

World War II Unit: The Pacific Theater



Sixth through Twelfth Grade

This World War II unit plan by the Arkansas Inland Maritime Museum is intended for students in Sixth-Twelfth grade and covers seven days for 45 minute classes. Extended Activities are included for those that have spare time with their students or have longer classes. The unit should be incorporated into the educator's World War II unit plan. Our lessons focus on the Pacific Theater, because the museum offers information about two vessels that served in the Pacific Theater during World War II. USS *Hoga* (arrival date to be determined) that served during the attack on Pearl Harbor and USS *Razorback* that served throughout the Pacific Ocean during five war patrols and was present during the surrender ceremony in Tokyo Bay, Japan.

Day 1	The Pacific Rim	2
Day 2	Attack on Pearl Harbor	6
Day 3	Battles and Turning Points of the Pacific Theater	11
Day 4	Silent Service: Submarine Service during World War II	15
Day 5	Victory in the Pacific	19
Appendix	Ancillary Materials	23

Unit plan developed in 2013 by Allison Hiblong, Education Specialist of AIMM. 2006 Revised Social Studies Arkansas Frameworks, 2006 Revised American History, and Common Core Standards for Literacy in History/Social Studies 6th-12th Grades, and College, Career, and Civic Life Framework for Social Studies State Standards.

The Pacific Rim

Essential Question: What tactics were successful during World War II?

Guiding Question: Why did Japan create territories for their Empire?

Objectives:

- Students will know what a territory is by playing The Pacific Game.
- Students will be able to comprehend why Japan took over territories by discussing tactics used during The Pacific Game.
- Students will create synthetic rubber and comprehend that the United States had to make synthetic rubber because natural rubber was unavailable.

Common Core Connections:

History Strand in Social Studies State Standards

D2.His.14.6-8: Explain multiple causes and effects of events and developments in the past.

D2.His.14.9-12: Analyze multiple and complex causes and effects of events in the past.

Arkansas Social Studies Frameworks:

H.6.6.11: Analyze the scientific and technology innovations that affected society in the mid to late 20th century (technology).

H.6.8.25: Describe causes and consequences of World War II

Arkansas American History Frameworks:

WC.18.AH.2: Summarize Japanese motives for attacking Pearl Harbor.

WC.18.AH.6: Investigate the contributions of technology and science during World War II (synthetic materials).

Materials Needed:

The Pacific Game

Map of Japanese Territory Before 1941

Creating Synthetic Rubber Activity Sheet

- Liquid starch
- White glue
- Food coloring
- 2 small plastic or paper cups
- A ruler
- A marking pen
- Popsicle stick or another strong stirrer
- Paper towels (for clean-up)
- Plastic sandwich bag

Background Information:

In 1931, the Empire of Japan invaded Manchuria in order to increase the country's natural resources. This began a push by Japan into mainland Asia that continued throughout the 1930's. A decade later, Japan had been slowly pressing into China and was prepared to make a major assault in the Pacific Theater. The Pacific Game should be a fun way for students to learn about the differences between alliances and invasions for a country to gain resources. Students will also see how countries compete with one another for resources.

The game does not address the United States isolationist sentiment. In 1931, after Japan invaded Manchuria, President Herbert Hoover and Secretary of State, Henry Stimson, established the Stimson Doctrine. The Stimson Doctrine stated that the United States would not recognize the territory gained by aggression and in violation of international agreements. The doctrine allowed the United States to express concern over the aggressive action without committing itself to any direct involvement or intervention. When completing the discussion about the game it is suggested to incorporate these facts about the Pacific Rim during the 1930s leading up to 1941.

Opening Activity:

3-5 minutes

Write the word "territory" at the top of one side of the board. Ask students to describe their own territories within the classroom. What space do they define as their own when they're in class? They might say that their desks and the air surrounding their desks represent their personal territories within the classroom. Ask students what they do when their territory is "invaded." Do they fight, argue, go to an adult, "get even," or do other things? Write their responses on the board. Inform students that, just as they have their own personal territories within the classroom, countries have territories that are usually defined by national borders. Ask students to describe the ways that a country defends its territory. They should also realize that countries sometimes go to

war to extend their territories, taking new land away from other countries or groups of people.

Activity 1:

10-15 minutes

As a class play The Pacific game. Divide the class into four groups. Each group will receive a playing card: Japan, Russia, China, or the United States; and three coin cards. The game lasts 10 turns. To play follow instructions provided. Take score at the end of the game to reveal which country won.

Activity 2:

10 minutes

Have a discussion with your class about the game. The game is supposed to allow students to understand why Japan would invade other countries for their resources.

- What tactics did each country use during the game?
- Did any country form alliances with the resource territories?
- Did any country invade the resource territories?
- How did these actions affect the game?
- If a country built infrastructure (factories), why did they do this?
- What tactics were successful, which tactics were not successful?

The game does not discuss the impact it had on those territories or their people. The Pacific Rim during 1930s-1940s was much more complicated than this game signifies, but hopefully students understand how tensions with Japan, the United States, and Russia were heated.

Activity 3:

15-30 minutes

Allow students to play the game again either as a class or allow students to break up into groups of three to four players to play individually.

Ask students if they changed their tactic the second time they played. What country won? Are there any new successful tactics that were used?

Closing Activity:

10 minutes

Display the Map of Japanese Territory Before 1941. Explain to students that the United States' Stimson Doctrine stated that the United States would not recognize the territory gained by aggression and in violation of international agreements. The doctrine allowed the United States to express concern over the aggressive action without committing itself to any direct involvement or intervention. Explain to students that when the Empire of Japan took over 90% of the world's natural rubber, the United States created

synthetic and artificial rubber through scientific experiments. Rubber was an essential product for wartime needs from tires, to life rafts, to engine gaskets. Hand out the Synthetic Rubber activity worksheet to students along with the required material.

Sources:

“American Isolationism in the 1930s,” U.S. Department of State Office of the Historian, <http://history.state.gov/milestones/1937-1945/AmericanIsolationism> (Accessed 10/11/13).

“Japan Modernizes,” Imperialism-by-Brady, <http://imperialism-by-brady.wikispaces.com/Japan+Modernizes> (Accessed 10/11/13).

Paul Wendt, “The Control of Rubber in World War II,” *Southern Economic Journal*, Vol. 13, No. 3 (January, 1947), p. 203-227.

“Science and Technology World War II Poster,” The National World War II Museum, <http://www.ww2sci-tech.org/poster/poster.php>, (Accessed July 2013.)

Attack on Pearl Harbor

Essential Question: What tactics were successful during World War II?

Guiding Question: What caused the United States to join World War II?

Objectives:

- Students will be asked to recall information from primary source documents about the Pearl Harbor attack and create an argument based on their evidence of if the attack was successful or not.
- Students will identify structures that were targeted at Pearl Harbor using a map of the harbor.

Common Core Connections:

English Language Arts: Reading Standards for Literacy in History/Social Studies 6-12

Standard 5: Describe how a text presents information. (6-8)

Standard 5: Analyze how a text uses structure to emphasize key points. (9-12)

Standard 6: Identify/Compare/Evaluate author's point of view. (6-12)

Standard 7: Integrate visual information with other information in print and digital texts. (6-8)

History Strand for Social Studies State Standards

D2.His.6.6-8: Analyze how people's perspectives influenced what information is available in the historical sources they created.

D2.His.6.9-12: Analyze the ways in which the perspectives of those writing history shaped the history that they produced.

D2.His.16.6-8: Organize applicable evidence into a coherent argument about the past.

D2.His.16.9-12: Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past.

Arkansas Social Studies Frameworks:

H.6.6.19: Research the major events and political decisions made by the United States during the course of World War II (Pearl Harbor).

H.6.8.25: Describe causes and consequences of World War II (Pearl Harbor).

H.6.8.26: Examine the following battles as turning points of World War II (Pearl Harbor).

Arkansas American History Frameworks:

WC.18.AH.2: Summarize Japanese motives for attacking Pearl Harbor.

Materials Needed:

Map of the United States 1940

Center Instructions Sheet

“Beaching Nevada” by Bill Garrison

Technology to Listen to Audio Online President Roosevelt’s Message to Congress

The Japanese View of the Attack at Pearl Harbor

Jim Dick Miller Report

Oral History--Ruth Erickson

United States Pacific Fleet Citation

Map of the Enemy’s Harbor

Cypher Worksheet

Background Information:

Pearl Harbor, Hawaii, was attacked by the Empire of Japan on December 7, 1941. Part of the lesson emphasizes the importance of a little known tug boat. USS *Hoga* is a firefighting tug boat that is one of the last surviving vessels from the attack. *Hoga*’s crew worked on fighting fires on burning vessels and towing vessels away from other burning vessels. The major story is of *Hoga* towing USS *Nevada* out of the channel to the harbor before it sank. This kept the channel opened for vessels to get in and out of the harbor which allowed the Navy to still operate the harbor even after the attack. *Hoga* is owned by the Arkansas Inland Maritime Museum and will soon be on display in North Little Rock.

Preparation:

Educators should move the furniture in their classroom to create a gallery walk. Gallery invites students to look closely at a range of material that highlights the words, images,

and sounds of a particular time and place. The materials are displayed gallery-style on the walls and other spaces of the classroom. Students will rotate through centers that include: Art Center, Audio Center, Document Center, and Map Center. Each center has their own instructional sheets with assignments for the students.

Opening:

5 minutes

Display the map of the United States from 1940. Ask students to identify the two differences between the 1940 map and a current United States map. The difference is that Alaska and Hawaii are not states until 1959. In 1941 these were not states, but territories. Students should remember what a territory is based on the prior lesson.

Then divide students into four groups and give students 5-8 minutes at each center.

Art Center:

5-8 minutes

Display the “Beaching Nevada” painting which depicts an event that occurred at Pearl Harbor during the attack and have students complete the assignment.

Audio Center:

5-8 minutes

Have technology set up so that students can listen to President Franklin D. Roosevelt’s speech and the instruction sheet. To access a 48 second audio file for a Windows go to <http://www.archives.gov/education/lessons/day-of-infamy/images/infamy-radio-address.wav>; for a Macintosh go to <http://www.archives.gov/education/lessons/day-of-infamy/images/infamy-radio-address.aiff>.

You can access the entire speech on YouTube at:

<http://www.youtube.com/watch?v=3VqQAf74fsE>. The video is 2 minutes and 37 seconds.

Note: If you are unable to provide the technology to allow students to listen to the audio file, then use the speech document in the Document Analysis Center.

Document Center:

5-8 minutes

Each student should choose one of the available primary source documents and follow the instruction sheet. Documents include: Jim Dick Miller’s Report, The Enemy’s View, an Oral History by Ruth Erickson, and an official Citation by the United States Pacific Fleet.

Map Center:

5-8 minutes

Provide students with the Attack on Enemy's Harbor Map. Students will have five minutes to decide what they would attack if they were deciding the attack on the enemy's harbor. Each group will fill out a score card, and at the end of the day students will see whose tactics worked the best.

Wrap Up:

8-10 minutes

Host a discussion about the students' experience with the gallery.

- What documents or images are most interesting and why?
- What questions do these artifacts raise for you about the attack and its effects?
- Art Center: Teacher should highlight the battleship USS *Nevada*, the firefighting tug boat USS *Hoga*, the Japanese plane, and the rope on the back of *Hoga*.
- Audio Center: What did students think were important in the recording? Who is the audience of the recording?
- Document Center: What type of documents did you read? Who are the authors of your documents? What historical facts did the documents give?
- Map Center: What structures (buildings, ships, oil/fuel tanks) were targeted, destroyed, and avoided by the students? Did your group work individually or as a group? Who scored the most points in each group and what tactics did you use? Actual targets that were destroyed during the attack: 8 Battleships: Arizona, Oklahoma, West Virginia, California, Nevada, Tennessee, Maryland, and Pennsylvania; 1 Ex-battleship (target/AA training ship): Utah; 3 Cruisers: Helena, Raleigh, and Honolulu; 3 Destroyers: Cassin, Downes, and Shaw; 3 Auxiliaries: Oglala (minelayer), Vestal (repair ship), and Curtiss (seaplane tender); and 350 Aircraft damaged or destroyed.

Closing Activity:

10 minutes

Hand out to students the Cypher Worksheet and explain to students that codes were used by all military forces during World War II. The United States had intercepted a Japanese code about the Pearl Harbor attack, but was unable to crack the code. Have students crack the code given to them on the worksheet and complete the assignment in the worksheet.

Sources:

1940 United States Map, http://www.1940census.net/1940_us_map.php (Accessed 10/9/2013).

"Attack At Pearl Harbor, 1941, - the Japanese View" EyeWitness to History,
www.eyewitnesstohistory.com (2001).

Bill Garrison, "Beaching Nevada."

C. W. Nimitz, Admiral, "United States Pacific Fleet Citation."

"Document Analysis Worksheets," National Archives,
<http://www.archives.gov/education/lessons/worksheets/> (Accessed 10/11/13).

Freeman, Elsie, Wynell Burroughs Schamel and Jean West. "A Date Which Will Live in Infamy": The First Typed Draft of Franklin D. Roosevelt's War Address." *Social Education* 55, 7 (November/December 1991): 467-470,
<http://www.archives.gov/education/lessons/day-of-infamy/> (Accessed May 2012).

"Miller, Jim Dick – USN," USS Arizona Survivor Stories,
<http://www.ussarizona.org/stories/uss-arizona-survivor-stories/112-miller-jim-dick-usn> (Accessed February 2013).

"Oral History of The Pearl Harbor Attack, 7 December 1941, Lieutenant Ruth Erickson, NC, USN." Naval History and Heritage, <http://www.history.navy.mil/faqs/faq66-3b.htm> (Accessed March 2013).

Paul R. Yarnall, "Map of Pearl Harbor December 7, 1941," NavSource, Naval History,
<http://www.navsource.org/archives/11/110201906.jpg> (Accessed October 2013).

"Ships and District Craft Present at Pearl Harbor, 0800 7 December 1941," Naval History and Command, <http://www.history.navy.mil/faqs/faq66-2.htm> (Accessed October 2013).

Battles and Turning Points of the Pacific Theater

Essential Question: What tactics were successful during World War II?

Guiding Question: What battles changed the course of the Pacific Theater?

Objectives:

- Students will compare the Navajo code to the cypher from the previous lesson.
- Students will construct an exhibit about a short research project.
- Students will distinguish important information to include in their research project.
- Students will critique a peer's project based on the evaluation sheet provided.
- Students will explain their prediction of how the war ends from their knowledge from the exhibits.

Common Core Connections:

Reading Standards for Literacy in History/Social Studies 6-12

Standard 3: Analyze/Evaluate a series of events; determine whether earlier events caused later ones or simply preceded them. (9-12)

Writing Standards for Literacy in History/Social Studies 6-12

Standard 1: Write arguments focused on discipline-specific content. (6-12)

Standard 2: Write informative texts, including the narration of historical events. (6-12)

Standard 4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purposes, and audience. (6-12)

Standard 7: Conduct short research projects to answer a question. (6-12)

Standard 9: Draw evidence from informational texts to support analysis reflection, and research. (6-12)

History Strand for Social Studies State Standards

D2.His.14.6-8: Explain multiple causes and effects of events and developments in the past.

D2.His.14.9-12: Analyze multiple and complex causes and effects of events in the past.

D2.His.16.6-8: Organize applicable evidence into a coherent argument about the past.

D2.His.17.6-8: Compare the central arguments in secondary works of history on related topics in multiple media.

D2.His.17.9-12: Critique the central arguments in secondary works of history on related topics in multiple media in terms of their historical accuracy.

Arkansas Social Studies Frameworks:

H.6.6.11: Analyze the scientific and technological innovations that affected society in the mid to late 20th century (communication).

H.6.8.17: Explain the influences that changing technology had on World War II (weapons, transportation, and communication).

H.6.8.26: Examine the following battles as turning points of World War II (Midway).

Arkansas American History Frameworks:

WC.18.AH.5: Evaluate the military contribution of minorities in World War II (Navajo Code Talkers).

Materials Needed:

Internet Access

Projector/Smartboard

Classroom Set of Computers with Internet Access

Creating an Exhibit Instruction Sheet

Exhibit Evaluation Worksheet

Background Information:

The lesson allows students to work with animated maps to understand the geography of the Pacific Ocean and the progression of the Pacific Theater during World War II. The maps give students a rundown of battles, campaigns, victories, losses, and movement of troops. Each group of students will create an exhibit about an event in the Pacific Theater.

The only unbroken code in modern military history is the Navajo Code. Navajo Code Talkers were used during every major engagement of the Pacific Theater from

1942-1945. Their unbreakable code played a pivotal role in saving lives and hastening the war's end. Students should include tactics, like code talkers, that were used in their event that they are researching.

Opening Activity:

5 minutes

Introduce students to the Navajo Code Talkers by watching the following video that runs 2 minutes, 46 seconds. <http://www.youtube.com/watch?v=5rSvm3m8ZUA>.

Activity 1:

40 minutes

Divide students into groups. Assign each group with a topic. Note: There are 20 events and each class should be responsible for 3-5 events. Have students use their computer to go to www.pacificwaranimated.com website. The students will watch the video and begin research on their project.

Explain to students what an exhibit is. An exhibit is a way to give evidence of or an instance of an event, or to demonstrate knowledge gained through research. Historical exhibition presents information about an event from the past by physically displaying documents, images, or objects. We often see such exhibits at museums, but they are also presented at many other places such as archives, historic sites, park visitor centers, classrooms, and even airports or train stations. For your project, you will tell the story of your research through historic photographs, maps, drawings, and other interesting objects.

1. Pearl Harbor
2. Malaya and Singapore
3. Dutch East Indies
4. Fall of Philippines
5. Battle of the Coral Sea
6. Battle for New Guinea
7. Operation Cartwheel
8. Doolittle Raid
9. Battle of Midway Island
10. Aleutians Campaign
11. Battle for Guadalcanal Island
12. Battle of Savo Island
13. Battle of Eastern Solomons
14. Battle of the Santa Cruz Islands
15. Tarawa and Makin
16. Kwajalein and Eniwetok

17. Battle of Philippine Sea
18. Battle of Leyte Gulf
19. Battle of Iwo Jima
20. Battle of Okinawa

Note: Bonus points can be offered to students to use other sources that are not provided.

Give students a few days to complete their exhibit. Take a day to display the exhibit and allow students to complete an activity.

Activity 2: *40 minutes*

Have students take a gallery walk. Use the evaluation worksheet to allow students to complete peer reviews about two projects. While students are evaluating the exhibits they should determine whether earlier events caused later ones or simply preceded them and then write their answer on the top of the evaluation page.

Closing Activity: *5 minutes*

Have students predict how the war could end in a short paragraph based on the past events that occurred in the Pacific Theater. What tactics, forces, weapons, and technology could be used to end the war?

Sources:

History Animated, www.pacificwaranimated.com (Accessed July 2013).

History Day in Arkansas, <http://ar.nhd.org/> (Accessed June 2013).

National History Day, <http://www.nhd.org/> (Accessed August 2013).

Navajo Code Talkers Museum and Veterans Center, <http://www.navajocodetalkers.org/> (Accessed October 2013).

YouTube, <http://www.youtube.com/watch?v=5rSvm3m8ZUA> (Accessed October 2013).

Silent Service: Submarine Service during World War II

Essential Question: What tactics were successful during World War II?

Guiding Question: How was submarine service different from the Navy's surface fleet?

Objectives:

- Students will comprehend how radar and sonar works.
- Students will demonstrate their skills of analyzing a propaganda poster by completing an analysis worksheet about World War II Submarine Recruiting Posters.
- Students will differentiate between information provided while completing their submarine bingo cards.

Common Core Connections:

History Strand for Social Studies State Standards

D2.His.13.6-8: Evaluate the relevancy and utility of a historical source based on information such as maker, date, place of origin, intended audience, and purpose.

Arkansas Social Studies Frameworks

H.6.6.11: Analyze the scientific and technology innovations that affected society in the mid to the late 20th century (communication, technology, and transportation).

H.6.8.17: Explain the influences that changing technology had on World War II (weapons, transportation, and communication).

Arkansas American History Frameworks

WC.18.AH.6 Investigate the contributions of technology and science during World War II (radar and sonar).

Materials Needed:

“Rosie the Riveter” by Norman Rockwell

Projector/Smartboard

National Archives Poster Analysis Worksheet

“He Volunteered for Submarine Service” Poster

“Smack the Jap!” Poster

“Him Em Where It Hurts” Poster

“Learn to Operate a \$7,000,000 Sub” Poster

USS Razorback Ship’s History

Submarine Bingo Card

Identification Cards

Radar and Sonar in World War II Worksheet

Background Information:

Submarine service is fondly known by submariners as the Silent Service. Submarines primarily served in the Pacific Ocean during World War II and operated primarily individually (away from the fleets). Though the United States issued a draft, submarine service has always been volunteered based during its history. These men spent six months out of the year living aboard these diesel boats (referred to as pig boats). During World War II 52 submarines were sunk (lost), which is one out of every six. USS Razorback served five war patrols during her service in the war. She was built in Portsmouth Naval Shipyard in Kittery, Maine from September of 1943 till April of 1944. During the war she sunk 18 Japanese vessels, saved 5 Americans stranded in the water, and was in Tokyo Bay during the surrender ceremony. *Razorback* continued in service with the United States until 1970, and then was sold to the Turkish Navy where it served until 2001. Now *Razorback*, is a part of the Arkansas Inland Maritime Museum on the banks of the Arkansas River in North Little Rock.

Opening Activity:

5 minutes

Display the painting of Rosie the Riveter by Norman Rockwell. Ask students to look at the image for three minutes and find three objects, symbols, or imagery. Discuss what the students notice. Objects: lunch pail with the name “Rosie,” rivet machine in the lap, she is wearing pants which was uncommon for women before World War II, *Mein Kamp* under her foot, a handkerchief coming out of her pocket (feminine object), and the shield attached to her head looks like a halo. Symbols: buttons across the top of her overalls include Red Cross button for donating blood, banner with one star symbolizing that she has one “loved one” probably a family member in the war, “V” button standing for victory, and the larger button is her security badge. Imagery: the red white and blue background.

Activity 1:

15 minutes

Have students work in pairs or small groups to evaluate a World War II Submarine Recruiting Poster. Students will complete the National Archives Poster Analysis Worksheet.

Activity 2:

10 minutes

Allow students to read about USS *Razorback's* efforts during World War II. Every submarine's service was different, but a majority of them completed similar missions and patrols. Lead a discussion with the students by asking them these questions: How long did it take to build the submarine? **Answer: Under 7 months.** How many war patrols did *Razorback* complete? **Answer: 5 war patrols.** Did *Razorback* sink or damage any enemy vessels? **Answer: Yes.** If so what, how many, how much tonnage? **Answer: 2 Navy Destroyers and 16 merchant ships for a total of 28,150 tons.** Did *Razorback* rescue anyone? **Answer: Yes.** Was there anything else interesting about *Razorback's* service?

Activity 3:

15 minutes

Give each student an identification card. Each card will give a student position, the compartments they worked in, and job description. Then give each student a Submarine Bingo Card. Students must find a classmate whose identification card can complete each task. Students must make a full clear to complete Submarine Bingo.

Closing Activity:

5 minutes

Have students complete a worksheet that explains radar and sonar technology.

Sources:

"Document Analysis Worksheets," National Archives, <http://www.archives.gov/education/lessons/worksheets/> (Accessed October 2013).

Louis Garcia, "How Waves Helped Win the War: Radar and Sonar in WWII," The National World War II Museum, <http://www.ww2sci-tech.org/lessons/lessons3.html> (Accessed September 2013).

Norman Rockwell, "Rosie the Riveter."

“Rosie the Riveter: Real Women Workers in World War II,” Library of Congress,
<http://www.encyclopedia.com/video/04VNBM1PqR8-rosie-riveter-real-women-workers.aspx> (Accessed October 2013).

Ted Kreiter, “The Art of Work,” The Saturday Evening Post,
<http://www.saturdayeveningpost.com/2009/04/17/art-entertainment/art-work.html>,
(Accessed October 2013).

