted into civilian products and services.

MATERIALS:

Access to Cold War Gallery website: <http://usnavymuseum.org/CentralHall.asp>

Student scavenger hunt hand out.

INSTRUCTIONS:

Students can complete the scavenger hunt in several ways depending on the teacher's needs.

The scavenger hunt can be completed as an online homework assignment followed by class discussion, the online assignment can be done during class time in small groups sharing a computer, or the class can take the tour as a whole on a single computer hooked to an LED projector and address the questions as your progress through the gallery.

NAVAL HISTORY STEM-H LESSON PLAN

Cold War Gallery Scavenger Hunt

Answer the questions as you walk through the virtual web site. If you need to watch a video to answer questions that will be noted. Otherwise enjoy the videos as they are extensive and exciting. You get watch real warfare tactics and see things blow up.

Cold War Gallery Scavenger hunt

For more than 45 years, the Navy played a vital, pivotal role in containing and defeating the very real threat of Soviet military power and Communist ideology. Few episodes in the Navy's history were as momentous as the Cold War, America's longest war. From 1945 to 1991, American Sailors braved combat and the dangers of service at sea to protect the United States from powerful adversaries armed with nuclear and conventional weapons. These men and women served long years far from home, many suffering death or injury to help threatened nations withstand Communist invasions and insurgencies.



CENTRAL HALL

CENTRAL HALL. DEFINING THE COLD WAR

STAY CONNECTED  



What countries participated in NATO to oppose the Warsaw Pact countries supporting the Soviet Union?

READY ROOM THEATER

Who donated the Navy Aviator flight suit to the museum?



NAVAL HISTORY STEM-H LESSON PLAN

The screenshot shows a web browser interface for a virtual tour. At the top, a navigation bar includes links for HOME, PLAN YOUR VISIT, VIRTUAL TOUR (highlighted), EDUCATION, RENTALS, ABOUT, SUPPORT THE GALLERY, and MUSEUM STORE. Below the navigation bar, the page title is "READY ROOM THEATER" under the heading "A VIRTUAL TOUR OF THE NAVY MUSEUM'S COLD WAR GALLERY". A red circular logo on the left reads "U.S. Navy Museum COLD WAR GALLERY". A paragraph of text describes the theater's function: "The flight leader briefs his squadron's pilots in the ready room just before their missions. In these briefings he passes on intelligence about their targets and the enemy's air defenses. He also describes what bombs, missiles, or rockets their planes will carry, where the aircraft will rendezvous after their launch from the carrier, routes to the target, call signs and radio frequencies, individual mission responsibilities, and emergency procedures. In addition, he determines the minimum fuel or 'Bingo' requirement - the fuel level at which an aircraft will have to receive aerial refueling or divert to a landing field ashore." Below the text is a virtual walk-through interface with a 360-degree view window showing a theater interior. A row of six thumbnail images is displayed below the main view, each with a zoom-in icon. The thumbnails show: 1) a red and white aircraft model, 2) a theater interior, 3) a wall display with medals, 4) a man in a military uniform, 5) a logo for the American Revolution Bicentennial (1776-1976), and 6) a map of the Pacific region. The interface also includes a "PREVIOUS EXHIBIT" button on the left and a "READY ROOM THEATER VIDEO" button on the right.

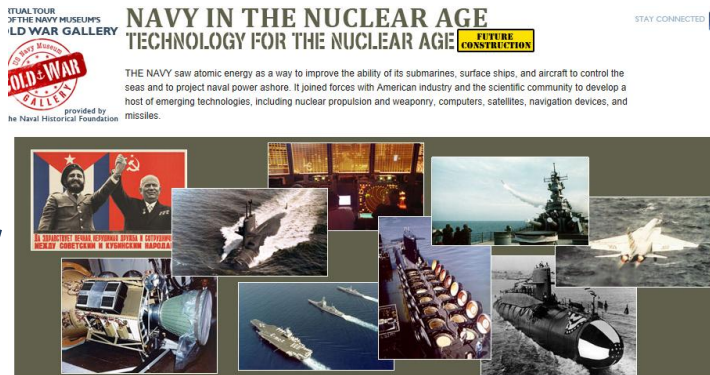
Watch the Ready Room Video on The Cold War and then continue searching the website for answers to the questions below:



NAVAL HISTORY STEM-H LESSON PLAN

TECHNOLOGY FOR THE NUCLEAR AGE

What is the quote below the picture of Fidel Castro, Head of Cuba, and Nikita Khrushchev, Head of the Soviet Union?



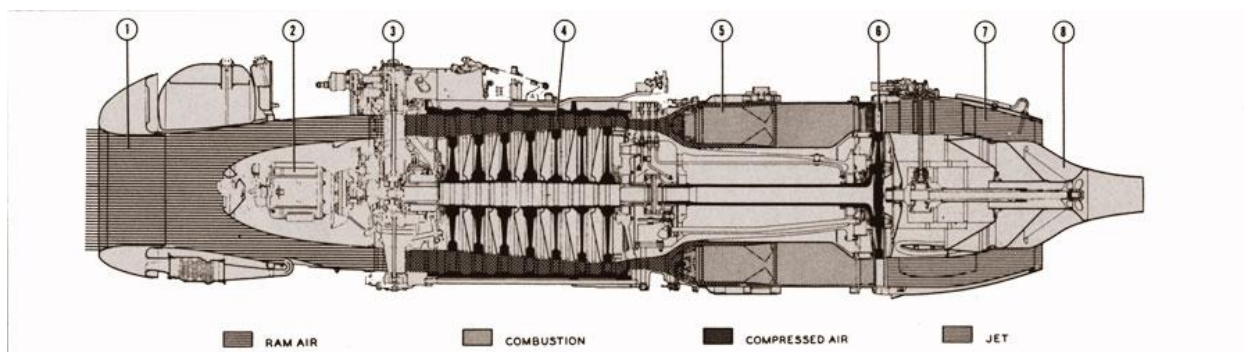
What was the purpose of the Soviet ECHO II? During what period did it patrol the oceans?