USS Razorback World War II War Patrol Deck Logs (1944-1945), United States Navy Archives, available at Arkansas Inland Maritime Museum,
<http://www.aimm.museum/razorback.asp> (Accessed July 2013.)

“USS Razorback History,” Arkansas Inland Maritime Museum, <http://aimm.museum/SS-394-WWII.asp> (Accessed August 2013).

Victory in the Pacific Theater

Essential Question: What tactics were successful during World War II?

Guiding Questions: What tactics did the United States use to end World War II with Japan? How did the American public feel about the end of the war?

Objectives

- Students will summarize primary source documents about the atomic bomb.
- Students will defend and justify their points of view for either affirmative or negative stance on the atomic bomb during a debate.

Common Core Connections:

Reading Standards for Literacy in History/Social Studies 6-12

Standard 6: Identify/Compare/Evaluate author's point of view. (6-12)

Standard 8: Distinguish/Assess/Evaluate among fact, opinion, and reasoned judgment in a text that supports the author's claims. (6-10)

Standard 9: Integrate information from diverse sources, primary, into a coherent understand of an idea or event, noting discrepancies among sources. (11-12)

History Strand for Social Studies State Standards

D2.His.13.6-8: Evaluate the relevancy and utility of a historical source based on information such as a maker, date, place of origin, intended audience, and purpose.

D2.His.14.6-8: Explain multiple causes and effects of events and developments in the past.

D2.His.14.9-12: Analyze multiple and complex causes and effects of events in the past.

Arkansas Social Studies Frameworks:

H.6.6.11: Analyze the scientific and technology innovations that affected society in the mid to late 20th century (technology).

H.6.6.19: Researching the major events and political decisions made by the United States during the course of World War II (atomic bomb).

H.6.6.20: Examine the events that lead to the conclusion of World War II.

H.6.8.17: Explain the influences that changing technology had on World War II (weapons).

H.6.8.25: Describe causes and consequences of World War II (atomic bomb).

Arkansas American History Frameworks:

WC.18.AH.6: Investigate the contributions of technology and science during World War II (Manhattan Project).

WC.18.AH.7: Analyze President Harry S. Truman's decision to use atomic weapons against Japan.

Materials Needed:

Potsdam Declaration

Henry Stimson to Harry S. Truman, April 24, 1945

Petition to the President of the United States, July 17, 1945

Press release by the White House, August 6, 1945

Translation of leaflet dropped on the Japanese, August 6, 1945

Telegram, Richard Russell to Harry S. Truman, August 7, 1945

Harry S. Truman to Richard Russell, August 9, 1945

U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946

Background Information:

By the summer of 1945, the Japanese navy and air force were destroyed and its economy devastated. Once Okinawa was captured Okinawa which the Allies could launch an invasion of the main Japanese home islands. The invasion was code-named "Operation Olympic" and set for November 1945. The invasion of Japan promised to be the bloodiest seaborne attack of all time, conceivably 10 times as costly as the Normandy invasion in terms of Allied casualties. In July a new option became available when the United States secretly detonated the world's first atomic bomb, so the Allies issued the Potsdam Declaration demanding the "unconditional surrender of all the Japanese armed forces." Japanese Prime Minister Kantaro Suzuki responded by telling the press that his government was "paying no attention" to the Allied ultimatum.

President Harry Truman ordered that on August 6 the B-29 bomber Enola Gay to drop an atomic bomb on the Japanese city of Hiroshima. The bomb killed an estimated 80,000 people and fatally wounding thousands more. On August 8, the USSR declared war against Japan. The next day, Soviet forces attacked in Manchuria and a second atomic bomb was dropped on the Japanese coastal city of Nagasaki. On August 15, 1945, Hirohito surrendered to the Allied forces, bringing an end to the War in the Pacific and World War II. September 2, 1945, the formal surrender of Japan took place in Tokyo Bay. The surrender was signed aboard the battleship USS *Missouri*. Twelve submarines were invited to attend the ceremony and USS *Razorback* was among those present.

Opening Activity:

5 minutes

Display the Potsdam Declaration from July 26, 1945. Highlight to students:

- the countries that were involved in the declaration from point 1
- “We will not deviate from [our terms]. There are no alternatives.” from point 5
- “convincing proof that Japan’s war-making power is destroyed” from point 7
- “We do not intend that the Japanese shall be enslaved as a race or destroyed as a nation,” from point 10
- “We call upon the government of Japan to proclaim now the unconditional surrender of all Japanese armed forces, and to provide proper and adequate assurances of their good faith in such action. The alternative for Japan is prompt and utter destruction.” from point 13.

Activity 1:

15 minutes

Students will participate in an Atomic Bomb Debate. Students should be divided into pro and con teams. Have students read the following primary source documents to create their arguments. Note: A good strategy is to have one student read each document listed and summarize the document for their side.

Have students read the following documents:

- Henry Stimson to Harry S. Truman, April 24, 1945
- Petition to the President of the United States, July 17, 1945
- Press release by the White House, August 6, 1945
- Translation of leaflet dropped on the Japanese, August 6, 1945
- Telegram, Richard Russell to Harry S. Truman, August 7, 1945
- Harry S. Truman to Richard Russell, August 9, 1945
- U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946: The Attacks

- U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946: Casualties
- U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946: The Japanese Decision to Surrender
- U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946: How the Atomic Bomb Works and The Nature of the Explosion
- U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946: The Danger and What We Can Do About It

Activity 2:

20 minutes

Complete the debate between the class. Choose a side to begin the debate giving reasoned evidence of why they agree or disagree with the dropping of the atomic bomb. Once each team makes their opening statements encourage each group to counter the opponent's opinions with the research they conducted.

Closing Activity:

5 minutes

Inform students on the events that ended the war. President Harry Truman ordered that on August 6 the B-29 bomber Enola Gay to drop an atomic bomb on the Japanese city of Hiroshima. The bomb killed an estimated 80,000 people and fatally wounding thousands more. On August 8, the USSR declared war against Japan. The next day, Soviet forces attacked in Manchuria and a second atomic bomb was dropped on the Japanese coastal city of Nagasaki. On August 15, 1945, Hirohito surrendered to the Allied forces, bringing an end to the War in the Pacific and World War II. September 2, 1945, the formal surrender of Japan took place in Tokyo Bay. The surrender was signed aboard the battleship USS *Missouri*. Twelve submarines were invited to attend the ceremony and USS *Razorback* was among those present.

Sources:

“Japan Surrenders,” This Day in History, <http://www.history.com/this-day-in-history/japan-surrenders> (Accessed October 2013).

“The Decision to Drop the Atomic Bomb,” Harry S. Truman Presidential Library, http://www.trumanlibrary.org/whistlestop/study_collections/bomb/large/index.php (Accessed August 2013).

“The Potsdam Declaration,” Asia for Educators, Columbia University, <http://afe.easia.columbia.edu/> (Accessed October 2013).

Appendix: Ancillary Materials

Day 1: The Pacific Rim

- The Pacific Game 25
- Map of Japanese Territory Before 1941 47
- Creating Synthetic Rubber Activity Sheet 48

Day 2: Attack on Pearl Harbor

- Map of the United States 1940 49
- Center Instructions Sheet 50
- “Beaching Nevada” by Bill Garrison 52
- Proposed Message to the Congress, December 7, 1941 53
- The Japanese View of the Attack at Pearl Harbor 56
- Jim Dick Miller Report 59
- Oral History—Ruth Erickson 62
- United States Pacific Fleet Citation 67
- Map of the Enemy’s Harbor 68
- Cypher Worksheet 69

Day 3: Battles and Turning Points of the Pacific Theater

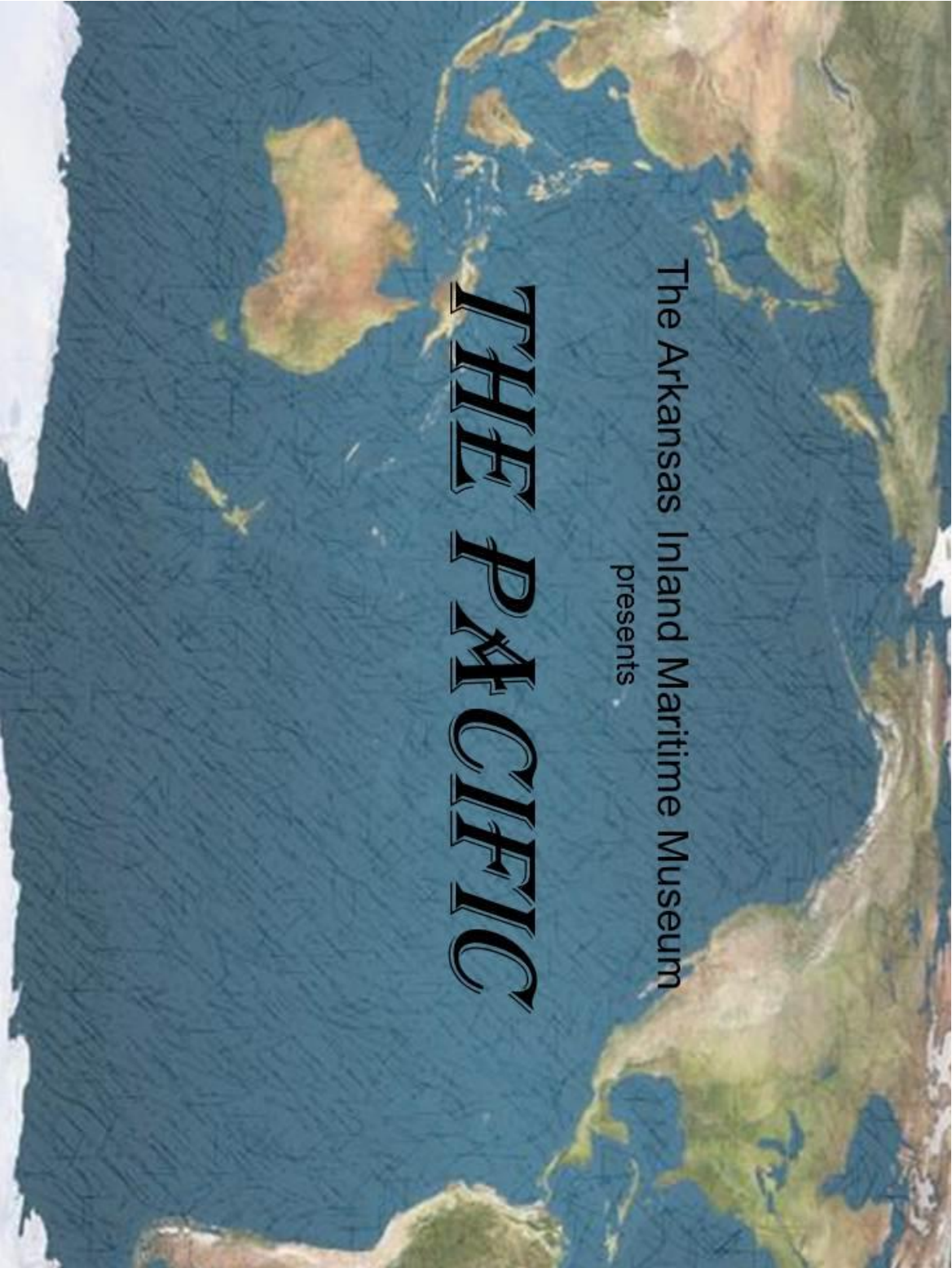
- Creating an Exhibit Instruction Sheet 70
- Exhibit Evaluation Worksheet 72

Day 4: Silent Service: Submarine Service during World War II

- “Rosie the Riveter” by Norman Rockwell 73
- National Archives Poster Analysis Worksheet 74
- “He Volunteered for Submarine Service” Poster 75
- “Smack the Jap!” Poster 76
- “Him Em Where It Hurts” Poster 77
- “Learn to Operate a \$7,000,000 Sub” Poster 78
- USS Razorback Ship’s History 79
- Submarine Bingo Card and Answer Key 84
- Identification Cards 86
- Radar and Sonar Worksheet and Answer Key 92

Day 5: Victory in the Pacific

- Potsdam Declaration 95
- Henry Stimson to Harry S. Truman, April 24, 1945 96
- Petition to the President of the United States, July 17, 1945 97
- Press release by the White House, August 6, 1945 99
- Translation of Leaflet Dropped on the Japanese, August 6, 1945 102
- Telegram, Richard Russell, August 9, 1945 103
- Harry S. Truman to Richard Russell, August 9, 1945 105
- U.S. Strategic Bombing Survey: The Effects of the Atomic Bombing of Hiroshima and Nagasaki, June 19, 1946: The Attacks 106
- U.S. Strategic Bombing Survey: The Effects of the Atomic Bombing of Hiroshima and Nagasaki, June 19, 1946: Casualties 109
- U.S. Strategic Bombing Survey: The Effects of the Atomic Bombing of Hiroshima and Nagasaki, June 19, 1946: The Japanese Decision to Surrender 111
- U.S. Strategic Bombing Survey: The Effects of the Atomic Bombing of Hiroshima and Nagasaki, June 19, 1946: How the Atomic Bomb Works and The Nature of the Explosion 115
- U.S. Strategic Bombing Survey: The Effects of the Atomic Bombing of Hiroshima and Nagasaki, June 19, 1946: The Danger and What We Can Do About It 118



The Pacific Rules

Pacific Rim Game allows you to be a country (Japan, United States, USSR, or China) during late 1930s. As a country you are trying to have more influence than the other countries. To do that you will need COIN, OIL, RUBBER, FOOD, MILITARY, FACTORY, ALLIANCE, and TERRITORY.

At the beginning of the game students should choose a country. *If you only have three people then leave out USSR or China.* There will be 3 resource countries (Dutch East Indies, Malaya, and Manchuria) that provide players with valuable resources (Oil, Rubber, and Food) that cost COINS or MILITARY. Each country begins the game with three COINS.

Japan will start the game, which consist of 10 turns; Japan will keep a tally of how many turns have been completed. Then players will take turns in a clockwise direction until every country has played their 10 turns.

A turn consist of a country receiving a COIN at the beginning of their turn. Then the player will choose 2 actions to complete (Buy, Train, Build, Alliance, or Invade).

- Buy: spend 2 COINS for 1 resource from a resource country
- Train spend 2 Coins for 1 MILITARY
- Build: spend 3 (different) resources for 1 FACTORY, receive 1 COIN per FACTORY per turn
- Alliance: spend 1 MILITARY for 1 resource country, receive 1 free resource (from that country) per turn, more than one player country can have an alliance with a resource country
- Invade: spend 3 MILITARY to create a resource territory, receive 1 free resource (from that country) per turn, all alliances are broken when a resource country is invaded, any money spent for that resource goes to the country that invaded it. Each invasion after the initial invasion requires 1 extra MILITARY

Each country receives a bonus.

USSR: receives each FACTORY for 2 (different) resources

Japan: receives MILITARY for 1 COIN

United States: receives 2 COINS per turn

China: receives resources for 1 COIN

The end of the game each country will earn victory points based on their tactics during the game.

3 COINS = 1 Influence Point

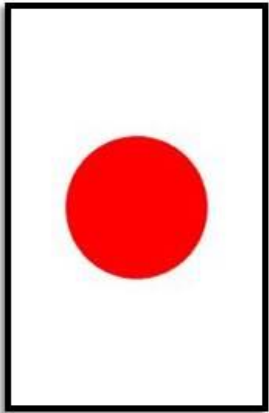
1 FACTORY = 3 Influence Points

2 RESOURCES = 1 Influence Point

1 ALLIANCE = 4 Influence Points

1 MILITARY = 1 Influence Point

1 TERRITORY = 7 Influence Points



Japan: Militaristic

- Each turn you receive 1 COIN
- Each turn you complete 2 ACTIONS:
 - BUY – spend COINS for resources (OIL, RUBBER, or FOOD)
 - 2 COINS for 1 resource
 - TRAIN – spend COIN for MILITARY
 - 1 COIN for 1 MILITARY
 - BUILD – spend resources to generate more COINS
 - 1 of each resource for 1 FACTORY
 - Receive 1 COIN for each FACTORY each turn
- ALLIANCE – spend 1 MILITARY to ally with a resource country
 - 1 free resource per turn
- INVADE – spend 3 MILITARY to take over a resource country and make it a territory
 - 1 free resource per turn
- COINS to buy resources for that country go to the owner
- After first invasion, each invasion cost 1 extra MILITARY



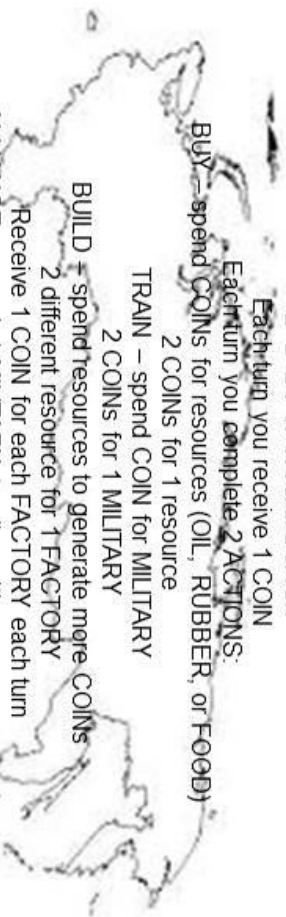
United States: Capitalism

- Each turn you receive 2 COINS
- Each turn you complete 2 ACTIONS:
 - BUY – spend COINS for resources (OIL, RUBBER, or FOOD)
 - 2 COINS for 1 resource
 - TRAIN – spend COIN for MILITARY
 - 2 COINS for 1 MILITARY
 - BUILD – spend resources to generate more COINS
 - 1 of each resource for 1 FACTORY
 - Receive 1 COIN for each FACTORY each turn
- ALLIANCE – spend 1 MILITARY to ally with a resource country
 - 1 free resource per turn
- INVADE – spend 3 MILITARY to take over a resource country and make it a territory
 - 1 free resource per turn
- COINS to buy resources for that country go to the owner
- After first invasion, each invasion cost 1 extra MILITARY



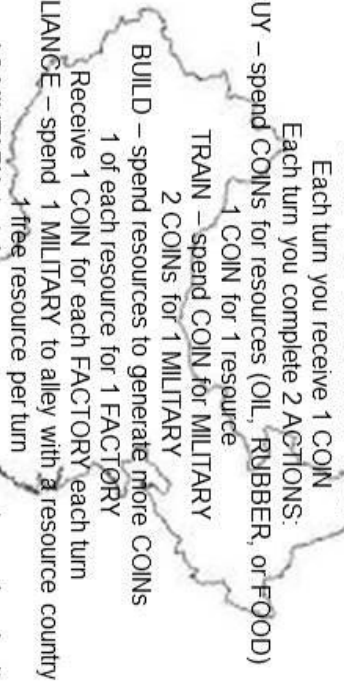
USSR: Industrial

- Each turn you receive 1 COIN
- Each turn you complete 2 ACTIONS:
- BUY – spend COINS for resources (OIL, RUBBER, or FOOD)
- 2 COINS for 1 resource
- TRAIN – spend COIN for MILITARY
- 2 COINS for 1 MILITARY
- BUILD – spend resources to generate more COINS
- 2 different resource for 1 FACTORY
- Receive 1 COIN for each FACTORY each turn
- ALLIANCE – spend 1 MILITARY to ally with a resource country
- 1 free resource per turn
- INVADE – spend 3 MILITARY to take over a resource country and make it a territory
- 1 free resource per turn
- COINS to buy resources for that country go to the owner
- After first invasion, each invasion cost 1 extra MILITARY







CHINA: Resourceful

- Each turn you receive 1 COIN
- Each turn you complete 2 ACTIONS:
- BUY – spend COINS for resources (OIL, RUBBER, or FOOD)
- 1 COIN for 1 resource
- TRAIN – spend COIN for MILITARY
- 2 COINS for 1 MILITARY
- BUILD – spend resources to generate more COINS
- 1 of each resource for 1 FACTORY
- Receive 1 COIN for each FACTORY each turn
- ALLIANCE – spend 1 MILITARY to ally with a resource country
- 1 free resource per turn
- INVADE – spend 3 MILITARY to take over a resource country and make it a territory
- 1 free resource per turn
- COINS to buy resources for that country go to the owner
- After first invasion, each invasion cost 1 extra MILITARY



The Pacific Rim Game Score Card

<u>Influences</u>				
COIN:				
RESOURCE:				
MILITARY:				
FACTORY:				
ALLIANCE:				
TERRITORY:				



FOOD

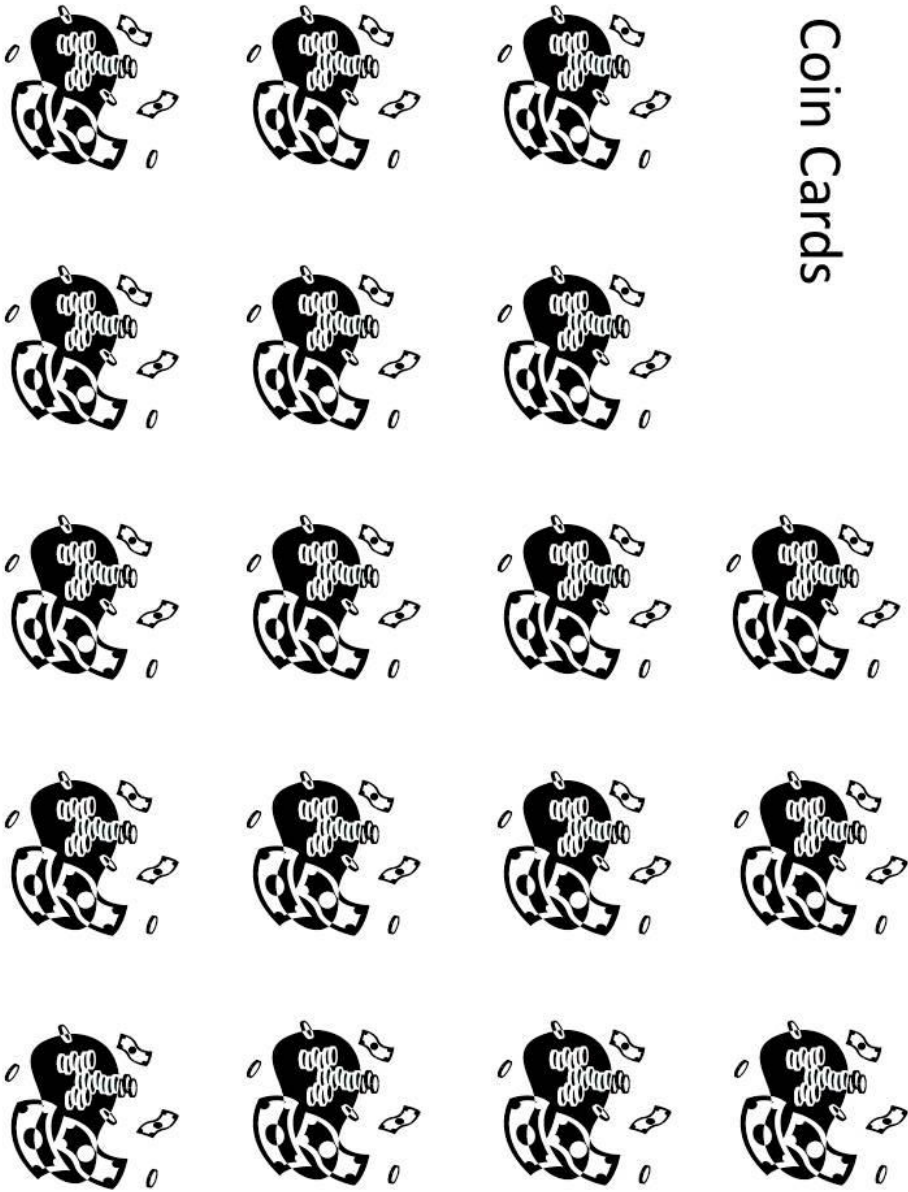


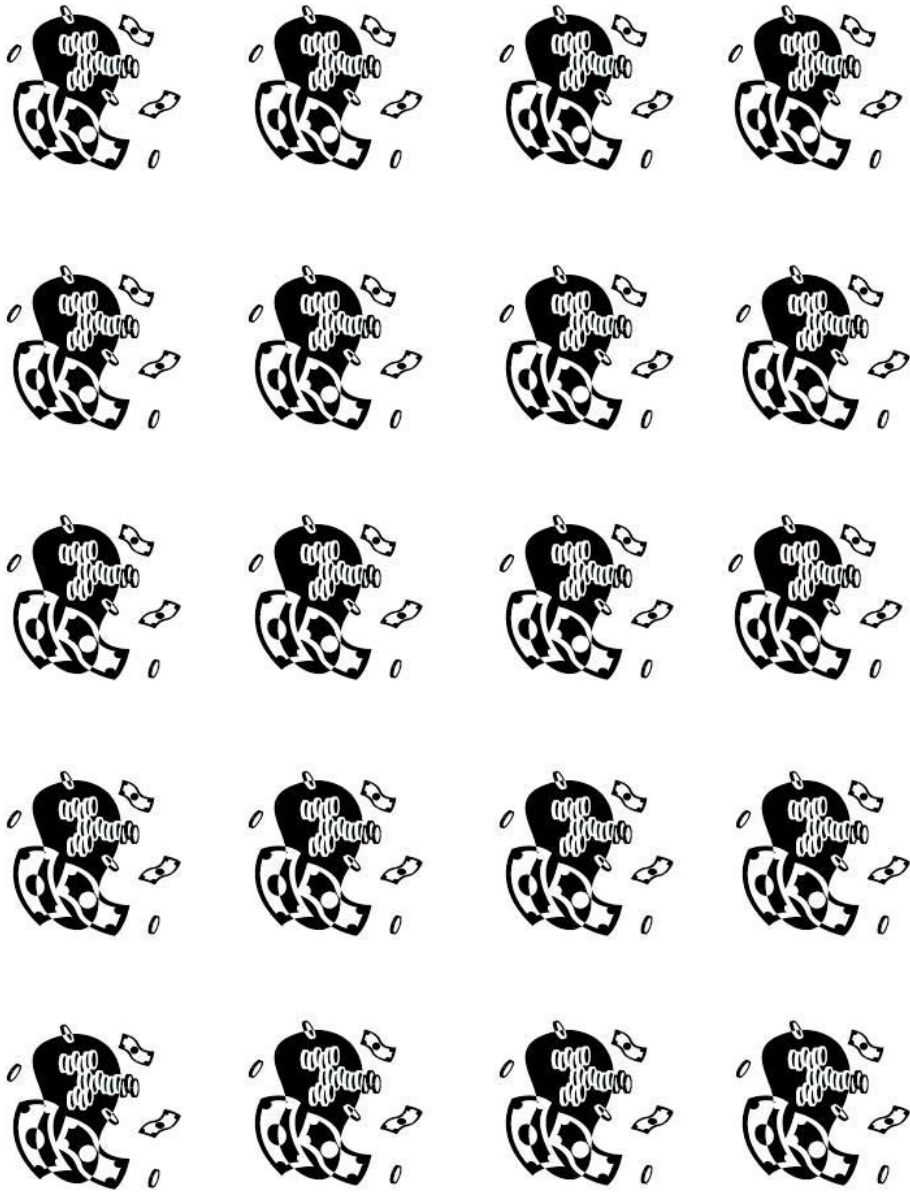
RUBBER

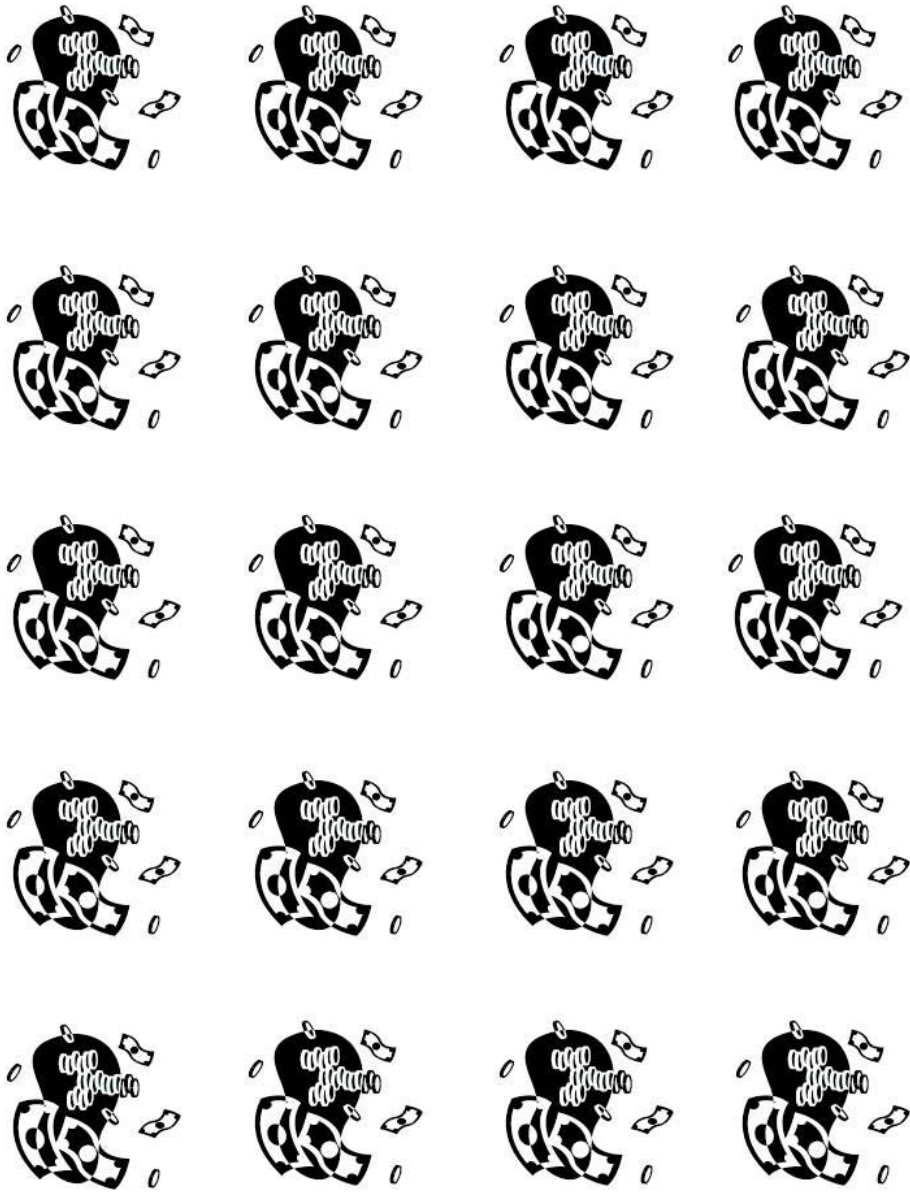


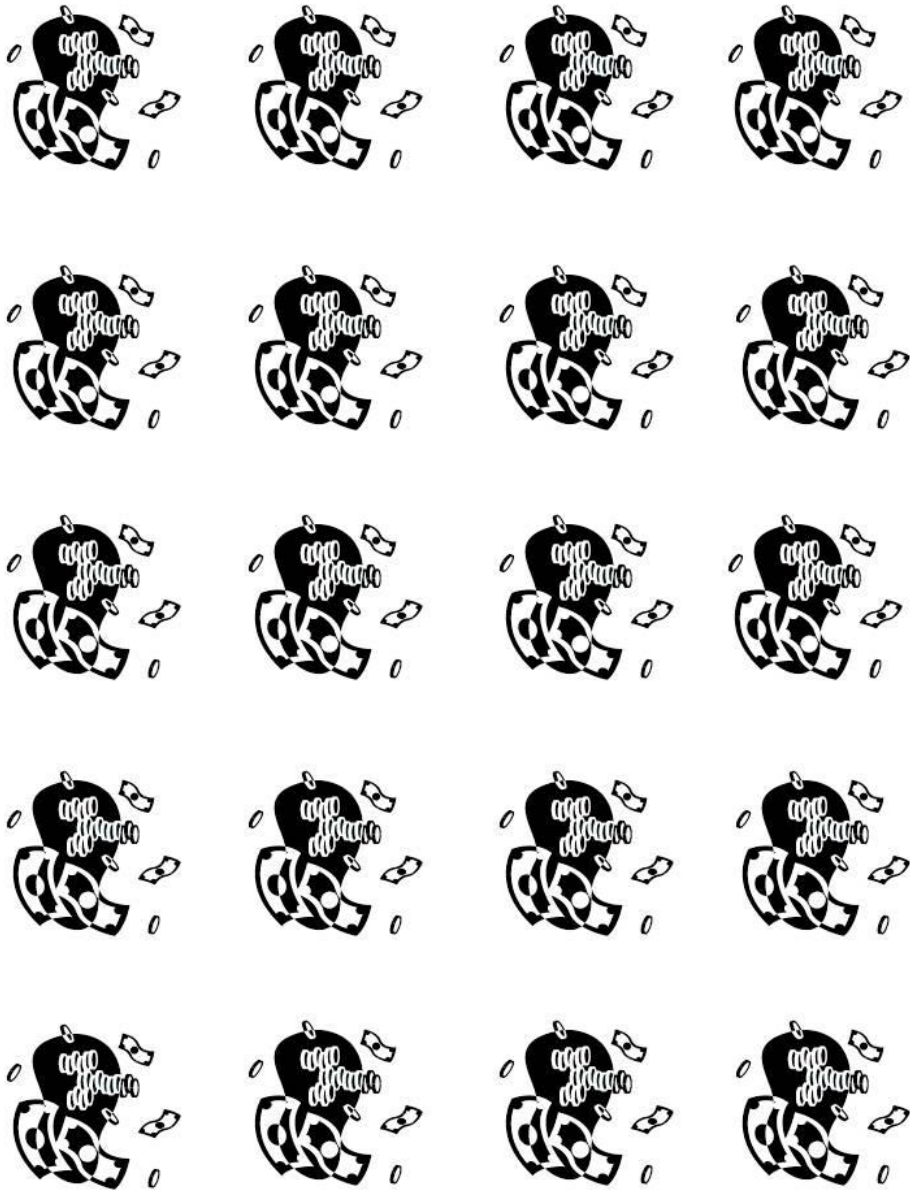
OIL

Coin Cards

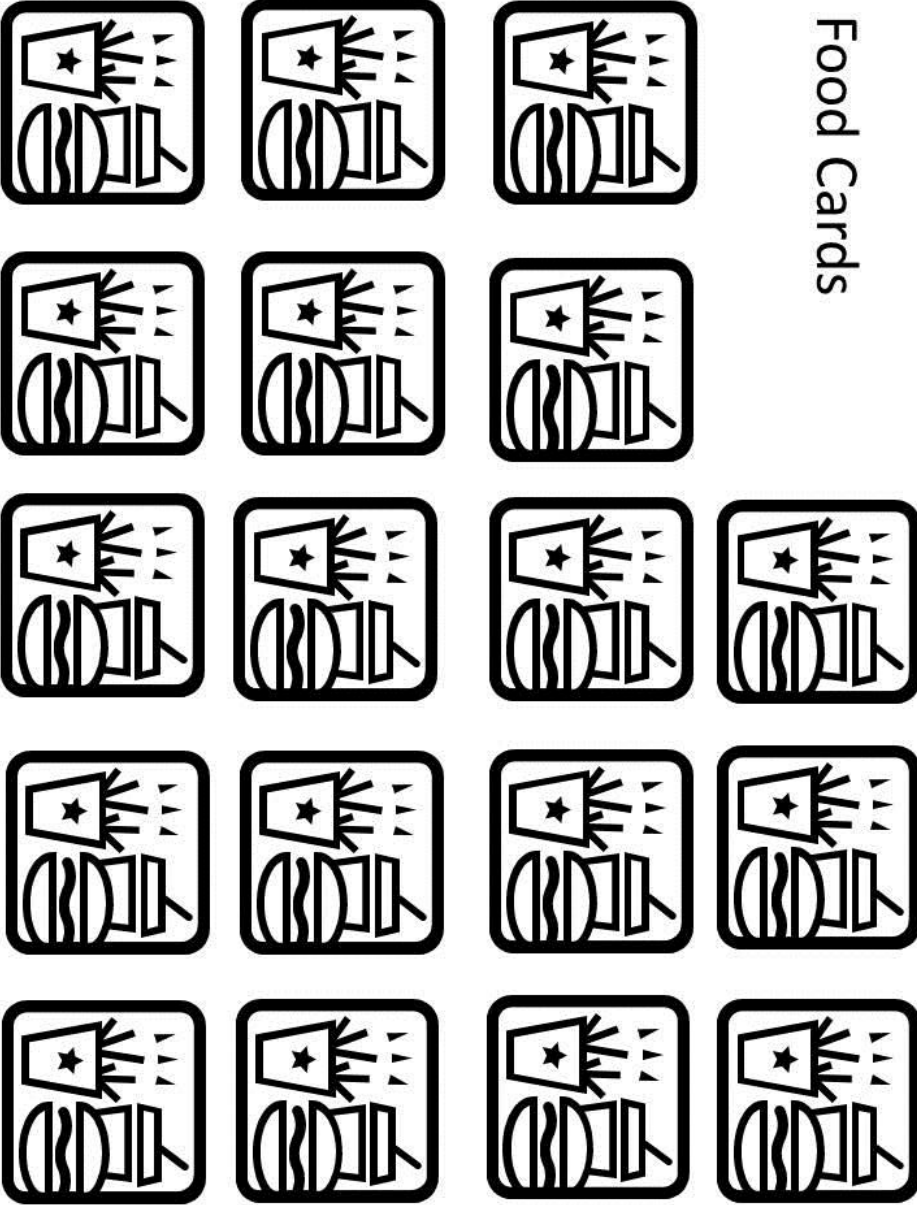


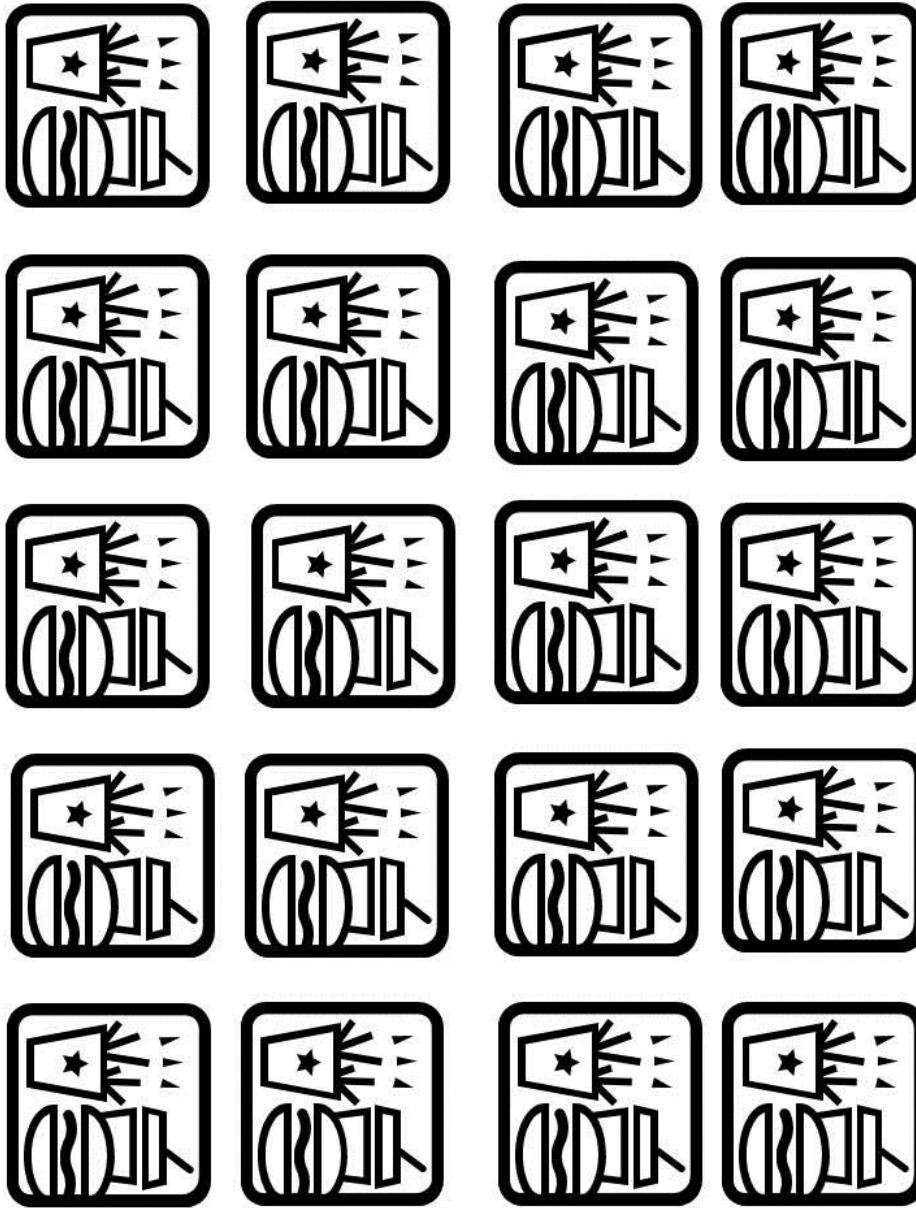


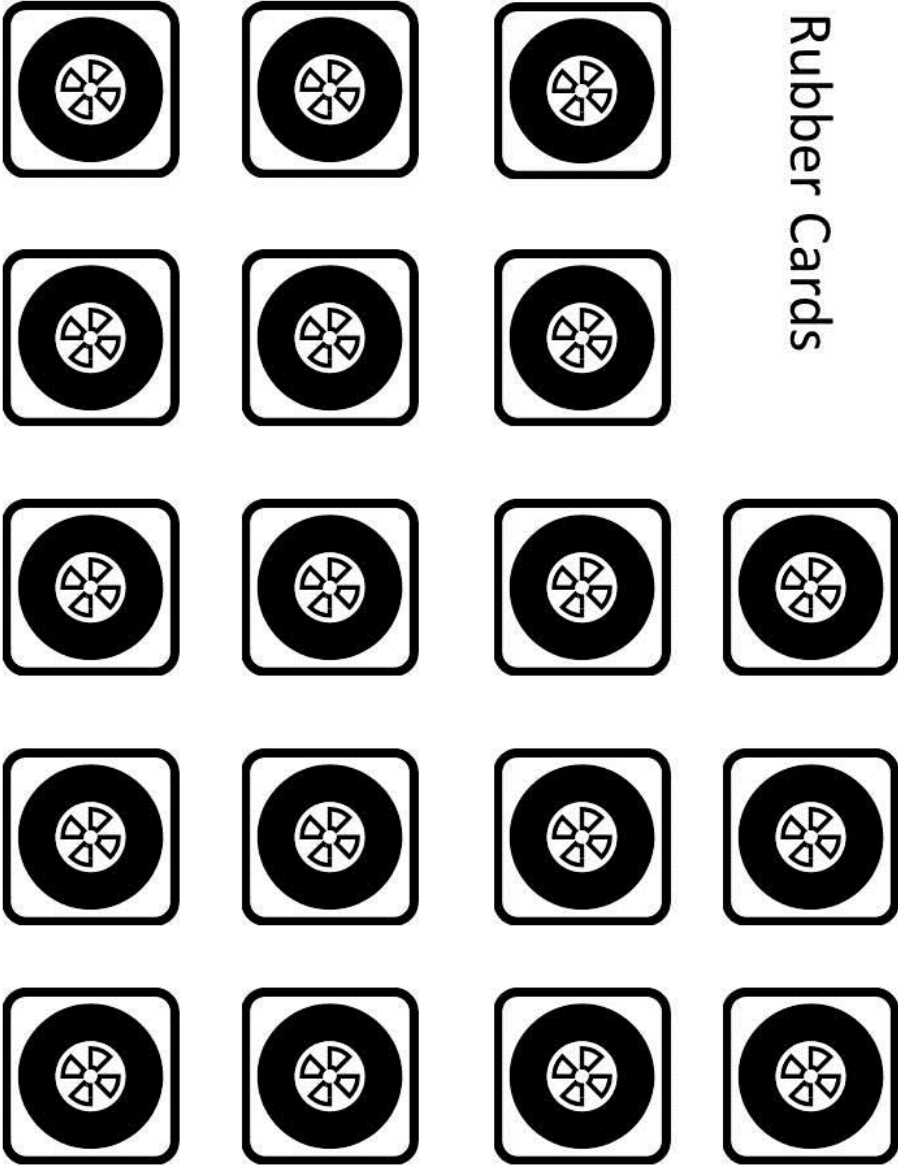




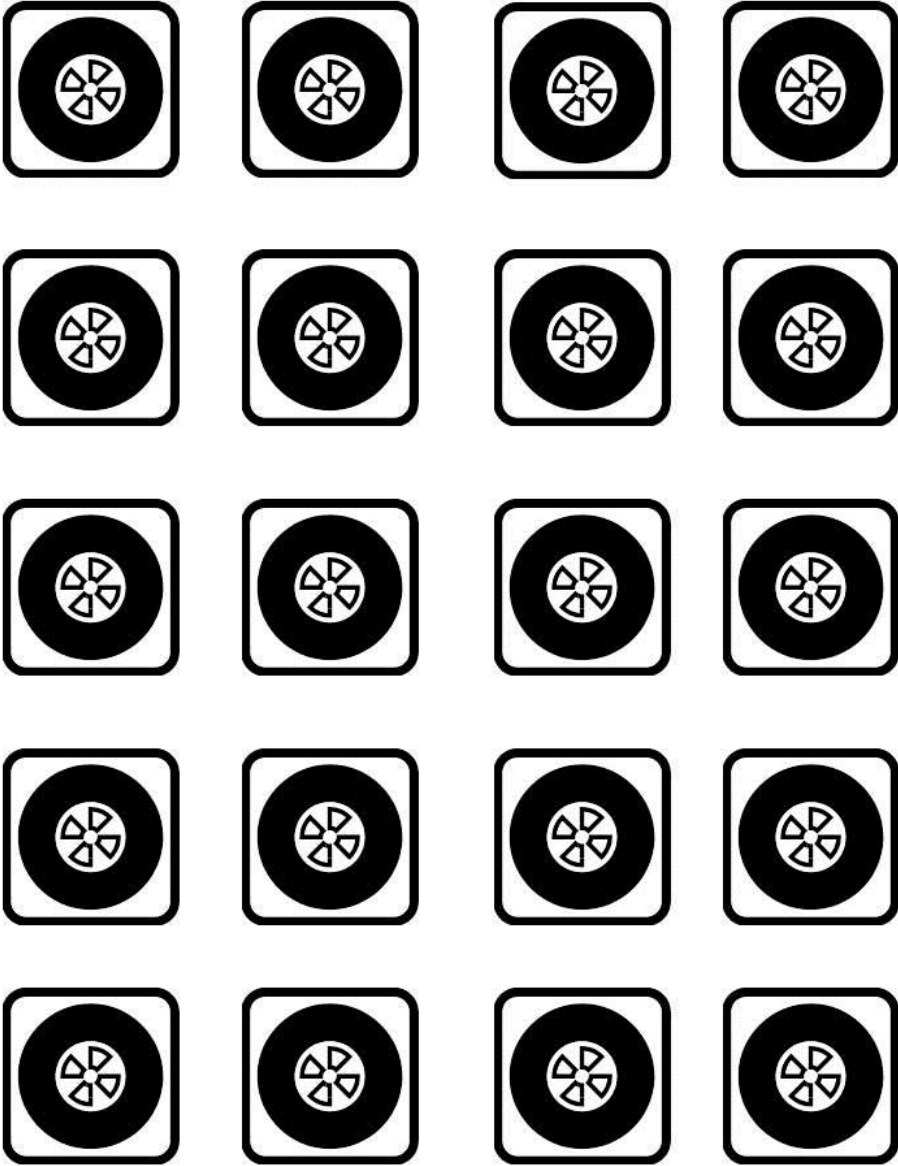
Food Cards

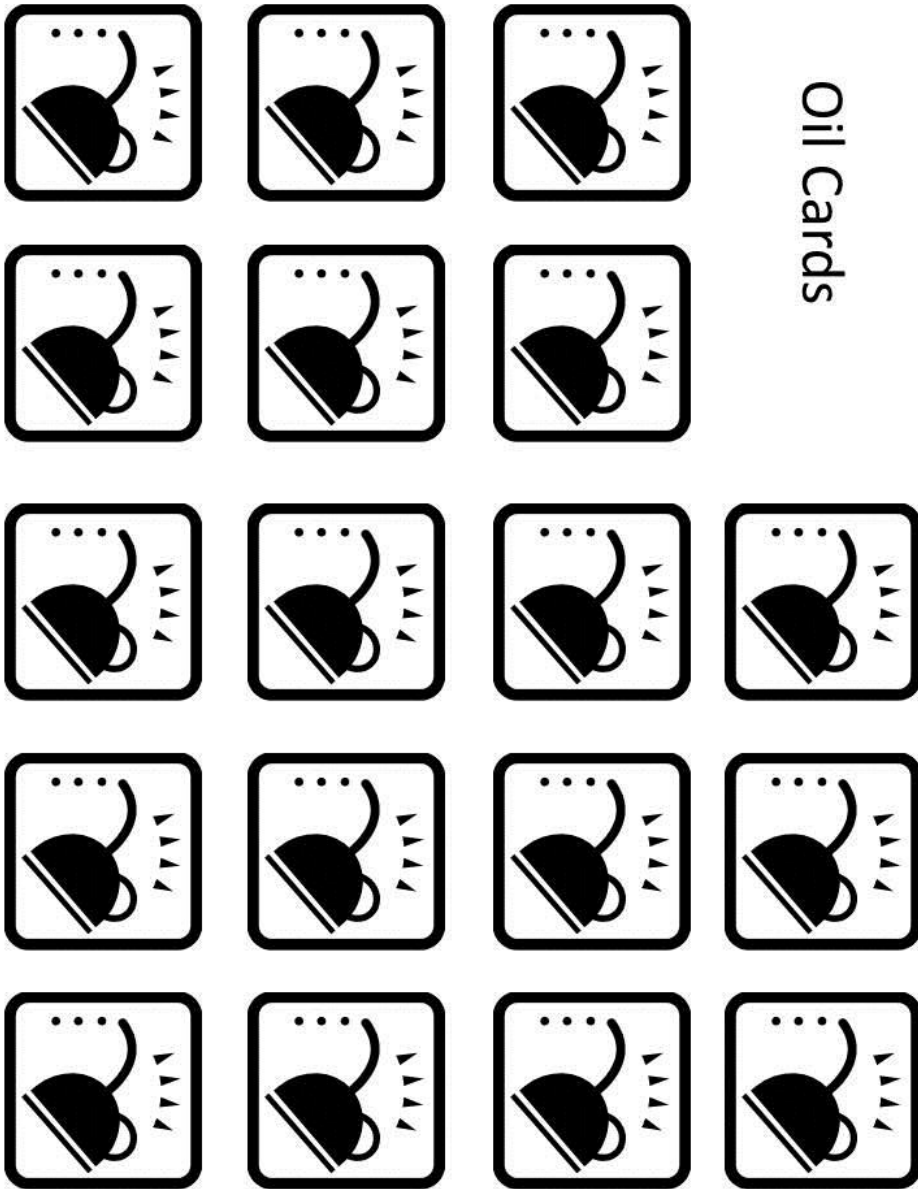




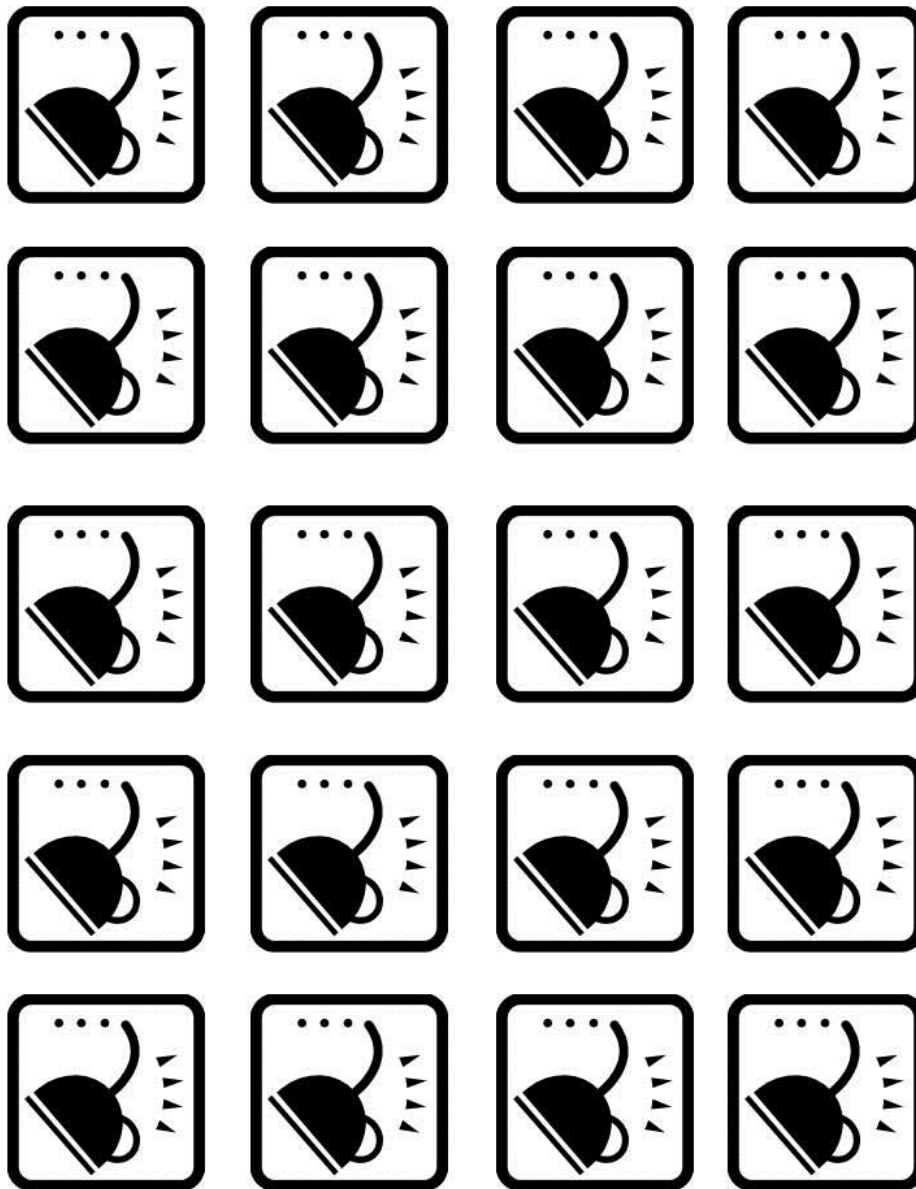