What training mission made the USS Triton famous?

What was Admiral Rickover's contribution to using advanced technology in the Navy?

What World War II operation problems with submarines did it address?

Identify the 8 parts of a jet engine.



What did Dr. Roger L. Easton invent that we use today to get around?

NAVAL HISTORY STEM-H LESSON PLAN

Where did he work?

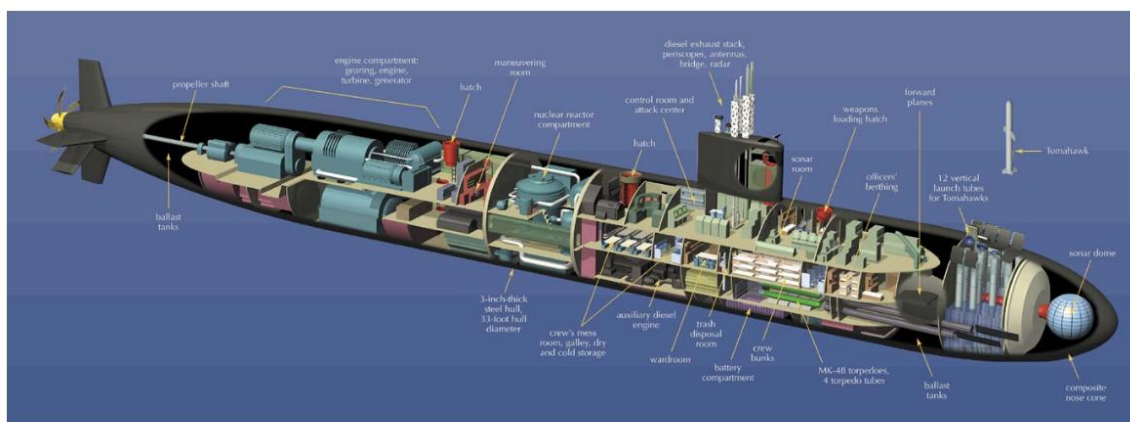
What contributions did Admiral Grace Hooper make to the advancement of naval warfare electronics?

What did she consider the greatest reward she ever received?

The Navy utilized 5 types of submarines during the cold war. What made the SS Clamagore (SS343) different from the other 4?

What did the term “41 for freedom” mean?

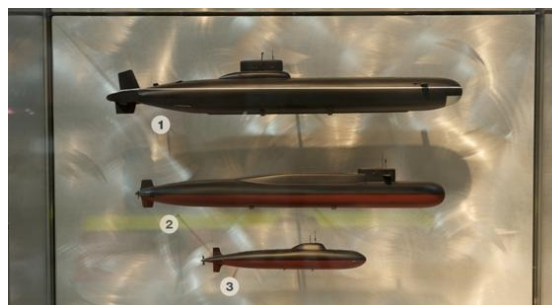
Looking at this picture of a nuclear powered fast attack sub, what percentage of the ship is dedicated to reactor power and propulsion?



Courtesy of the Smithsonian Institution, NMAH/Transportation

COVERT SUB OPERATION

Soviet Threat section: What are the three types of Russian Subs on display in the Gallery (hint: take the 360 tour)



NAVAL HISTORY STEM-H LESSON PLAN

TACAMO

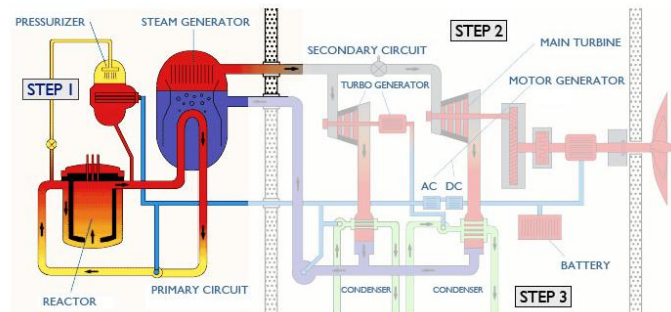
What did the term TACAMO stand for?

Nuclear Power:

How many steps in the operation of a submarine nuclear power plant?

What does each one do?

rollover STEPS 1, 2, and 3 for more information.



How a Nuclear Reactor Works

SEA CONTROL:

Perils at Sea:

What are the Names of the only two nuclear submarines lost during the Cold War?

Naval Intelligence:

What was the purpose of Project Bullseye?

COLD WAR BUILD UP

Look at the picture below. Which Navy aircraft was used for re-fueling?

U.S. Navy Cold War Aircraft: 1946 - 1991

The aircraft models on display in the Gallery were developed and deployed during the Cold War era. These models are highly detailed and built at 1:48 scale. Click the thumbnails below to see images of each model.



NAVAL HISTORY STEM-H LESSON PLAN

THEY MADE A DIFFERENCE

Who were the three women described in this part of the exhibit who “made a difference”.

What was their key contribution?

click to zoom and read full descriptions



IN CONCLUSION

Based on information from your gallery tour, what was the primary mission of the US Navy during the Cold War?