Rubber Cards

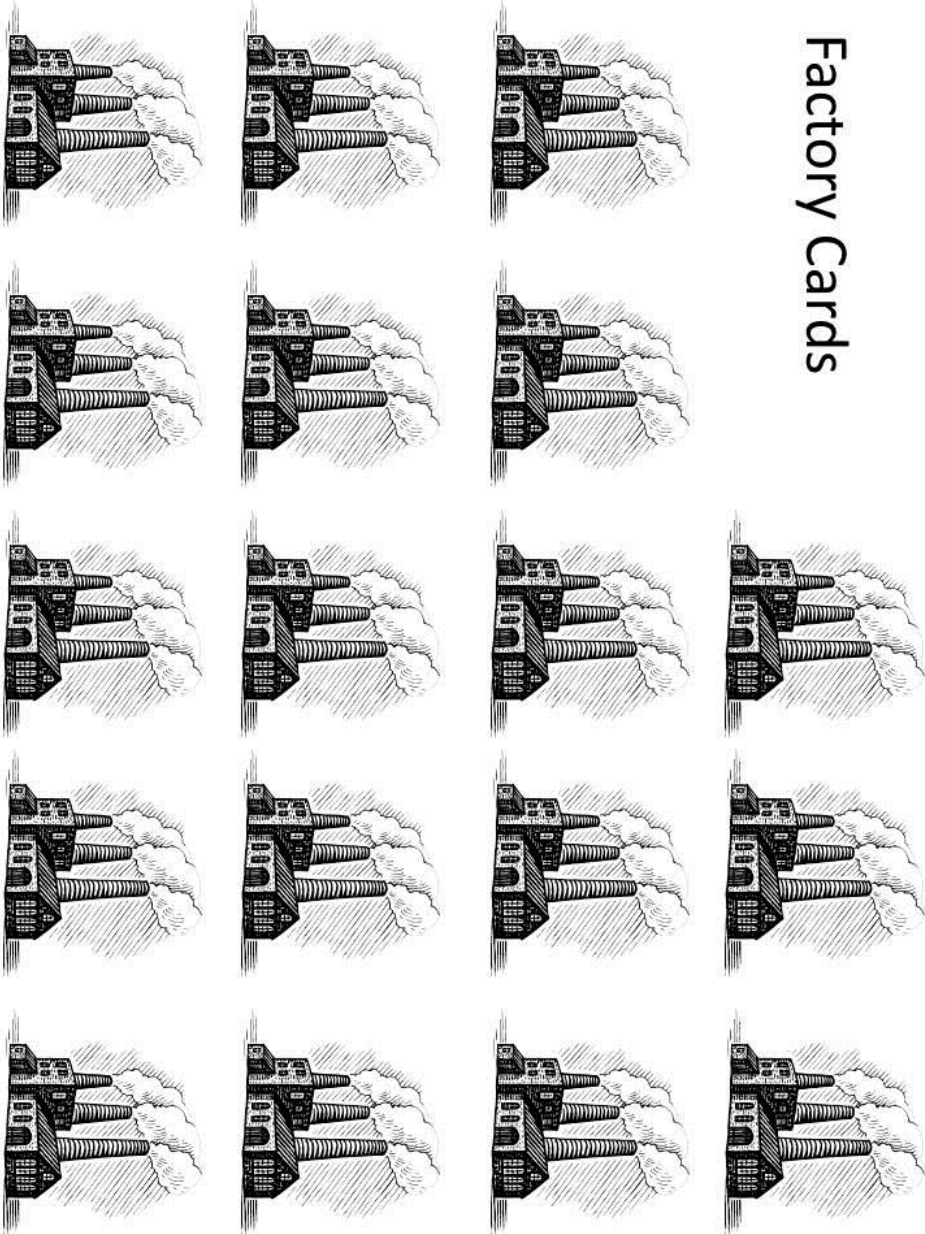


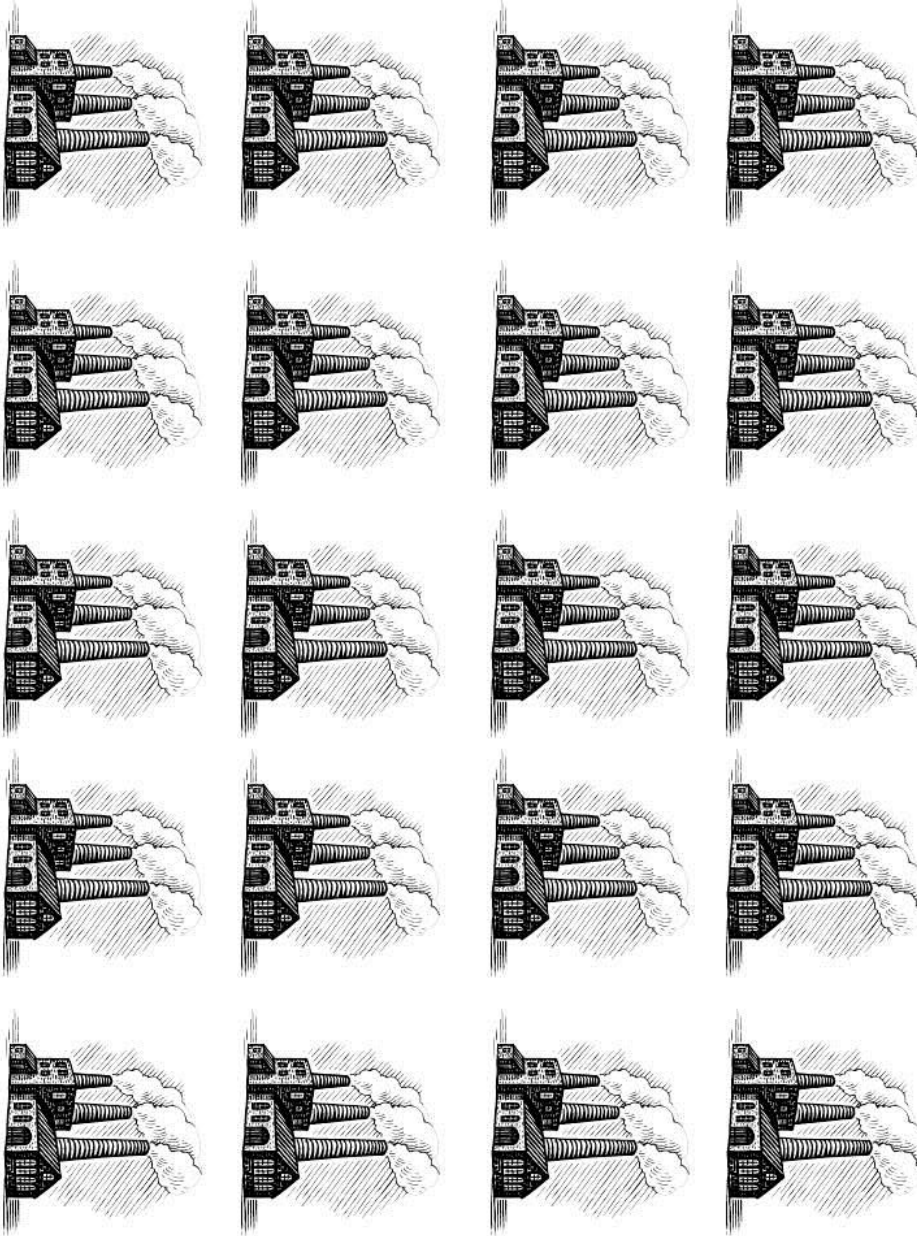


Oil Cards

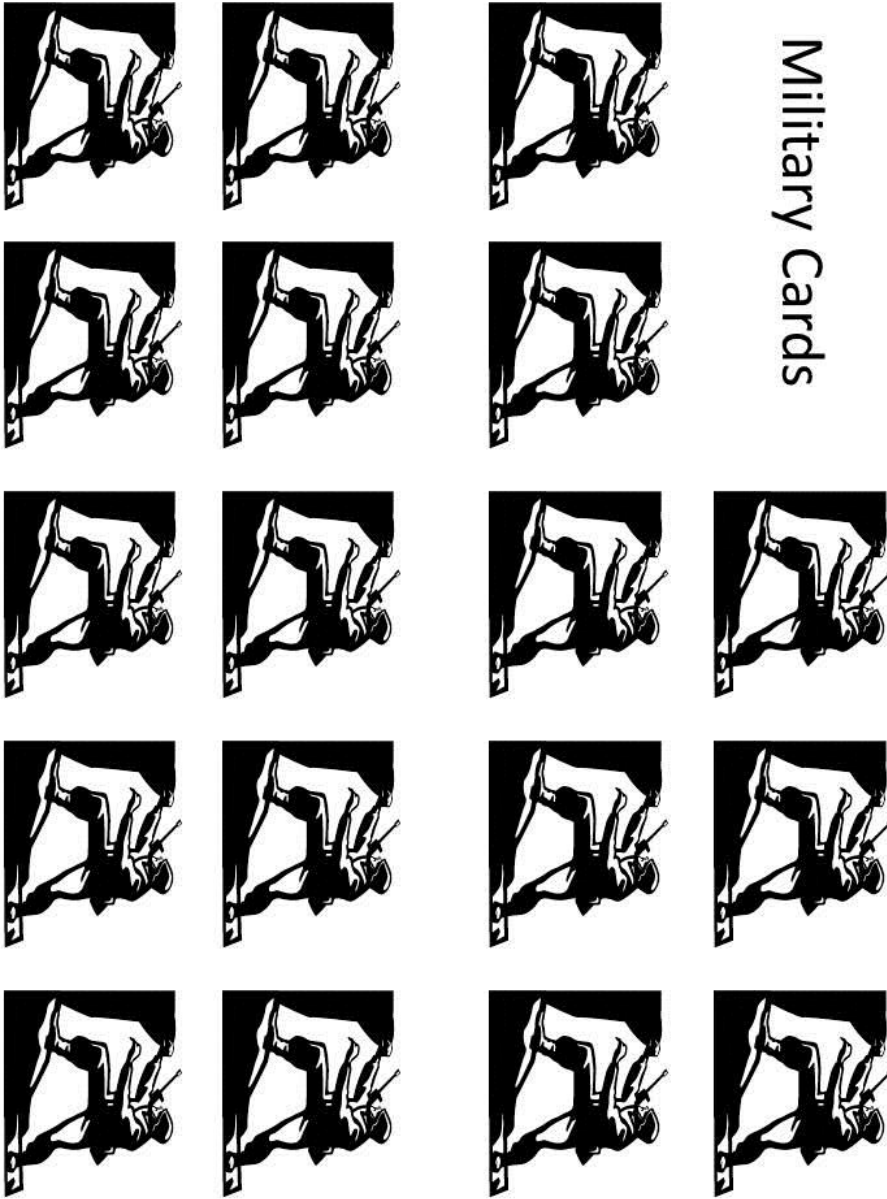


Factory Cards

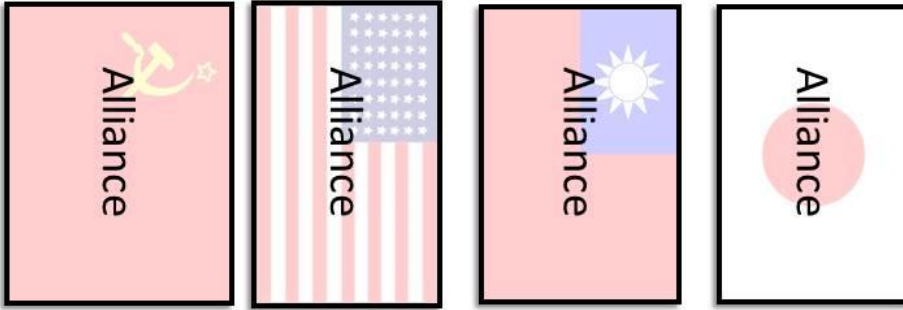
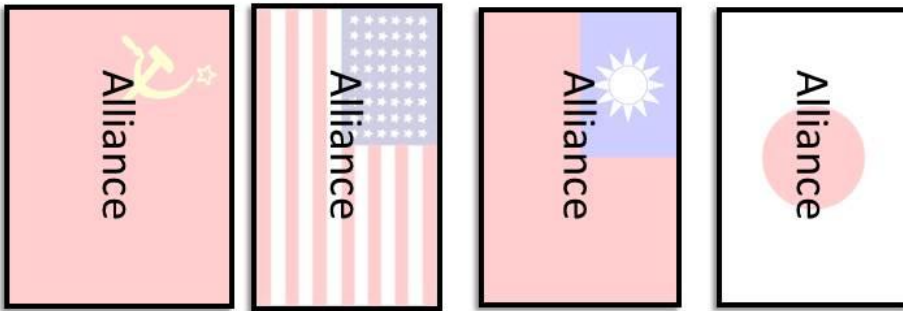
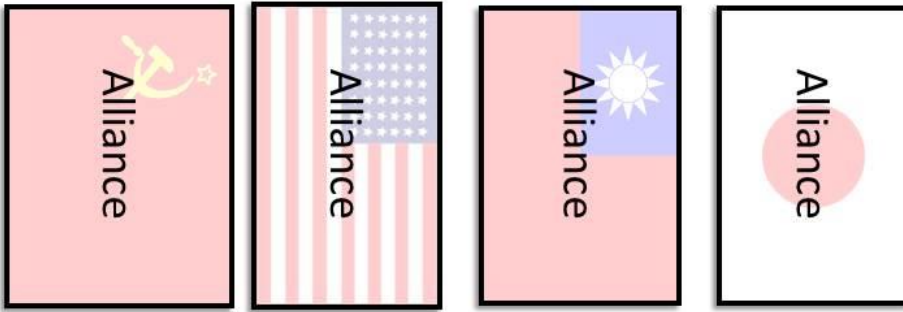


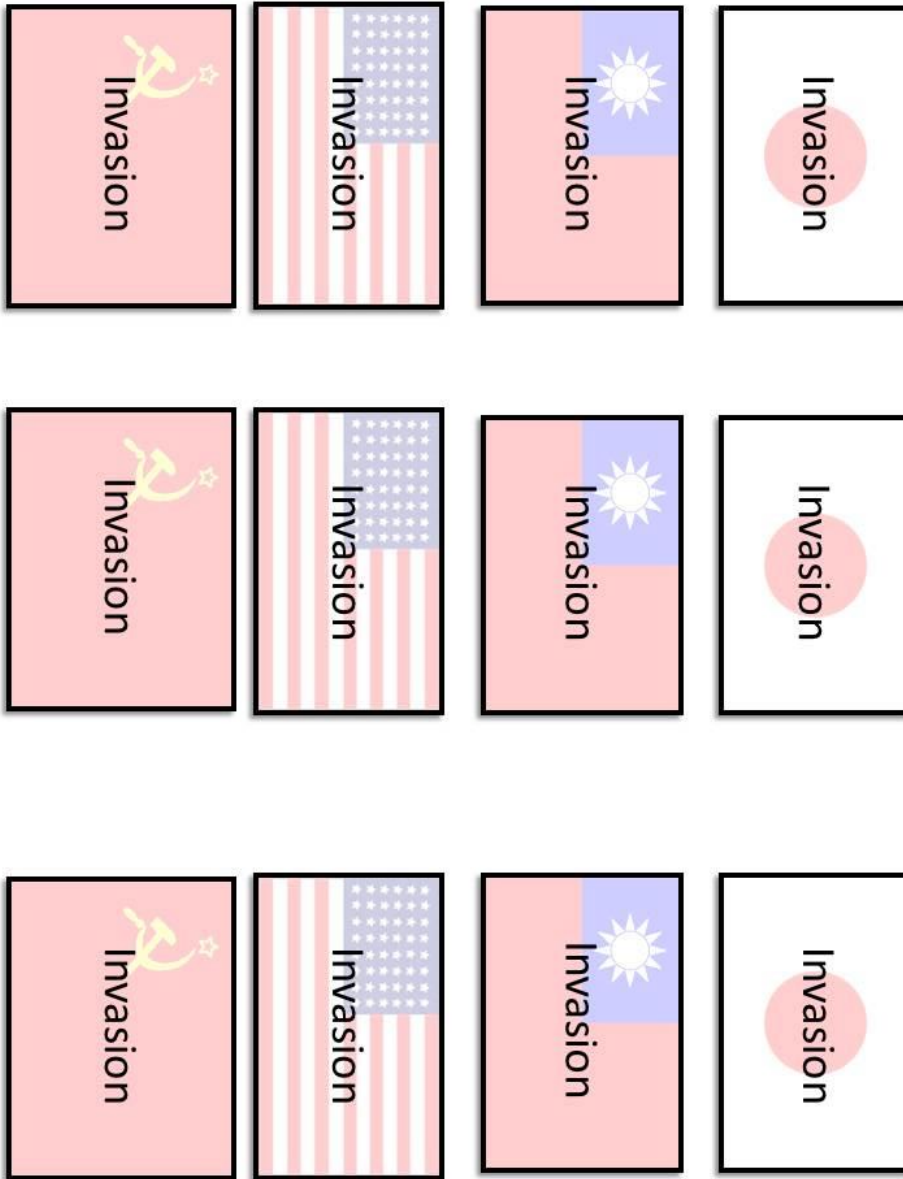


Military Cards









Map of Japanese Territory Before 1941



Creating “Synthetic Rubber”



What you need:

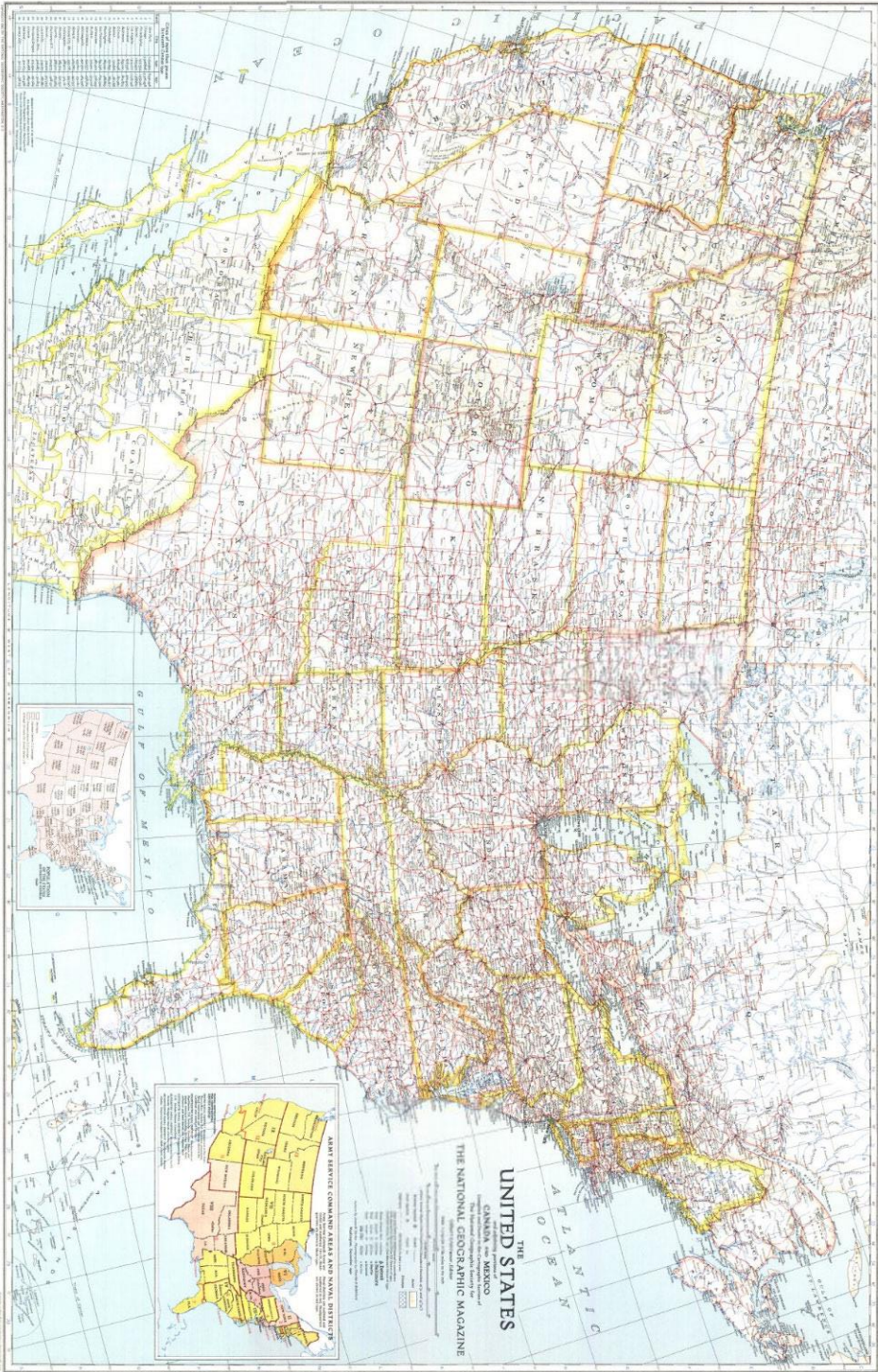
- Liquid starch
- Food Coloring (optional)
- A ruler
- Popsicle stick or strong stirrer
- White glue
- 2 small plastic or paper cups
- A marking pen
- Plastic sandwich bag

The recipe for this version of gooey synthetic rubber is one part liquid starch and two parts white glue. You only want to make as much as you can easily hold in your hand.

Directions:

1. On your first cup, draw a line one inch from the bottom of the cup. Carefully pour in white glue up to that line.
2. On your second cup, draw a line $\frac{1}{2}$ inch from the bottom. Carefully pour liquid starch up to that line.
3. Choose the color you want your gooey rubber to be. Drop one drop of food coloring on top of your glue. (Food coloring can stain clothing, so be careful.) Slowly pour the liquid starch into your glue cup.
4. With your stirrer, carefully begin to mix your rubber together. As the glue and starch mix together, you can stir more vigorously for about 30 seconds.
5. The rubber will collect on your stirrer. Remove the stirrer from the cup and scrape the mixture into your hand. Place the stirrer back in the cup.
6. Begin to work the rubber together between your hands. It will feel very gooey and sticky. Work the mixture for at least two minutes. If the rubber continues to be very sticky, add a dollop more of liquid starch directly to the mixture in your hand.
7. Once your rubber has the right consistency (pliable, but not too wet), place it in a plastic bag. Keep the putty in the bag when you are not playing with it or it will dry out.
8. Throw away your cups and stirrer. Wash your hands. Clean up any mess around your work area.

Map of the United States 1940



Gallery Walk: Center Instructional Sheets

Art Center Instructions

- Examine the painting.
- Each student should tell their group what they notice in the painting.
- As a group answer the following questions (these do not have to be written down):
 1. What is on fire?
 2. What are the individuals in the painting doing?
 3. What ships are displayed in the painting?
 4. What story is the painting depicting?

Audio Center Instructions

- On a blank sheet of paper write “Audio Center” and your name.
- Facts: This recording is of President Franklin Roosevelt on December 7, 1941. The recording was made in Washington, D.C. at the Capitol.
- Begin the audio recording.
- Answer the following questions on your paper:
 1. What is the tone or mood of this recording?
 2. List 3 things in this recording that you think are important.
 3. Who is the audience of this recording?

Document Center Instructions

- On a blank sheet of paper write “Document Center” and your name.
- Pick a document to read. Each student should have a different document.
- After reading the document answer the following questions on your paper:
 - Who is the author of the document? Name, Job, Male/Female, Ethnicity.
 - What type of document is this?
 - What historical facts does this document give?
 - Write down opinions that are stated by the author.
 - Did the author have any reasoned judgments? If so what?

Map Center Instructions

- On a blank sheet of paper write “Map Center” and your name.
- Each student will conduct their own plan to bomb the enemy’s harbor.
- Each student receives 25 bombs.
 - Battleships: 4 bombs damage the ship, 8 bombs destroy the ship.
 - All other vessels: 2 bombs damage the ship, 5 bombs destroy the ship.
 - Buildings: 5 bombs damage the buildings, 10 bombs destroy the buildings.
 - Oil/Fuel: 1 bomb to damage the tank, 15 bombs to destroy the tank.
- Choose your targets and write them down on your paper.
- Each student should score their actions.
 - Each damaged structure receives 1 point.
 - Each destroyed structure receives 5 points.
 - All battleships destroyed receives 50 points.
 - All oil/fuel tanks destroyed receives 100 points.
 - All buildings at Hickman Field destroyed receives 100 points.

“Beaching Nevada” by Bill Garrison



December 7, 1941.

PROPOSED MESSAGE TO THE CONGRESS

Yesterday, December 7, 1941, a date which will live in ~~world history~~ ^{infamy}
 the United States of America was ~~unprovokedly~~ ^{suddenly} and deliberately attacked
 by naval and air forces of the Empire of Japan, ~~with out warning~~.

The United States was at the moment at peace with that nation and was
~~continuing the~~ ^{still in} conversation with its Government and its Emperor looking
 toward the maintenance of peace in the Pacific. Indeed, one hour after
 Japanese air squadrons had commenced bombing in ~~the Philippines~~ ^{Dahu}

the Japanese Ambassador to the United States and his colleague delivered
 to the Secretary of State a formal reply to a ~~former~~ ^{recent American} message, ~~from the~~
~~Secretary~~ ^{While}. This reply ~~contained a statement~~ ^{stated} that diplomatic negotiations
 must be considered at an end, ~~but~~ ^{it} contained no threat ~~and~~ ^{or} hint of ~~an~~ ^{war or}
 armed attack.

It will be recorded that the distance ~~of Hawaii, and especially~~ ^{was} of
 Hawaii from Japan makes it obvious that the ~~attack~~ ^{was} deliberately
 planned many days ago. ^{or 1000 weeks} During the intervening time the Japanese Govern-
 ment has deliberately sought to deceive the United States by false
 statements and expressions of hope for continued peace.

at the solicitation of Japan
 to continue to assist

The attack ~~yesterday~~ ^{the Hawaiian Islands} on ~~Manila and on the Island of Oahu~~ ^{has}

caused severe damage to American naval and military forces. Very many American lives have been lost. In addition American ~~ships~~ ships have been torpedoed on the high seas between San Francisco and Honolulu.

Yesterday the Japanese Government also launched an attack against Malaya.

~~It~~ ^{of} Last night Japanese forces attacked ~~Manila~~ ^{The Philippine Islands}. Japan has, therefore, undertaken a "surprise offensive extending

throughout the Pacific area. The facts of yesterday speak for themselves. The people of the United States have already formed their opinions and well understand the implications ~~of these attacks~~ ^{of these attacks} ~~on~~ ^{to} the safety of our nation.

As Commander-in-Chief of the Army and Navy I have, ~~of course,~~ directed that all measures be taken for our defense.

Long will we remember the character of the onslaught against us.

A No matter how long it may take us to overcome this pernicatated invasion the American people will in their righteous might win through to absolute victory.

I speak the will of the Congress and of the people ~~of this~~
~~country~~ when I assert that we will not only defend ourselves to
the uttermost but will see to it that this form of treachery shall
never endanger us again. Hostilities exist. There is no mincing
the fact that our people, our territory and our interests are in
grave danger.

I, therefore, ask that the Congress declare that since the
unprovoked and dastardly attack by Japan on Sunday, December
seventh, a state of war ^{has} ^{ex} ^{ist} between the United States and the
Japanese Empire.

*Our people in
full confidence in our might*

Attack At Pearl Harbor, 1941

The Japanese View

The Japanese attack fleet left its home waters on November 26 steaming a circuitous route towards Pearl Harbor. Fleet Commander, Vice Admiral Nagumo, received his final orders on December 1 and on the morning of December 7 the battle group was in position 275 miles north of Hawaii. At 6:00 AM the first elements of the air attack consisting of fighter aircraft, torpedo bombers, high-level bombers and dive-bombers were aloft and assembling in the pre-dawn gloom.

"Suprise Attack Successful"

Commander Mitsuo Fuchida led the first wave of the air attack and published his recollections in 1951. These were later published in English in 1955. We join his story as he approaches the Hawaiian coast:

"One hour and forty minutes after leaving the carriers I knew that we should be nearing our goal. Small openings in the thick cloud cover afforded occasional glimpses of the ocean, as I strained my eyes for the first sight of land. Suddenly a long white line of breaking surf appeared directly beneath my plane. It was the northern shore of Oahu.

Veering right toward the west coast of the island, we could see that the sky over Pearl Harbor was clear. Presently the harbor itself became visible across the central Oahu plain, a film of morning mist hovering over it. I peered intently through my binoculars at the ships riding peacefully at anchor. One by one I counted them. Yes, the battleships were there all right, eight of them! But our last lingering hope of finding any carriers present was now gone. Not one was to be seen.

It was 0749 when I ordered my radioman to send the command, 'Attack!' He immediately began tapping out the pre-arranged code signal: 'TO, TO, TO...'

Leading the whole group, Lieutenant Commander Murata's torpedo bombers headed downward to launch their torpedoes, while Lieutenant Commander Itayay's fighters raced forward to sweep enemy fighters from the air. Takahashi's dive-bomber group had climbed for altitude and was out of sight. My bombers, meanwhile, made a circuit toward Barbers Point to keep pace with the attack schedule. No enemy fighters were in the air, nor

After the war, Mitsuo Fuchida converted to Christianity and

were there any gun flashes from the ground.

The effectiveness of our attack was now certain, and a message, 'Surprise attack successful!' was accordingly sent to *Akagi* [Flagship of the Japanese attack fleet] at 0753. The message was received by the carrier and duly relayed to the homeland, ...

The attack was opened with the first bomb falling on Wheeler Field, followed shortly by dive-bombing attacks upon Hickam Field and the bases at Ford Island. Fearful that smoke from these attacks might obscure his targets, Lieutenant Commander Murata cut short his group's approach toward the battleships anchored east of Ford Island and released torpedoes. A series of white waterspouts soon rose in the harbor.

Lieutenant Commander Itaya's fighters, meanwhile, had full command of the air over Pearl Harbor. About four enemy fighters which took off were promptly shot down. By 0800 there were no enemy planes in the air, and our fighters began strafing the airfields.

My level-bombing group had entered on its bombing run toward the battleships moored to the east of Ford Island. On reaching an altitude of 3,000 meters, I had the sighting bomber take position in front of my plane.

As we closed in, enemy antiaircraft fire began to concentrate on us. Dark gray puffs burst all around. Most of them came from ships' batteries, but land batteries were also active. Suddenly my plane bounced as if struck by a club. When I looked back to see what had happened, the radioman said: 'The fuselage is holed and the rudder wire damaged.' We were fortunate that the plane was still under control, for it was imperative to fly a steady course as we approached the target. Now it was nearly time for 'Ready to release,' and I concentrated my attention on the lead plane to note the instant his bomb was dropped. Suddenly a cloud came between the bombsight and the target, and just as I was thinking that we had already overshot, the lead plane banked slightly and turned right toward Honolulu. We had missed the release point because of the cloud and would have to try again.

While my group circled for another attempt, others made their runs, some trying as many as three before succeeding. We were about to begin our second bombing run when there was a colossal explosion in battleship row. A huge column of dark red smoke rose to 1000 meters. It must have been the explosion of a ship's powder magazine. [This was the Battleship *Arizona*] The shock wave was felt even in my plane, several miles away from the harbor.

We began our run and met with fierce antiaircraft concentrations. This time the lead bomber was successful, and the other planes of the group followed suit promptly upon seeing the leader's

lived in the U.S. for a time. He died in 1976.

bombs fall. I immediately lay flat on the cockpit floor and slid open a peephole cover in order to observe the fall of the bombs. I watched four bombs plummet toward the earth. The target - two battleships moored side by side - lay ahead. The bombs became smaller and smaller and finally disappeared. I held my breath until two tiny puffs of smoke flashed suddenly on the ship to the left, and I shouted, 'Two hits!'

When an armor-piercing bomb with a time fuse hits the target, the result is almost unnoticeable from a great altitude. On the other hand, those which miss are quite obvious because they leave concentric waves to ripple out from the point of contact, and I saw two of these below. I presumed that it was battleship *Maryland* we had hit.'

As the bombers completed their runs they headed north to return to the carriers. Pearl Harbor and the air bases had been pretty well wrecked by the fierce strafings and bombings. The imposing naval array of an hour before was gone. Antiaircraft fire had become greatly intensified, but in my continued observations I saw no enemy fighter planes. Our command of the air was unchallenged."

As the first wave of the attack made its way back to its carriers, Commander Fuchida remained over the target in order to assess damage and to observe the second wave attack. He returned to his carrier after the second wave successfully completed its mission.

References:

Fuchida, Mitsuo and Masatake Okumiya, *Midway, the Battle that Doomed Japan* (1955); Lord, Walter, *Day of Infamy* (1957).

How To Cite This Article:
"Attack At Pearl Harbor, 1941, - the Japanese View" EyeWitness to History, www.eyewitnesstohistory.com (2001).

MILLER, Jim Dick - USN

Jim Dick Miller
ENS on 7 Dec 1941

b. 2 Jul 1917 - d. 19 Jan 2000

Birth Place: Van Buren, Arkansas - Death Place: Coronado, California

Statement of Ensign Jim D. Miller:

From: USS Arizona Action Report - 13 December 1941



Jim Dick Miller

I had gotten up at about 0745, and had started to dress when a short air raid alarm sounded. The Arizona's air raid alarm consisted of the sounding of three blasts of a warning howler over the general announcing system. What I heard was only one short blast as though some one had accidentally touched the switch. I felt one explosion near the ship which seemed to me like a no-load shot on No. 2 Catapult. However it was followed by two more explosions, and I decided it was not a no-load shot, but of course had no idea just what the explosions were. Then the word was passed to set Condition ZED below the third deck. I slipped on a uniform and started to go down to the third deck to check up on the water tight doors and hatches. I still did not realize that there was actually an air raid. As soon as I came up to the second deck from the lower wardroom, I met a gunner's mate who said he was trying to find the magazine keys. I went into the Captain's cabin to call him and get the keys if possible. The Captain was not there. I then looked in the Gunnery Officer's Stateroom to see if I could get the keys from him, but he was not in either. By that time the gunner's mate had left me, and I went on down to the third deck.

General Quarters was sounded. I went into Turret III through the lower handling room to the booth, took the turret officer's station and manned the 2JE phones to Plot. Communications to Plot were OK. However, Turret III was the only turret I heard on the line. Shortly after I had reached the booth the turret was shaken by a bomb explosion of not very great intensity. After a minute or two a much more terrific explosion shook the turret. Smoke poured in through the overhang hatch, and I could see nothing but reddish flame outside. The 2JE phones went dead, all power went off the turret, and all lights went out. From all reports that I could get from inside the turret, the turret was not even half manned. I believe that it was at about this time that a bomb hit on the starboard side of the quarterdeck next to Turret IV, penetrated down to the third deck and exploded. From later examination I found that this bomb had glanced off the side of Turret IV and then had penetrated the decks. My lower handling room crew was shaken up, and water began coming into the lower handling room. Explosion gases were filling the turret from the overhang hatch and from openings into the lower room. I stepped outside the turret to see what the condition was on the quarterdeck. There were several small fires on the deck and awnings. I noticed several badly burned men lying on deck and saw Ensign Anderson, who had been Junior Officer of the Deck, lying on deck with a bad cut on his head.

I figured that with the turret not completely manned, with all power off, and with the turret full of suffocating gas we could do nothing toward repelling the attack. I sent the word into the turret for all hands to come outside and fight fires. All hands came out. Ensign Field and Ensign Flanagan were at their battle stations in the lower handling room. They were the last to come out of the turret and reported to me that everybody had gotten out and that all hatches in the turret had been closed behind them. I found all fire hoses already connected to plugs on the quarterdeck, but there was no water on the

fire mains. An attempt to call the center engine room on the ship's service telephones was unsuccessful because the ship's service telephones were out of commission. It was also impossible to reach the engine room because of fire and smoke and gas. The First Lieutenant was on the quarterdeck and in charge. About all we could do was to try to put out fires and drag some of the wounded men under the protection of the overhangs of the turrets. We put out several of the small fires ? papers and awnings on deck ? with buckets of water. Fuel oil was coming up from some place on the port side and was catching on fire. The ship was down by the bow, and the quarterdeck began to become awash starting at the break of the deck at frame 88. The main and forecastle decks forward of frame 88 were ablaze. Oil on top of the water was feeding the fire. At one time the First Lieutenant asked me if I had seen the Captain or the Admiral. I told him I had been in the Captain's cabin and had not seen him. He wanted me to go down into the cabin and check again. White, T.A., BM2c, and myself went down into the cabin and looked around, felt in the Captain's bed, but could find no trace of him. However, it was dark and smoke was bad, and it is possible that we could have missed him. Nevertheless, I am sure he was not there. We did not go into the Admiral's cabin. We came back up to the quarterdeck.

Our boats, which were tied up to the quays and booms, were manned by some of the men who had swum to them from the side of the ship. One of the first boats which came alongside was a motor launch from the Solace with a medical rescue party. This boat took all our stretcher cases off the quarterdeck. Of these men the only ones that I recognized were Ensign Schubert, Ensign Anderson, Stephenson, H.D. Sea1/c, and a ship's cook, name unknown. Most of the men who were burned were unrecognizable. Shortly after the stretcher cases had been removed to the Solace motor launch, the First Lieutenant ordered abandon ship. All of our guns had ceased firing, the main, forecastle, and boat decks were burning; smoke obstructed a view of the foremast and the forward part of the ship. All officers quarters aft were flooded and the quarterdeck forward was awash. Our life rafts were cut down and put into the water [and] all hands ordered to go over the side. Men found the rafts difficult to paddle, and most of them crawled aboard motor launches or started swimming toward Ford Island. The First Lieutenant, Ensign Field, and about half a dozen men and myself were the last to leave in one of our fifty-foot motor launches. We picked up quite a few more men who were swimming toward the island. We made the officers' landing at Ford Island, and all hands went ashore except the boat crew, Ensign Field, and the First Lieutenant. The latter said that he was going back out and try to pick up any more men he could find. I was told to remain in charge of the men on Ford Island. We went to the air raid shelter at the northeastern corner of the island. All injured men were sent to the air station hospital as fast as possible. The rest remained in the air raid shelter until the raid was clear.

Citation:

The Navy Cross is presented to Jim Dick Miller, Lieutenant (j.g.), U.S. Navy, for exceptional courage, presence of mind, and devotion to duty and disregard for his personal safety while serving on board the U.S.S. ARIZONA (BB-39) during the Japanese attack on the United States Pacific Fleet in Pearl Harbor, Territory of Hawaii, 7 December 1941. Upon Turret III of the U.S.S. ARIZONA becoming untenable due to gas from a bomb hit on the quarterdeck penetrating several decks and starting a fire, Lieutenant (j.g.) Miller ordered his turret crew out to fight fires. Almost immediately, a tremendous explosion forward made the ship appear to rise out of the water, shudder and settle rapidly down by the bow. The whole forward part of the ship was enveloped in flames spreading rapidly; wounded and burned men poured onto the quarterdeck. Despite these conditions plus severe enemy bombing and strafing, Lieutenant (j.g.) Miller assisted in directing firefighting to check them while wounded and burned could be taken from the ship. He supervised their rescue in such an amazingly calm, cool manner and with such excellent judgment, it inspired everyone who saw him and undoubtedly resulted in saving many lives. After the abandon ship order he remained on the quarterdeck assisting in directing abandon ship and rescue of personnel, until satisfied that all personnel who could be, had been saved, after which he left his ship with the last boatload. Furthermore, after leaving his ship, on his own initiative he engineered a motor launch that proceeded to the quays and picked up personnel seeking protection from the severe fires, and rescued many men from the water. The

3/20/13

MILLER, Jim Dick- USN - USS Arizona BB-39 and Pearl Harbor Memorial

conduct of Lieutenant (j.g.) Miller throughout this action reflects great credit upon himself, and was in keeping with the highest traditions of the United States Naval Service.

Born: July 2, 1917 at Van Buren, Arkansas

Home Town: Borger, Texas

Obituary:

Jim Dick Miller

CORONADO, Calif. - Jim Dick Miller, 82, died Wednesday, Jan. 19, 2000.

Services will be at noon Wednesday, Feb. 2 in Graham Memorial Presbyterian Church. Graveside services with full military honors will be at Fort Rosecrans National Cemetery, Point Loma, San Diego. Arrangements are by Pinkham-Mitchell Mortuary in Imperial Beach.

Jim Dick Miller, a retired captain in the Navy, was born in Van Buren, Ark. He moved with his family to Sapulpa, Okla., and then to Borger, Texas, and graduated from Borger High School in 1934. He attended Amarillo Junior College before entering the U.S. Naval Academy in 1935.

He graduated from the Academy in 1939 and was deployed to the USS Arizona, where he was serving when the Japanese attacked Pearl Harbor. He rescued a man from his burning ship and received the Navy Cross for valor during the attack. He conducted wartime patrols in the Pacific on the USS Spearfish. His other wartime honors include the Silver Star and Bronze Star, and he earned the Legion of Merit and the Gold Star during his 30-year career.

Mr. Miller served in the 1946 Arctic expedition and was a submarine commander, including service in Key West, Fla., during the Cuban Missile Crisis. He served on the staff of the Joint Chiefs of Staff and commanded the Gulf Sub-Area, Military Sea Transportation Service in New Orleans. He was the highest-ranking survivor of the Arizona.

Mr. Miller earned his master's degree in math from North Carolina State University and taught at colleges in the San Diego area. He was active in community affairs in Coronado, was a member of Graham Memorial Presbyterian Church and was active with veterans' organizations, including the U.S. Submarine Veterans of World War II.

He married Mary Jane Sullivan in 1943 at Los Angeles. She died in 1997.

Survivors include two sons, William Miller of Wilmington, Del., and James Miller of Manhattan Beach; three sisters, Catherine Spiller and Myra Fowler, both of Amarillo, and Mabel Wade of Lynchburg, Va.; three brothers, Oth Miller and Dee Miller, both of Amarillo, and G. William Miller of Washington, D.C.; and four grandchildren.

The family suggests memorials in lieu of flowers to Graham Memorial Presbyterian Church, 10th Street and C Avenue, Coronado, CA 92118; or the Friends of the Coronado Public Library, 640 Orange Ave., Coronado, CA 92118.

U.S. Veterans Gravesites Information:

Name: Jim Dick Miller

Service Info.: CAPT US NAVY WORLD WAR II, KOREA, VIETNAM

Birth Date: 2 Jul 1917

Death Date: 19 Jan 2000

Service Start Date: 30 May 1939

Interment Date: 2 Feb 2000

Cemetery: Ft. Rosecrans National Cemetery

www.ussarizona.org/stories/uss-arizona-survivor-stories/112-miller-jim-dick-usn?tmpl=component&print=1&page=

3/4



Oral History of the Pearl Harbor Attack, 7 December 1941 Lieutenant Ruth Erickson, NC, USN

Excerpt from Oral History of LT Ruth Erickson, NC (Nurse Corps), USN. LT Erickson was a nurse at Naval Hospital Pearl Harbor during the attack on 7 December 1941.
[Source: Oral history provided courtesy of Historian, Bureau of Medicine and Surgery]

Tropical duty was another segment in my life's adventure! On this same date I reported to the hospital command in which CAPT Reynolds Hayden was the commanding officer. Miss Myrtle Kinsey was the chief of nursing services with a staff of eight nurses. I was also pleased to meet up with Miss Winnie Gibson once again, the operating room supervisor.

We nurses had regular ward assignments and went on duty at 8 a.m. Each had a nice room in the nurses' quarters. We were a bit spoiled; along with iced tea, fresh pineapple was always available.

We were off at noon each day while one nurse covered units until relieved at 3 p.m. In turn, the p.m. nurse was relieved at 10 p.m. The night nurse's hours were 10 p.m. to 8 a.m.

One month I'd have a medical ward and the next month rotated to a surgical ward. Again, I didn't have any operating room duties here. The fleet population was relatively young and healthy. We did have quite an outbreak of "cat [catarrhal] fever" with flu-like symptoms. This was the only pressure period we had until the war started.

And then it all ended rather quickly.

Yes, it did. A big drydock in the area was destined to go right through the area where the nurses' quarters stood. We had vacated the nurses' quarters about 1 week prior to the attack. We lived in temporary quarters directly across the street from the hospital, a one-story building in the shape of an E. The permanent nurses' quarters had been stripped and the shell of the building was to be razed in the next few days.

By now, the nursing staff had been increased to 30 and an appropriate number of doctors and corpsmen had been added. The Pacific Fleet had moved their base of operations from San Diego to Pearl Harbor. With this massive expansion, there went our tropical hours! The

hospital now operated at full capacity.

Were you and your colleagues beginning to feel that war was coming?

No. We didn't know what to think. I had worked the afternoon duty on Saturday, December 6th from 3 p.m. until 10 p.m. with Sunday to be my day off.

Two or three of us were sitting in the dining room Sunday morning having a late breakfast and talking over coffee. Suddenly we heard planes roaring overhead and we said, "The 'fly boys' are really busy at Ford Island this morning." The island was directly across the channel from the hospital. We didn't think too much about it since the reserves were often there for weekend training. We no sooner got those words out when we started to hear noises that were foreign to us.

I leaped out of my chair and dashed to the nearest window in the corridor. Right then there was a plane flying directly over the top of our quarters, a one-story structure. The rising sun under the wing of the plane denoted the enemy. Had I known the pilot, one could almost see his features around his goggles. He was obviously saving his ammunition for the ships. Just down the row, all the ships were sitting there--the [battleships] *California* (BB-44), the *Arizona* (BB-39), the *Oklahoma* (BB-37), and others.

My heart was racing, the telephone was ringing, the chief nurse, Gertrude Arnest, was saying, "Girls, get into your uniforms at once. This is the real thing!"

I was in my room by that time changing into uniform. It was getting dusky, almost like evening. Smoke was rising from burning ships.

I dashed across the street, through a shrapnel shower, got into the lanai and just stood still for a second as were a couple of doctors. I felt like I were frozen to the ground, but it was only a split second. I ran to the orthopedic dressing room but it was locked. A corpsman ran to the OD's [Officer-of-the-Day's] desk for the keys. It seemed like an eternity before he returned and the room was opened. We drew water into every container we could find and set up the instrument boiler. Fortunately, we still had electricity and water. Dr. [CDR Clyde W.] Brunson, the chief of medicine was making sick call when the bombing started. When he was finished, he was to play golf...a phrase never to be uttered again.

The first patient came into our dressing room at 8:25 a.m. with a large opening in his abdomen and bleeding profusely. They started an intravenous and transfusion. I can still see the tremor of Dr. Brunson's hand as he picked up the needle. Everyone was terrified. The patient died within the hour.

Then the burned patients streamed in. The USS *Nevada* (BB-36) had managed some steam and attempted to get out of the channel. They were unable to make it and went aground on Hospital Point right near the hospital. There was heavy oil on the water and the men dived off the ship and swam through these waters to Hospital Point, not too great a distance, but when one is burned... How they ever managed, I'll never know.

The tropical dress at the time was white t-shirts and shorts. The burns began where the pants ended. Bared arms and faces were plentiful.

Personnel retrieved a supply of flit guns from stock. We filled these with tannic acid to spray burned bodies. Then we gave these gravely injured patients sedatives for their intense pain.

Orthopedic patients were eased out of their beds with no time for linen changes as an unending stream of burn patients continued until midafternoon. A doctor, who several days before had renal surgery and was still convalescing, got out of his bed and began to assist the other doctors.

Do you recall the Japanese plane that was shot down and crashed into the tennis court?

Yes, the laboratory was next to the tennis court. The plane sheared off a corner of the laboratory and a number of the laboratory animals, rats and guinea pigs, were destroyed. Dr. Shaver [LTJG John S.], the chief pathologist, was very upset.

About 12 noon the galley personnel came around with sandwiches and cold drinks; we ate on the run. About 2 o'clock the chief nurse was making rounds to check on all the units and arrange relief schedules.

I was relieved around 4 p.m. and went over to the nurses' quarters where everything was intact. I freshened up, had something to eat, and went back on duty at 8 p.m. I was scheduled to report to a surgical unit. By now it was dark and we worked with flashlights. The maintenance people and anyone else who could manage a hammer and nails were putting up black drapes or black paper to seal the crevices against any light that might stream to the outside.

About 10 or 11 o'clock, there were planes overhead. I really hadn't felt frightened until this particular time. My knees were knocking together and the patients were calling, "Nurse, nurse!" The other nurse and I went to them, held their hands a few moments, and then went onto others.

The priest was a very busy man. The noise ended very quickly and the word got around that these were our own planes.

What do you remember when daylight came?

I worked until midnight on that ward and then was directed to go down to the basement level in the main hospital building. Here the dependents--the women and children--the families of the doctors and other staff officers were placed for the night. There were ample blankets and pillows. We lay body by body along the walls of the basement. The children were frightened and the adults tense. It was not a very restful night for anyone.

Everyone was relieved to see daylight. At 6 a.m. I returned to the quarters, showered, had breakfast, and reported to a medical ward. There were more burn cases and I spent a week

there.

On the evening of 17 December, the chief nurse told me I was being ordered to temporary duty and I was to go to the quarters, pack a bag, and be ready to leave at noon. When I asked where I was going, she said she had no idea. The commanding officer ordered her to obtain three nurses and they were to be in uniform. In that era we had no outdoor uniforms. Thus it would be the regular white ward uniforms.

And so in our ward uniforms, capes, blue felt hats, and blue sweaters, Laretta Eno, Catherine Richardson, and I waited for a car and driver to pick us up at the quarters. When he arrived and inquired of our destination, we still had no idea! The OD's desk had our priority orders to go to one of the piers in Honolulu. We were to go aboard the SS [steamship] *President Coolidge* and prepare to receive patients. We calculated supplies for a 10-day period.

We three nurses and a number of corpsmen from the hospital were assigned to the SS *Coolidge*. Eight volunteer nurses from the Queens Hospital in Honolulu were attached to the Army transport at the next pier, USAT [U.S. Army transport] *Scott*, a smaller ship.

The naval hospital brought our supplies the following day, the 18th, and we worked late into the evening. We received our patients from the hospital on the 19th, the *Coolidge* with 125 patients and the *Scott* with 55.

Were these the most critically injured patients?

The command decided that patients who would need more than 3 month's treatment should be transferred. Some were very bad and probably should not have been moved. There were many passengers already aboard the ship, missionaries and countless others who had been picked up in the Orient. Two Navy doctors on the passenger list from the Philippines were placed on temporary duty and they were pleased to be of help.

Catherine Richardson worked 8 a.m. to 4 p.m. I had the 4 p.m. to midnight, and Laretta Eno worked midnight to 8 a.m. Everyone was very apprehensive. The ship traveled without exterior lights but there was ample light inside.

You left at night?

Yes, we left in the late afternoon of the 19th. There were 8 or 10 ships in the convoy. It was quite chilly the next day; I later learned that we had gone fairly far north instead of directly across. The rumors were rampant that a submarine was seen out this porthole in some other direction. I never get seasick and enjoy a bit of heavy seas, but this was different! Ventilation was limited by reason of sealed ports and only added to gastric misery. I was squared about very soon.

The night before we got into port, we lost a patient, an older man, perhaps a chief. He had been badly burned, He was losing intravenous fluids faster than they could be replaced. Our

destination became San Francisco with 124 patients and one deceased.

We arrived at 8 a.m. on Christmas Day! Two ferries were waiting there for us with cots aboard and ambulances from the naval hospital at Mare Island and nearby civilian hospitals. The Red Cross was a cheerful sight with donuts and coffee.

Our arrival was kept very quiet. Heretofore, all ship's movements were published in the daily paper but since the war had started, this had ceased. I don't recall that other ships in the convoy came in with us except for the *Scott*. We and the *Scott* were the only ships to enter the port. The convoy probably slipped away.

The patients were very happy to be home and so were we all. The ambulances went on ahead to Mare Island. By the time we had everyone settled on the two ferries, it was close to noon. We arrived at Mare Island at 4:30 p.m. and helped get the patients into the respective wards.

While at Mare Island, a doctor said to me, "For God's sake, Ruth, what's happened out there? We don't know a thing." He had been on the USS *Arizona* (BB-39) and was detached only a few months prior to the attack. We stayed in the nurses' quarters that night.

United States Pacific Fleet
Flagship of the Commander-in-Chief



Citation

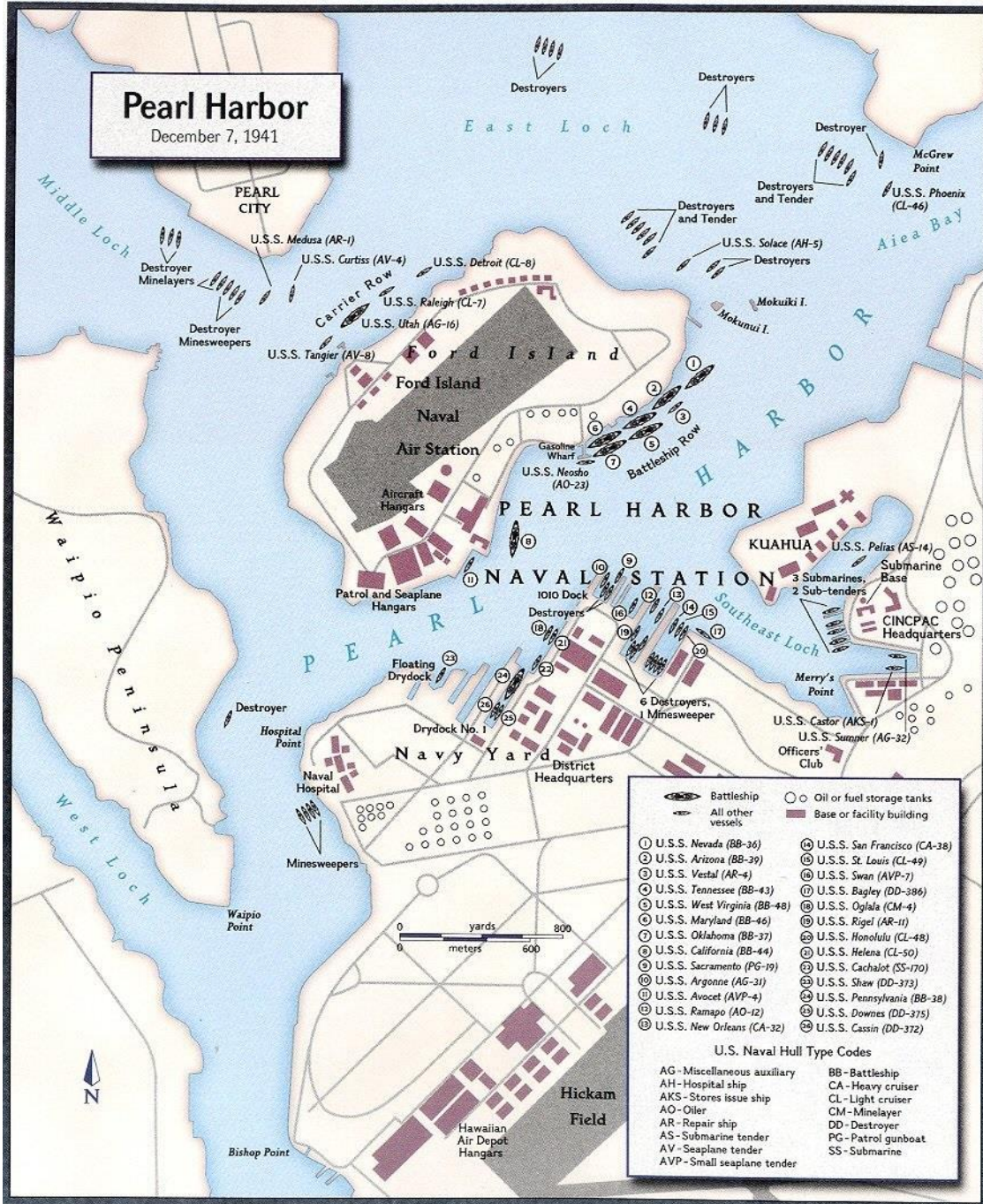
J. B. LC LARUS,
CHIEF BOATSWAIN'S MATE, U. S. NAVY.

For distinguished service in line of your profession as Commanding Officer of the Navy Yard Tug HCCA, and efficient action and disregard of your own personal safety during the attack on the U. S. Pacific Fleet in Pearl Harbor, Territory of Hawaii, by Japanese forces on December 7, 1941. When another ship was disabled and appeared to be out of control, with serious fires in the fore part of that ship, you moored your tug to her bow and assisted materially in extinguishing the fires. When it was determined that the damaged ship should be beached, as there was serious danger of her sinking in the channel, you assisted in the beaching operations in an outstanding manner. Furthermore, each member of the crew of the HCCA functioned in a most efficient manner and exhibited commendable disregard of personal danger throughout the operations.

Handwritten signature of C. W. Nimitz.

C. W. NIMITZ,
Admiral, U. S. Navy.

Map of the Enemy's Harbor



Cypher Worksheet



Instructions: Use the cypher key number to find your start in the alphabet. Then write the alphabet starting at your key number.

For example: Cypher Key 5 means the alphabet would start at E and E would become A in the alphabet and D would become Z.

Cypher Key: 10

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

NRJ ARGRE

JLTTVJJWLC

NZKY KYVZI

RKKRTB VOGCRZE

Note: Please explain your answer in a short (non-coded) paragraph on the back of this worksheet.

Creating an Exhibit



The exhibit is three dimensional and is displayed on a physical structure. Exhibits use color, images, documents, objects, graphics, and design, as well as words, to tell your story. Exhibits can be interactive by asking viewers to solve a puzzle or open a door/window to see more documents or photos.

1. *Research the topic first.* Go to www.pacificwaranimated.com and view your event. You may use additional resources as needed.
2. *Select items to put on the exhibit.* These items include primary source documents, maps, photographs, drawings, and other interesting artifacts.
3. *Developing the exhibit.* You should consider the following questions when designing your exhibit:
 - a. Does the item advance the story you are trying to tell?
 - b. Is a document too long or too wordy? Is it easy to read and understand? Will it take up too much space in your exhibit?
 - c. Is the item visually interesting?
 - d. What images best tells your story?
4. *Prepare the script.* Writing your titles, text, and labels is often referred to as writing the script. Your exhibit script needs to be grammatically correct, use good sentence structure, make wise word choices, and contain no spelling errors. Exhibit labels are brief, so they need to be clear and concise.
5. *Create a thesis statement.* Your thesis statement presents your argument, or position on the research topic. It is opinion based on fact, and (theoretically) can be proven true or false. Your presentation is your defense of the thesis. Statement can be phrased as:
 - a. "I believe _____ (country) was victorious after _____ (this event) because....."
 - b. "I believe _____ (tactic) was successful during _____ (this event) because.....".

To create your story, fill out the following information during your research.

1. What is the title of your event?
2. What was the time span of your topic?
3. What other major events/issues/conditions were in play during the time period of your topic?
4. How did some of these events/conditions force the immediate reaction of your topic?
5. What countries were involved in your event?
6. What military branches were involved in your event?
7. Was your event caused by any previous event?
8. Did your event effect another event proceeding your event?
9. What tactics were successful and which tactics were unsuccessful? Explain.
10. Which country would you deem successful after the event?

Rules:

1. Each exhibit has a 500 word limit. This excludes the title and the annotated bibliography.
2. Sentences displayed in the exhibit are expected to be grammatically correct.
3. All words should be spelled correctly.
4. An annotated bibliography must be included in the exhibit.
5. Place group participants name on the back of the exhibit display.

Exhibit Evaluation



Exhibit Title: _____

Historical Quality (45%)	Superior	Excellent	Good	Needs Improvement, Explain
Entry is historically accurate				
Shows analysis and interpretation				
Demonstrates significance of topic in history and draws conclusions				

Clarity of Presentation (10%)	Superior	Excellent	Good	Needs Improvement, Explain
Exhibit, written material is original, clear, appropriate, and organized				
Exhibit is organized, has visual impact, correctly uses maps, photos, etc.				

Rules Compliance (45%)	Yes	No
Maintains word limit (500 words)		
Sentence structure is correct		
No misspellings		
Includes annotated bibliography		
Uses other available primary/secondary sources		

“Rosie the Riveter” by Norman Rockwell



Poster Analysis Worksheet

1.	What are the main colors used in the poster? _____
2.	What symbols (if any) are used in the poster? _____
3.	If a symbol is used, is it a. clear (easy to interpret)? _____ b. memorable? _____ c. dramatic? _____
4.	Are the messages in the poster primarily visual, verbal, or both? _____
5.	Who do you think is the intended audience for the poster? _____
6.	What does the Government hope the audience will do? _____
7.	What Government purpose(s) is served by the poster? _____
8.	The most effective posters use symbols that are unusual, simple, and direct. Is this an effective poster? _____

Limit response for each question to 2 lines of text

**Designed and developed by the
Education Staff, National Archives and Records Administration,
Washington, DC 20408**



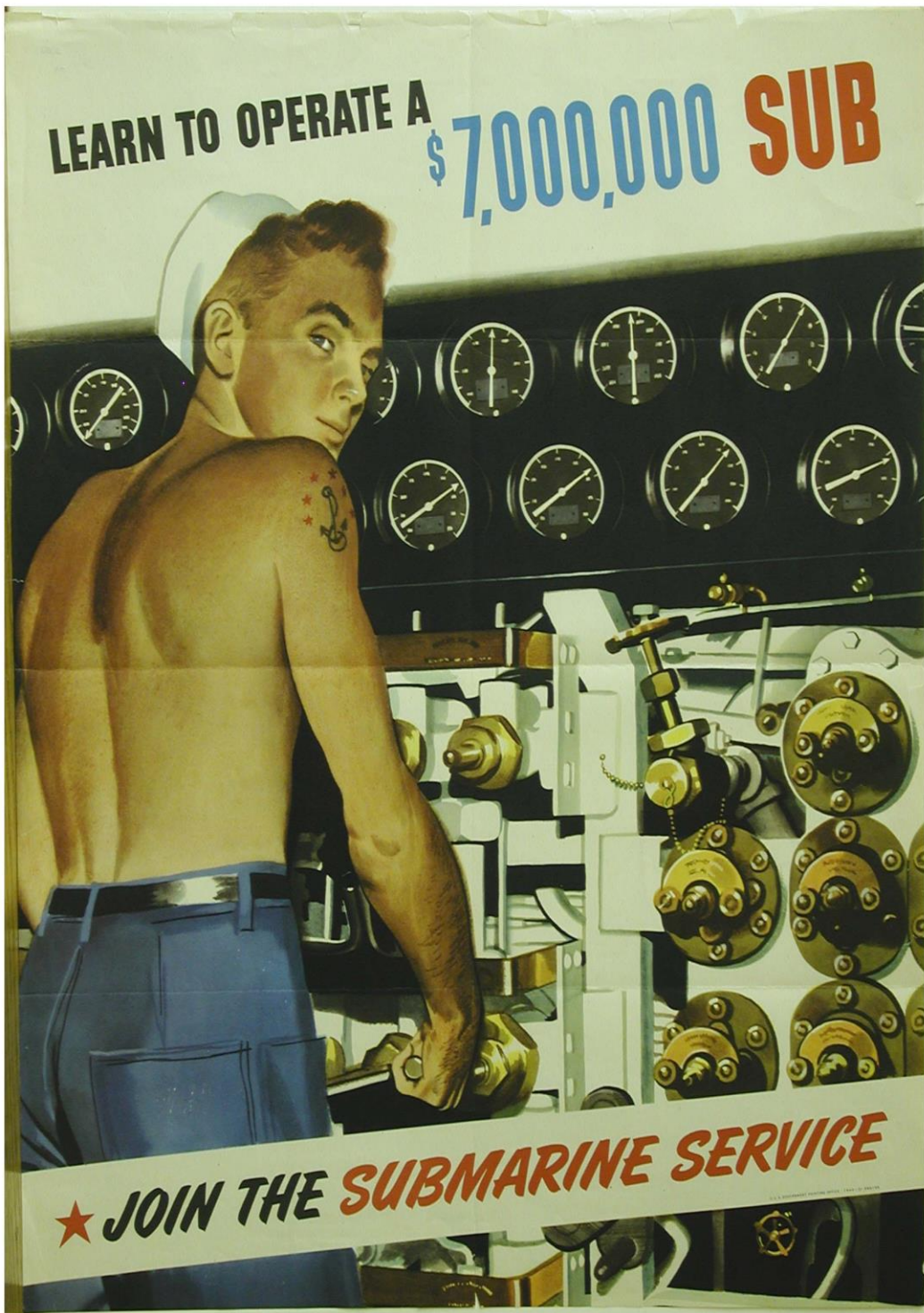


HIT 'EM WHERE IT HURTS!



**33% OF JAPAN'S TONNAGE HAS BEEN SUNK. Of this
77% WAS SUNK BY SUBMARINES!**

**JOIN THE
Submarine Service**



OCT 23 1945 AM

In reply refer to:

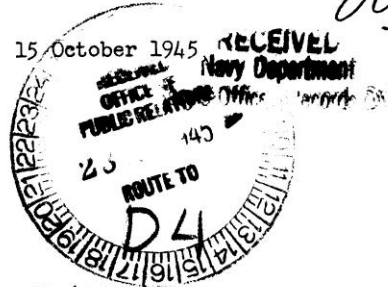
SS394/394/A12

Serial: 79

U. S. S. RAZORBACK (SS394)

Care of Fleet Post Office
San Francisco, California

SO10 23 63



From: The Commanding Officer.
To: The Secretary of the Navy.

Subject: Ship's History.

Reference: (a) Alpac 202

~~All enclosures
except main enclosure~~

(A) History of U.S.S. RAZORBACK (SS394).

1. In compliance with reference (a) which directs commanding officers to submit to the Secretary of the Navy a resume of wartime operations for historical purposes, Enclosure (A) is submitted herewith.

C. Donald Brown
C. DONALD BROWN

Copy to:
SecNav 2
CincPac 1
ComSubPac 1
ComSubRon ONE 1
ComSubDiv TWELVE 1

158958 FILMED

PRINT

In reply refer to:

SS394/

Serial:

U. S. S. RAZORBACK (SS394)

Care of Fleet Post Office

ENCLOSURE (A)

HISTORY OF THE U.S.S. RAZORBACK (SS394)

Pre-Commissioning and Commissioning Data

Authorized under the wartime building program, the RAZORBACK is a good example of Portsmouth Navy Yard's excellent workmanship. Her keel was laid on 9 September 1943; she was launched 27 January 1944 and commissioned at Portsmouth, N. H. 3 April of the same year. Mrs. H. F. D. DAVIS, wife of Capt. H. F. D. DAVIS, USN(Ret) was sponsor.

Commissioning Officers were:

The late Lt. Comdr. A. M. BONTIER, USN, lost on the U.S.S. SEAWOLF
Lieut. J. L. HAINES, USN
Lieut. R. L. SMITH, USNR
Lieut. R. S. THOMPSON, USNR
Lt.(jg) J. H. KING, USN
Lt.(jg) A. R. HERSH, USN
Lt.(jg) L. B. CRANN, USNR
Ensign L. T. ADAMS, USNR

Pre-War Period

An intensive training period and shakedown was conducted off Portsmouth, New Hampshire and Newport, Rhode Island. On 5 June 1944, Commander Roy S. BENSON, USN, a veteran submariner who had distinguished himself as skipper of the U.S.S. TRIGGER, relieved Lt. Comdr. BONTIER. Further training was accomplished at New London, Connecticut, Key West, Florida and Panama. On 19 July 1944, the RAZORBACK reported to the Commander Submarines Pacific Fleet and set course for Pearl Harbor where voyage repairs and the final training period were completed on 25 August.

(1)

WAR NARRATIVE

The first patrol took place east of Luzon with this ship a member of an offensive group in support of the Palau landings. The JAP Fleet did not venture forth to oppose this offensive and the only enemy contact consisted of frequent encounters with anti-submarine planes. The last week of the patrol was conducted in the Luzon Straits where the major consideration was riding out a storm and keeping clear of JAPANESE aviators. A disappointed ship returned to Midway for rest and refit by Submarine Division 201 and the U.S.S. PROTEUS (AS19). On 21 October 1944 Lt. Comdr. C. DONALD BROWN, USN, relieved Commander BENSON as Commanding Officer.

On 15 November the RAZORBACK left Midway and joined the U.S.S. TREPANG (SS412) and U.S.S. SEGUNDO (SS398) to form a coordinated attack group under the command of Comdr. Roy DAVENPORT, USN. After refueling alongside the U.S.S. FULTON (AS11) at Saipan the group headed for the Luzon Straits. First contact was made on two large vessels escorted by three gunboats and heavy air cover. An unsuccessful attack was made due to the inability of the submarine to close the enemy to good torpedo range. Many of the officers and crew had now heard their first depth charges, fortunately not close. At daybreak several days later, radar contact was made on several enemy ships. Dived to avoid detection. The target was approached and identified as a hunter-killer group consisting of a destroyer and two smaller anti-sub craft. The former was attacked but results were not seen due to the advisability of rapid retirement. Torpedo hits and breaking up noises were heard as were the depth charges planted by the JAPS. Several nights later the TREPANG reported a convoy about 40 miles away from us. By the time the RAZORBACK arrived the TREPANG and SEGUNDO had sunk all but one ship, that having been stopped by the latter submarine. After skirting an escort at 2000 yards and having been challenged by two JAP escorts, the target was closed sufficiently for attack. Sudden appearance of the moon necessitated diving. On the way down the timely re-opening and closing of the hatch by GUIDRY, C. J., SMLC, USN, prevented the loss of a tardy lookout who had not heard the order to clear the bridge. RAZORBACK torpedoes set fire to the large transport previously stopped by the SEGUNDO and she was left burning furiously as the submarine surfaced and eluded the angry escorts. Returned to Saipan for more torpedoes and rejoined the U.S.S. SEGUNDO with Comdr. J. D. FULP, Jr., USN, as the new pack commander. The last day of patrol, contact was made on a four ship convoy escorted by an old destroyer, a D. E., and a float plane. Torpedo hits were obtained on a medium tanker followed, shortly by great relief to all hands as the bow was seen to blow off the destroyer which was then closing the submarine. Though the plane flew up and down the torpedo wakes to mark the submarines location, the latter

(2)

WAR NARRATIVE (Continued)

retired without damage from the remaining escort. That night the RAZORBACK surfaced and pursued the convoy. The moon again forced a submerged attack which was rewarded by a terrific explosion as one of the remaining three ships lighted up the sky. Hits on another small cargo ship were so violent that they knocked cork off the submarine conning tower bulkhead, but the JAP proved tough and equipped with sound gear and depth charges. The persecutor was eluded with difficulty.

On 5 January arrived at Guam for refit by the U.S.S. SPERRY (AS12) and Submarine Division 82. Commander Submarine Squadron TEN presented the officers and crew with combat insignias, the first for all but thirteen. After rest at Camp Dealy and training, the RAZORBACK, with the U.S.S. SEGUNDO (Comdr. J. D. FULP, Jr. as pack commander) and the U.S.S. SEACAT set out for the East China Sea for the third patrol.

Difficulty was encountered in finding targets. Two unsuccessful torpedo attacks were conducted on a transport and three-masted schooner respectively. With the patrol coming to a close and the score still zero, the RAZORBACK surfaced and in three separate gun actions sunk four wooden ships which were too small for torpedoes. Three JAP prisoners were obtained. Of interest was the fact that a bad grease fire in the galley necessitated surfacing and the subsequent gun engagement with a schooner which was nearby.

Prisoners were deposited in Guam and the RAZORBACK finished her patrol on arrival Pearl Harbor 26 March 1945. Although the patrol had not been considered successful for award of the combat insignia, morale was high and a good rest at the Royal Hawaiian Hotel soon had the crew in even higher spirits. The Submarine Division 45 and Submarine Base Pearl Harbor completed refit and training on 7 May at which time the submarine headed for Nanpo Shoto and Tokyo Bay area for lifeguard work. She refueled at Midway on 11 May enroute to patrol area.

Much of the fourth patrol was spent on the surface uncomfortably close to Tokyo, day and night. Topside personnel often saw the fires resulting from the air raids. Efforts were rewarded by rescue of a fighter pilot who bailed out of his plane 20 miles from Tokyo and clambered aboard the RAZORBACK seven minutes later. Subsequently four B-29 pilots were picked up after an extensive search had been conducted for them. The presence of enemy planes and proximity of enemy land (5 to 8 miles) made this rescue a ticklish operation, but lack of JAP intestinal fortitude for our two cover planes made the operation a success.

Returned to Midway on 27 June for refit by the U.S.S. AEGIR (AS23) and Submarine Division 242. Commander Submarine Squadron 24 presented the crew with their second combat insignia. On 18 July while proceeding to operating area Lt.(jg) PATILLO, USNR

(3)

WAR NARRATIVE (cont.)

and LANGFORD, D. D., MoMM3c, U.S.N.R. risked their lives by going over the side in heavy seas near a dangerous reef to save a Chief Gunner's Mate who had been washed overboard from the submarine preceding the RAZORBACK in the outer channel. The rescuers have been recommended for a Navy Marine Corps Medal for their unselfish act.

On 22 July the RAZORBACK departed Midway for patrol in the Okhotsk Sea. On 2 August a number of wooden cargo ships were discovered skirting a point for a certain harbor. They were too small for torpedoes, so surface gun action was necessary. Six ships were sunk and two damaged in what was to be the last encounter with the enemy for this submarine. OUDERKIRK, J. F., RM2c, USNR and LAWSON, L. "C", EM3c, USNR were wounded slightly by return fire in this engagement, the only personnel casualties suffered from enemy action. The remainder of the patrol was spent performing lifeguard services off Paramushiro for Alaskan based planes.

On 31 August the RAZORBACK entered Tokyo Harbor in company with eleven other submarines where she took part in the formal surrender of JAPAN. On 3 September she departed, arriving at Pearl Harbor 11 September and San Diego 20 September. ComSubRon TEM presented the officers and crew with their third combat insignia for a successful 5th and last patrol.

SUMMARY OF PATROL RESULTS

<u>Number of Patrol</u>	<u>Ships Sunk</u>	<u>Total Tonnage Sunk</u>	<u>Ships Damaged</u>	<u>Total Tonnage Damaged</u>	<u>Total Aviators Rescued</u>
1	0	0	0	0	0
2	1 Large Transport 1 Medium Tanker 1 Destroyer 1 Large Cargo	20,800	1 Destroyer 1 Medium Cargo	5,400	0
3	2 Sea Trucks 1 Schooner 1 Junk	350	0	0	0
4	0	0	0	0	5
5	6 Sea Trucks	1200*	2 Sea Trucks	400*	0
TOTAL		22,350 Tons		5,800 Tons	5

* Unofficial Assessment.

(4)

World War II Submarine Bingo



Instructions: Name the position that would be used to complete the given tasks.

Locate an enemy vessel while submerged.	Make sure crews mess is clean.	Radio message intercepted.	Sight an enemy fishing vessel.
Supply the submarine.	Fire upon large enemy target.	Navigate to ordered location.	Sinking mines with 20mm and 50 cal.
Ensure morale among enlisted is high.	Use of passive sonar to find vessels while submerged.	Prepare meals for the crew.	Makes the rules of the boat.
Severe stomach aches.	Serve officers their meals.	Track incoming torpedo.	Informs Captain of unsettled crew.
Fire in maneuvering room.	Interpreting communication lights from another vessel.	Proper operation of all mechanical and electrical equipment.	Engine out of commission.

World War II Submarine Bingo: Answer Key



Instructions: Name the position that would be used to complete the given tasks.

Locate an enemy vessel while submerged. Quarter Master, Sonar Man	Make sure crews mess is clean. Mess Cook	Radio message intercepted. Radio Man	Sight an enemy fishing vessel. Gunner's Mate
Supply the submarine. Supply Officer	Fire upon large enemy target. Torpedo Man, Fire Control Man	Navigate to ordered location. Navigation Officer	Sinking mines with 20mm and 50 cal. Weapons Officer
Ensure morale among enlisted is high. Chief of the Boat (COB)	Use of passive sonar to find vessels while submerged. Sonar Man	Prepare meals for the crew. Cook	Makes the rules of the boat. Captain
Severe stomach aches. Corps Man	Serve officers their meals. Stewards	Track incoming torpedo. Radar Technicians	Informs Captain of unsettled crew. Executive Officer
Fire in maneuvering room. Machinist Mate, Electrician Mate	Interpreting communication lights from another vessel. Signal Man	Proper operation of all mechanical and electrical equipment. Engineer Officer	Engine out of commission. Motor Mates

Identification Cards

<p>Position: Captain</p> <p>Primary Work Compartment: Forward Battery Compartment, Control Room, Conning Tower</p> <p>Duties: Is in charge of everything that happens on the submarine.</p>	<p>Position: Executive Officer</p> <p>Primary Work Compartment: Forward Battery Compartment, Control Room</p> <p>Duties: Is second in command and communicates to the Captain for the crew.</p>
<p>Position: Engineer Officer</p> <p>Primary Work Compartment: Forward Battery Compartment, Control Room</p> <p>Duties: Is the person in charge of ensuring that all mechanical and electrical equipment is operating correctly.</p>	<p>Position: Navigation Officer</p> <p>Primary Work Compartment: Forward Battery Compartment, Control Room</p> <p>Duties: Is in charge of ensuring the submarine is located within the patrol coordinates and taking the given patrol path.</p>
<p>Position: Corps Man</p> <p>Primary Work Compartment: After Battery Compartment</p> <p>Duties: Is in charge of the health of the crew members.</p>	<p>Position: Weapons Officer</p> <p>Primary Work Compartment: Forward Battery Compartment, Control Room</p> <p>Duties: Is in charge of all weapons on board and who is authorized to use them.</p>

<p>Position: Supply Officer</p> <p>Primary Work Compartment: Forward Battery Compartment, Control Room</p> <p>Duties: Is in charge of ensuring the submarine is well supplied for the actions the boat is making during their patrol.</p>	<p>Position: Chief of the Boat (COB)</p> <p>Primary Work Compartment: After Battery Compartment</p> <p>Duties: Is in charge of the enlisted men including their watch stations, sleeping arrangements, and general moral.</p>
<p>Position: Radar Technician</p> <p>Primary Work Compartment: Conning Tower</p> <p>Duties: Is in charge of interpreting the radar equipment which indicates vessels and aircraft nearby.</p>	<p>Position: Fire Control Man</p> <p>Primary Work Compartment: Conning Tower</p> <p>Duties: Is in charge of setting the speed and angle of a torpedo and launching the torpedo out of the tube.</p>
<p>Position: Steward</p> <p>Primary Work Compartment: Forward Battery Compartment</p> <p>Duties: Is in charge of serving the officers their meals.</p>	<p>Position: Cook</p> <p>Primary Work Compartment: After Battery Compartment</p> <p>Duties: Is in charge of preparing four meals a day for all crew members.</p>

<p>Position: Sonar Man</p> <p>Primary Work Compartment: Control Room</p> <p>Duties: Is in charge of passive sonar which listens for vessels in the water, as well as active sonar which precisely locates vessels in the water.</p>	<p>Position: Radio Man</p> <p>Primary Work Compartment: Control Room</p> <p>Duties: Is in charge of interpreting incoming messages and sending out messages prepared by an officer.</p>
<p>Position: Signal Man</p> <p>Primary Work Compartment: Deck</p> <p>Duties: Is in charge of sending and receiving signals from friendly vessels through a code using lights.</p>	<p>Position: Quarter Master</p> <p>Primary Work Compartment: Conning Tower, Control Room</p> <p>Duties: Is in charge of navigating the boat using the compass, maps, helm station, and looking through the periscope.</p>
<p>Position: Mess Cook</p> <p>Primary Work Compartment: After Battery Compartment</p> <p>Duties: Is in charge of ensuring cleanliness in the crews mess and cleaning the dishes after meals.</p>	<p>Position: Gunners Mate</p> <p>Primary Work Compartment: Deck</p> <p>Duties: Is in charge of operating and maintaining the deck guns.</p>

<p>Position: Electrician Mate</p> <p>Primary Work Compartment: Maneuvering Room</p> <p>Duties: Is in charge of all electrical equipment on board the boat especially the batteries.</p>	<p>Position: Machinist Mate</p> <p>Primary Work Compartment: Maneuvering Room</p> <p>Duties: Is in charge of all mechanical equipment on board the boat especially the motors.</p>
<p>Position: Motor Mates</p> <p>Primary Work Compartment: Forward and After Engine Room</p> <p>Duties: Is in charge of the diesel engines on board the boat.</p>	<p>Position: Torpedo Man</p> <p>Primary Work Compartment: Forward and After Torpedo Rooms</p> <p>Duties: Is in charge of the maintenance and loading of torpedoes.</p>
<p>Position: Motor Mates</p> <p>Primary Work Compartment: Forward and After Engine Room</p> <p>Duties: Is in charge of the diesel engines on board the boat.</p>	<p>Position: Torpedo Man</p> <p>Primary Work Compartment: Forward and After Torpedo Rooms</p> <p>Duties: Is in charge of the maintenance and loading of torpedoes.</p>

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<p>Position: Cook</p> <p>Primary Work Compartment: After Battery Compartment</p> <p>Duties: Is in charge of preparing four meals a day for all crew members.</p>	<p>Position: Signal Man</p> <p>Primary Work Compartment: Deck</p> <p>Duties: Is in charge of sending and receiving signals from friendly vessels through a code using lights.</p>
<p>Position: Motor Mates</p> <p>Primary Work Compartment: Forward and After Engine Room</p> <p>Duties: Is in charge of the diesel engines on board the boat.</p>	<p>Position: Torpedo Man</p> <p>Primary Work Compartment: Forward and After Torpedo Rooms</p> <p>Duties: Is in charge of the maintenance and loading of torpedoes.</p>
<p>Position: Motor Mates</p> <p>Primary Work Compartment: Forward and After Engine Room</p> <p>Duties: Is in charge of the diesel engines on board the boat.</p>	<p>Position: Torpedo Man</p> <p>Primary Work Compartment: Forward and After Torpedo Rooms</p> <p>Duties: Is in charge of the maintenance and loading of torpedoes.</p>

Radar and Sonar in World War II



Radar (**RA**dio **D**etection **A**nd **R**anging) and Sonar (**SO**und **N**avigation **A**nd **R**anging) were two similar technological advances that figured prominently in the Allied victory in World War II. Both techniques were used for detecting the location and speed of aircraft and sea vessels. During World War II submarines like USS *Razorback* used radar and sonar technology while on war patrols. Radar was used to warn submarines of approaching enemy aircraft or surface vessels so that the submarine could submerge before they would be attacked. Sonar was used by submarine to locate vessels while submerged so they could avert the enemy. These technologies both locate enemy by sending out invisible waves that strike the structure, bounce off, and return to a wave detector. The returning waves provide information as to the direction and velocity of the enemy craft.

Radar makes use of radio waves to detect distant objects. Radio waves travel at the same velocity as light which is 300,000 kilometers per second. Also radio waves are transverse waves that are emitted by a transmitter that send waves in predetermined directions. When these waves come in contact with an object they are usually reflected or scattered in many directions. Radio waves are reflected especially well by materials with electrical conductivity like most metals, seawater, and wet lands. If the object is moving either toward or away from the transmitter, there is a slight equivalent change in the frequency of the radio waves caused by the Doppler Effect. The Doppler Effect is when waves change in wavelength due to the motion of the wave source relative to a stationary detector.

Sonar makes use of sound waves to detect distant objects. Sound waves are compression waves which are produced by vibrating objects. When a vibrating object moves toward us, the air molecules are pushed closer together. When the object vibrates away from us the reverse happens. Sound waves travel longer and faster in water than they do in air. The velocity of sound in water is about 1.6 kilometers per second. Sonar was used in two ways by submarines while submerged. Passive sonar was used at all times to listen for enemy vessels approaching the submarine. Active sonar was rarely used, but would precisely locate enemy vessels speed and location by using a pinging noise that would ricochet off the hull of another vessel.

Radio Waves Compared to Sound Waves

Instructions: Circle the best answer.

	Radio Waves	Sound Waves
Basis for	radar / sonar	radar / sonar
Type of wave	compression / transverse	compression / transverse
Travels best in	air / water	air / water
Best in detecting	aircraft / submarines	aircraft / submarines

Problems:

1. What is the range (distance to) an aircraft for which a radar pulse from a submarine radar station requires half of a millisecond (0.00050 seconds) to travel to the aircraft, be reflected, and return? Remember, the velocity of radio waves is 300,000km/sec. Use the formula: Round-trip distance = velocity x time

2. A destroyer on the ocean surface detects the reflection of a sonar “ping” (sound pulse) off a submarine a tenth of a second (0.10 seconds) after it was produced by the sonar device on the destroyer. What is the depth of the submarine? Remember, the velocity of sound in water is about 1.6km/sec. Use the formula: Round-trip distance = velocity x time

Radio Waves Compared to Sound Waves: Answer Key

	Radio Waves	Sound Waves
Basis for	radar / sonar	radar / sonar
Type of wave	compression / transverse	compression / transverse
Travels best in	air / water	air / water
Best in detecting	aircraft / submarines	aircraft / submarines

Problems:

1. What is the range (distance to) an aircraft for which a radar pulse from a submarine radar station requires half of a millisecond (0.00050 seconds) to travel to the aircraft, be reflected, and return?

Round-trip distance = velocity x time

Round-trip distance = 300,000 km/sec x 0.00050 sec

Round-trip distance = 150 km

Distance to aircraft = 150 km/2

Distance to aircraft = 75 km

2. A destroyer on the ocean surface detects the reflection of a sonar “ping” (sound pulse) off a submarine a tenth of a second (0.10 seconds) after it was produced by the sonar device on the destroyer. What is the depth of the submarine?

Round-trip distance = velocity x time

Round-trip distance = 1.6 km/sec x 0.10 sec

Round-trip distance = 0.16 km = 160 m

Distance to submarine (depth) = 160m/2

Distance to submarine (depth) = 80 m

The Potsdam Declaration (July 26, 1945)

Proclamation Defining the Terms for the Japanese Surrender, July 26, 1945

- (1) WE — THE PRESIDENT of the United States, the President of the National Government of the Republic of China, and the Prime Minister of Great Britain, representing the hundreds of millions of our countrymen, have conferred and agree that Japan shall be given an opportunity to end this war.
- (2) The prodigious land, sea and air forces of the United States, the British Empire and of China, many times reinforced by their armies and air fleets from the west, are poised to strike the final blows upon Japan. This military power is sustained and inspired by the determination of all the Allied Nations to prosecute the war against Japan until she ceases to resist.
- (3) The result of the futile and senseless German resistance to the might of the aroused free peoples of the world stands forth in awful clarity as an example to the people of Japan. The might that now converges on Japan is immeasurably greater than that which, when applied to the resisting Nazis, necessarily laid waste to the lands, the industry, and the method of life of the whole German people. The full application of our military power backed by our resolve, will mean the inevitable and complete destruction of the Japanese armed forces and just as inevitably the utter devastation of the Japanese homeland.
- (5) Following are our terms. We will not deviate from them. There are no alternatives. We shall brook no delay.
- (6) There must be eliminated for all time the authority and influence of those who have deceived and misled the people of Japan into embarking on world conquest, for we insist that a new order of peace, security and justice will be impossible until irresponsible militarism is driven from the world.
- (7) Until such a new order is established and until there is convincing proof that Japan's war-making power is destroyed, points in Japanese territory to be designated by the Allies shall be occupied to secure the achievement of the basic objectives we are here setting forth.
- (10) We do not intend that the Japanese shall be enslaved as a race or destroyed as a nation, but stern justice shall be meted out to all war criminals, including those who have visited cruelties upon our prisoners. The Japanese Government shall remove all obstacles to the revival and strengthening of democratic tendencies among the Japanese people. Freedom of speech, of religion, and of thought, as well as respect for the fundamental human rights shall be established.
- (12) The occupying forces of the Allies shall be withdrawn from Japan as soon as these objectives have been accomplished and there has been established in accordance with the freely expressed will of the Japanese people a peacefully inclined and responsible government.
- (13) We call upon the government of Japan to proclaim now the unconditional surrender of all Japanese armed forces, and to provide proper and adequate assurances of their good faith in such action. The alternative for Japan is prompt and utter destruction.

Henry Stimson to Harry S. Truman, April 24, 1945. Confidential File, Truman Papers.

White House Central Files
Confidential Files

SECRET

WAR DEPARTMENT
WASHINGTON

B.F. War

*25
file*

April 24, 1945.

*Saw
4-25-45*

Dear Mr. President:

I think it is very important that I should have a talk with you as soon as possible on a highly secret matter.

I mentioned it to you shortly after you took office but have not urged it since on account of the pressure you have been under. It, however, has such a bearing on our present foreign relations and has such an important effect upon all my thinking in this field that I think you ought to know about it without much further delay.

x386

Faithfully yours,

Henry L. Stimson

Secretary of War. *x25*



The President,
The White House.

Ho H

*Put on list
tomorrow, Wed. 25,
H.S.*

DECLASSIFIED
E. O. 11652, Sec. 3(E) and 3(D) or (F)
OSD letter, April 12, 1974

SECRET

~~SECRET~~

July 17, 1945

A PETITION TO THE PRESIDENT OF THE UNITED STATES

Discoveries of which the people of the United States are not aware may affect the welfare of this nation in the near future. The liberation of atomic power which has been achieved places atomic bombs in the hands of the Army. It places in your hands, as Commander-in-Chief, the fateful decision whether or not to sanction the use of such bombs in the present phase of the war against Japan.

We, the undersigned scientists, have been working in the field of atomic power. Until recently we have had to fear that the United States might be attacked by atomic bombs during this war and that her only defense might lie in a counterattack by the same means. Today, with the defeat of Germany, this danger is averted and we feel impelled to say what follows:

The war has to be brought speedily to a successful conclusion and attacks by atomic bombs may very well be an effective method of warfare. We feel, however, that such attacks on Japan could not be justified, at least not unless the terms which will be imposed after the war on Japan were made public in detail and Japan were given an opportunity to surrender.

If such public announcement gave assurance to the Japanese that they could look forward to a life devoted to peaceful pursuits in their homeland and if Japan still refused to surrender our nation might then, in certain circumstances, find itself forced to resort to the use of atomic bombs. Such a step, however, ought not to be made at any time without seriously considering the moral responsibilities which are involved.

The development of atomic power will provide the nations with new means of destruction. The atomic bombs at our disposal represent only the first step in this direction, and there is almost no limit to the destructive power which will become available in the course of their future development. Thus a nation which sets the precedent of using these newly liberated forces of nature for purposes of destruction may have to bear the responsibility of opening the door to an era of devastation on an unimaginable scale.

If after this war a situation is allowed to develop in the world which permits rival powers to be in uncontrolled possession of these new means of destruction, the cities of the United States as well as the cities of other nations will be in continuous danger of sudden annihilation. All the resources of the United States, moral and material, may have to be mobilized to prevent the advent of such a world situation. Its prevention is at present the solemn responsibility of the United States--singled out by virtue of her lead in the field of atomic power.

The added material strength which this lead gives to the United States brings with it the obligation of restraint and if we were to violate this obligation our moral position would be weakened in the eyes of the world and in our own eyes. It would then be more difficult for us to live up to our responsibility of bringing the unloosened forces of destruction under control.

In view of the foregoing, we, the undersigned, respectfully petition: first, that you exercise your power as Commander-in-Chief, to rule that the United States shall not resort to the use of atomic bombs in this war unless the terms which will be imposed upon Japan have been made public in detail and Japan knowing these terms has refused to surrender; second, that in such an event the question whether or not to use atomic bombs

be decided by you in the light of the considerations presented in this petition as well as all the other moral responsibilities which are involved.

R. E. Hupp

J. M. Mulliken

E. P. Wigzell

George S. Mack

Leo L. Leland

J. G. Wilson

W. H. Zachariasen

Francis R. F. Fowke

John A. Simpson

Walter Bentley

John R. Howe

Frank Forte

DECLASSIFIED
NNP 73 0039
By _____
NARS, Date _____

Press release by the White House, August 6, 1945. Subject File, Ayers Papers.

THE WHITE HOUSE
Washington, D. C.

IMMEDIATE RELEASE

STATEMENT BY THE PRESIDENT OF THE UNITED STATES

Sixteen hours ago an American airplane dropped one bomb on and destroyed its usefulness to the enemy. That bomb had more power than 20,000 tons of T.N.T. It had more than two thousand times the blast power of the British "Grand Slam" which is the largest bomb ever yet used in the history of warfare.

The Japanese began the war from the air at Pearl Harbor. They have been repaid many fold. And the end is not yet. With this bomb we have now added a new and revolutionary increase in destruction to supplement the growing power of our armed forces. In their present form these bombs are now in production and even more powerful forms are in development.

It is an atomic bomb. It is a harnessing of the basic power of the universe. The force from which the sun draws its power has been loosed against those who brought war to the Far East.

Before 1939, it was the accepted belief of scientists that it was theoretically possible to release atomic energy. But no one knew any practical method of doing it. By 1942, however, we knew that the Germans were working feverishly to find a way to add atomic energy to the other engines of war with which they hoped to enslave the world. But they failed. We may be grateful to Providence that the Germans got the V-1's and V-2's late and in limited quantities and even more grateful that they did not get the atomic bomb at all.

The battle of the laboratories held fateful risks for us as well as the battles of the air, land and sea, and we have now won the battle of the laboratories as we have won the other battles.

Beginning in 1940, before Pearl Harbor, scientific knowledge useful in war was pooled between the United States and Great Britain, and many priceless helps to our victories



have come from that arrangement. Under that general policy the research on the atomic bomb was begun. With American and British scientists working together we entered the race of discovery against the Germans.

The United States had available the large number of scientists of distinction in the many needed areas of knowledge. It had the tremendous industrial and financial resources necessary for the project and they could be devoted to it without undue impairment of other vital war work. In the United States the laboratory work and the production plants, on which a substantial start had already been made, would be out of reach of enemy bombing, while at that time Britain was exposed to constant air attack and was still threatened with the possibility of invasion. For these reasons Prime Minister Churchill and President Roosevelt agreed that it was wise to carry on the project here. We now have two great plants and many lesser works devoted to the production of atomic power. Employment during peak construction numbered 125,000 and over 65,000 individuals are even now engaged in operating the plants. Many have worked there for two and a half years. Few know what they have been producing. They see great quantities of material going in and they see nothing coming out of these plants, for the physical size of the explosive charge is exceedingly small. We have spent two billion dollars on the greatest scientific gamble in history -- and won.

But the greatest marvel is not the size of the enterprise, its secrecy, nor its cost, but the achievement of scientific brains in putting together infinitely complex pieces of knowledge held by many men in different fields of science into a workable plan. And hardly less marvelous has been the capacity of industry to design, and of labor to operate, the machines and methods to do things never done before so that the brain child of many minds came forth in physical shape and performed as it was supposed to do. Both science and industry worked under the direction of the United States Army, which achieved a unique success in managing so diverse a problem in the advancement of knowledge in an amazingly short time. It is doubtful if such another combination could be got together in the world. What has been done is the greatest achievement of organized science in history. It was done under high pressure and without failure.

We are now prepared to obliterate more rapidly and completely every productive enterprise the Japanese have above ground in any city. We shall destroy their docks, their factories, and their communications. Let there be no mistake; we shall completely destroy Japan's power to make war.



It was to spare the Japanese people from utter destruction that the ultimatum of July 26 was issued at Potsdam. Their leaders promptly rejected that ultimatum. If they do not now accept our terms they may expect a rain of ruin from the air, the like of which has never been seen on this earth. Behind this air attack will follow sea and land forces in such numbers and power as they have not yet seen and with the fighting skill of which they are already well aware.

The Secretary of War, who has kept in personal touch with all phases of the project, will immediately make public a statement giving further details.

His statement will give facts concerning the sites at Oak Ridge near Knoxville, Tennessee, and at Richland near Pasco, Washington, and an installation near Santa Fe, New Mexico. Although the workers at the sites have been making materials to be used in producing the greatest destructive force in history they have not themselves been in danger beyond that of many other occupations, for the utmost care has been taken of their safety.

The fact that we can release atomic energy ushers in a new era in man's understanding of nature's forces. Atomic energy may in the future supplement the power that now comes from coal, oil, and falling water, but at present it cannot be produced on a basis to compete with them commercially. Before that comes there must be a long period of intensive research.

It has never been the habit of the scientists of this country or the policy of this Government to withhold from the world scientific knowledge. Normally, therefore, everything about the work with atomic energy would be made public.

But under present circumstances it is not intended to divulge the technical processes of production or all the military applications, pending further examination of possible methods of protecting us and the rest of the world from the danger of sudden destruction.

I shall recommend that the Congress of the United States consider promptly the establishment of an appropriate commission to control the production and use of atomic power within the United States. I shall give further consideration and make further recommendations to the Congress as to how atomic power can become a powerful and forceful influence towards the maintenance of world peace.



Translation of leaflet dropped on the Japanese, August 6, 1945,
Miscellaneous Historical Documents Collection.

4. A translation of the above leaflet follows:

"ATTENTION JAPANESE PEOPLE"

EVACUATE YOUR CITIES

"Because your military leaders have rejected the thirteen part
surrender declaration, two momentous events have occurred in the last
few days.

"The Soviet Union, because of this rejection on the part of the
military has notified your Ambassador Sato that it has declared war on
your nation. Thus, all powerful countries of the world are now at war
against you.

"Also, because of your leaders' refusal to accept the surrender
declaration that would enable Japan to honorably end this useless war,
we have employed our atomic bomb.

"A single one of our newly developed atomic bombs is actually the
equivalent in explosive power to what 2000 of our giant B-29's could
have carried on a single mission. Radio Tokyo has told you that with
the first use of this weapon of total destruction, Hiroshima was virtually
destroyed.

"Before we use this bomb again and again to destroy every resource
of the military by which they are prolonging this useless war, petition
the Emperor now to end the war. Our President has outlined for you the
thirteen consequences of an honorable surrender; We urge that you
accept these consequences and begin the work of building a new, better,
and peace loving Japan.

"Act at once or we shall resolutely employ this bomb and all our
other superior weapons to promptly and forcefully end the war."

EVACUATE YOUR CITIES

~~SECRET~~
DOD Dir. 5200.10, June 29, 1960
RMV by SE date 12-14-62

DECLASSIFIED
DOD Dir. 5200.10
RM By 4 Date 8-17-67

Telegram, Richard Russell to Harry S. Truman, August 7, 1945.
Official File, Truman Papers.

The White House
Washington
AUG 7 9 05 PM 1945

WUSD LG GOVT
WINDER GA AUG 7 427P

THE PRESIDENT
(PERSONAL DELIVERY) THE WHITE HOUSE

PERMIT ME TO RESPECTFULLY SUGGEST THAT WE CEASE OUR EFFORTS TO CAJOLE JAPAN INTO SURRENDERING IN ACCORDANCE WITH THE POTSDAM DECLARATION. LET US CARRY THE WAR TO THEM UNTIL THEY BEG US TO ACCEPT THE UNCONDITIONAL SURRENDER. THE FOUL ATTACK ON PEARL HARBOR BROUGHT US INTO WAR AND I AM UNABLE TO SEE ANY VALID REASON WHY WE SHOULD BE SO MUCH MORE CONSIDERATE AND LENIENT IN DEALING WITH JAPAN THAN WITH GERMANY. I EARNESTLY INSIST JAPAN SHOULD BE DEALT WITH AS HARSHLY AS GERMANY AND THAT SHE

SHOULD NOT BE THE BENEFICIARY OF A SOFT PEACE. THE VAST MAJORITY OF THE AMERICAN PEOPLE, INCLUDING MANY SOUND THINKERS WHO HAVE INTIMATE KNOWLEDGE OF THE ORIENT, DO NOT AGREE WITH MR. GREW IN HIS ATTITUDE THAT THERE IS ANY THING SACROSANCT ABOUT HIROHITO. HE SHOULD GO. WE HAVE NO OBLIGATION TO SHINTOLISM. THE COMPTENTIOUS ANSWER OF THE JAPS TO THE POTSDAM ULTIMATUM JUSTIFIES A REVISION OF THAT DOCUMENT AND STERNER PEACE TERMS.

IF WE DO NOT HAVE AVAILABLE A SUFFICIENT NUMBER OF ATOMIC BOMBS WITH WHICH TO FINISH THE JOB IMMEDIATELY, LET US CARRY ON WITH TNT AND FIRE BOMBS UNTIL WE CAN PRODUCE THEM.

I ALSO HOPE THAT YOU WILL ISSUE ORDERS FORBIDDING THE OFFICERS IN COMMAND OF OUR AIR FORCES FROM WARNING JAP CITIES

x692-A Min.

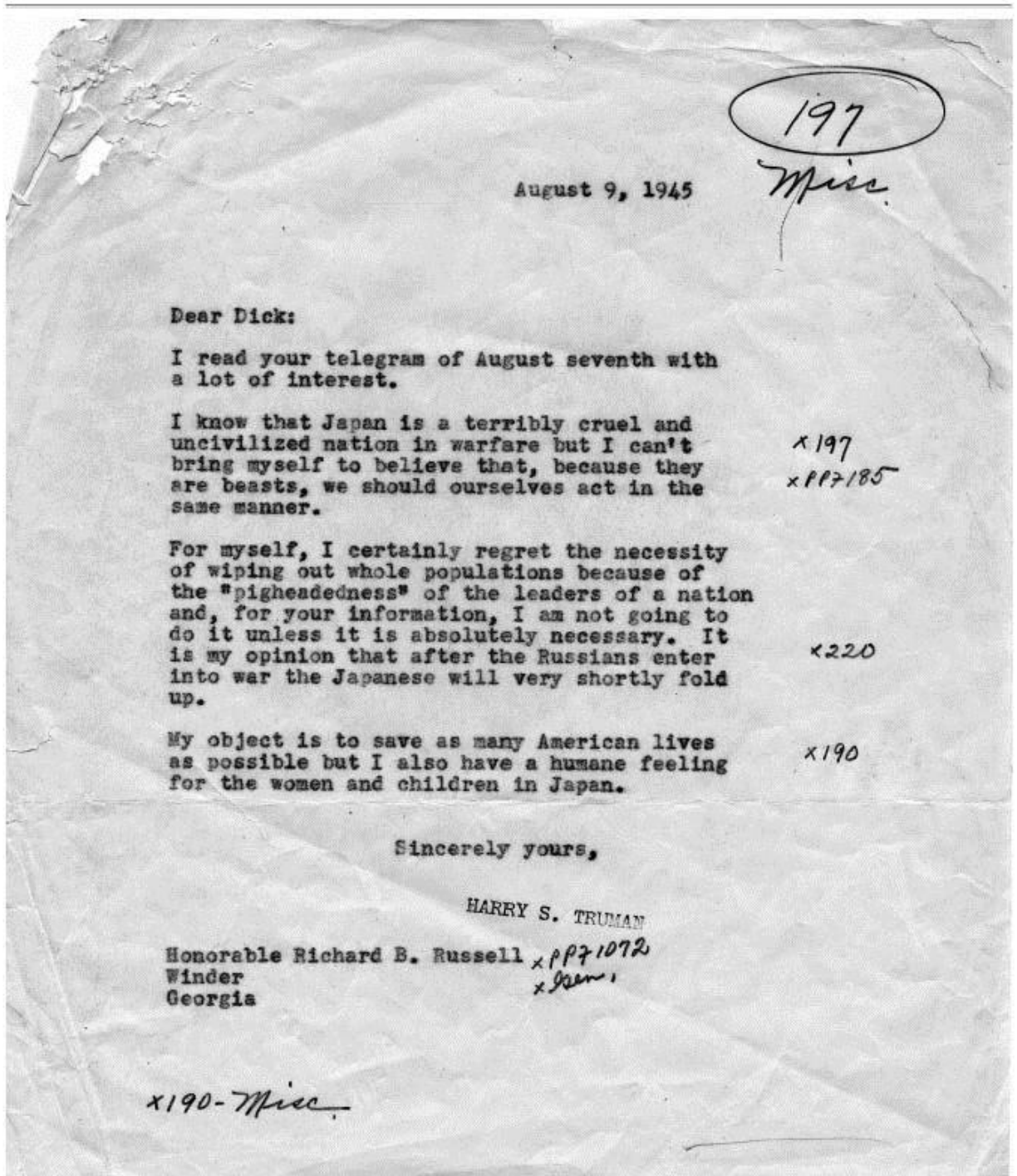
THAT THEY WILL BE ATTACKED. THESE GENERALS DO NOT FLY OVER JAPAN AND THIS SHOWMANSHIP CAN ONLY RESULT IN THE UNNECESSARY LOSS OF MANY FINE BOYS IN OUR AIR FORCE AS WELL AS OUR HELPLESS PRISONERS IN THE HANDS OF THE JAPANESE, INCLUDING THE SURVIVORS OF THE MARCH OF DEATH ON BATAAN WHO ARE CERTAIN TO BE BROUGHT INTO THE CITIES THAT HAVE BEEN WARNED.

THIS WAS A TOTAL WAR AS LONG AS OUR ENEMIES HELD ALL OF THE CARDS. WHY SHOULD WE CHANGE THE RULES NOW, AFTER THE BLOOD, TREASURE AND ENTERPRISE OF THE AMERICAN PEOPLE HAVE GIVEN US THE UPPER HAND. OUR PEOPLE HAVE NOT FORGOTTEN THAT THE JAPANESE STRUCK US THE FIRST BLOW IN THIS WAR WITHOUT THE SLIGHTEST WARNING. THEY BELIEVE THAT WE SHOULD CONTINUE TO STRIKE THE JAPANESE UNTIL THEY

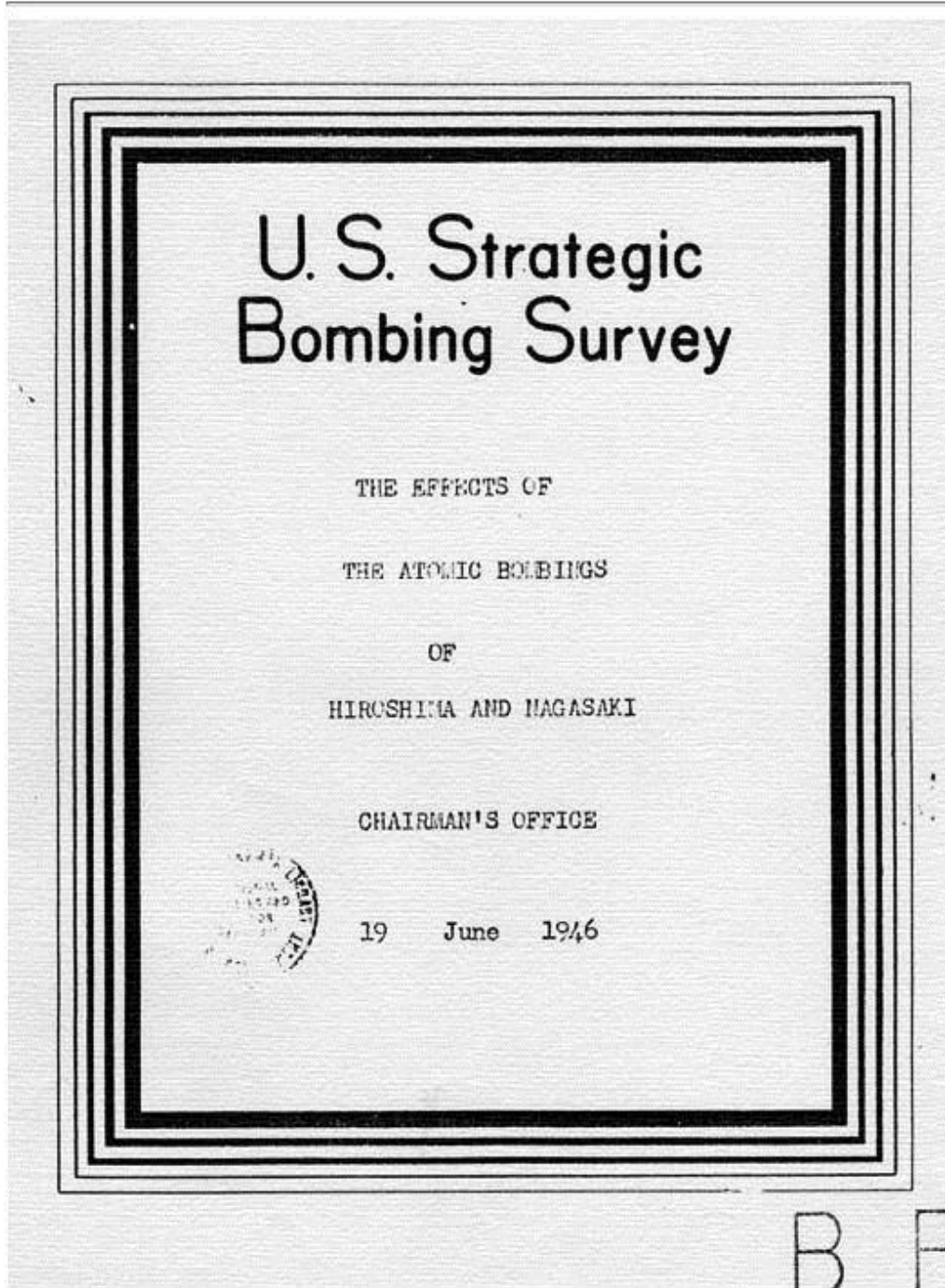
ARE BROUGHT GROVELING TO THEIR KNEES. WE SHOULD CEASE OUR APPEALS TO JAPAN TO SUE FOR PEACE. THE NEXT PLEA FOR PEACE SHOULD COME FROM AN UTTERLY DESTROYED TOKYO. WELCOME BACK HOME. WITH ASSURANCES OF ESTEEM

RICHARD B RUSSELL US SENATOR.

Harry S. Truman to Richard Russell, August 9, 1945. Official File, Truman Papers.



U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946. President's Secretary's File, Truman Papers.



II. The Effects of the Atomic Bombings.

A. The Attacks and Damage.

1. The Attacks.

A single atomic bomb, the first weapon of its type ever used against a target, exploded over the city of Hiroshima at 0815 on the morning of 6 August 1945. Most of the industrial workers had already reported to work, but many workers were enroute and nearly all the school children and some industrial employees were at work in the open on the program of building removal to provide firebreaks and disperse valuables to the country. The attack came 45 minutes after the "all clear" had been sounded from a previous alert. Because of the lack of warning and the populace's indifference to small groups of planes, the explosion came as an almost complete surprise, and the people had not taken shelter. Many were caught in the open, and most of the rest in flimsily constructed homes or commercial establishments.

The bomb exploded slightly northwest of the center of the city. Because of this accuracy and the flat terrain and circular shape of the city, Hiroshima was uniformly and extensively devastated. Practically the entire densely or moderately built-up portion of the city was leveled by blast and swept by fire. A "fire-storm", a phenomenon which has occurred infrequently in other conflagrations, developed in Hiroshima: fires springing up almost simultaneously over the wide flat area around the center of the city drew in air from all directions. The inrush of air easily overcame the natural ground wind, which had a velocity of only about five miles per hour. The "fire-wind" attained a maximum velocity of 30 to 40 miles per hour two to three hours after the explosion. The "fire-wind" and the symmetry of the built-up center of the city gave a roughly circular shape to the 4.4 square miles which were almost completely burned out.

The surprise, the collapse of many buildings, and the conflagration contributed to an unprecedented casualty rate. Seventy to eighty thousand people were killed, or missing and presumed dead, and an equal number were injured. The magnitude of casualties is set in relief by a comparison with the Tokyo fire raid of 9/10 March 1945, in which, though nearly 16 square miles were destroyed, the number killed was no larger and fewer people were injured.

At Nagasaki, three days later, the city was scarcely more prepared, though vague references to the Hiroshima disaster had appeared in the newspaper of 8 August. From the Nagasaki Prefectural Report on the bombing, something of the shock of the explosion can be inferred:

"The day was clear with not very much wind -- an ordinary mid-summer's day. The strain of continuous air attack on the city's population and the severity of the summer had vitiated

enthusiastic air raid precautions. Previously, a general alert had been sounded at 0748, with a raid alert at 0750; this was cancelled at 0830, and the alertness of the people was dissipated by a great feeling of relief."

The city remained on the warning alert, but when two B-29's were again sighted coming in the raid signal was not given immediately; the bomb was dropped at 1102 and the raid signal was given a few minutes later, at 1109. Thus only about 400 people were in the city's tunnel shelters, which were adequate for about 30 per cent of the population.

"When the atomic bomb exploded, an intense flash was observed first, as though a large amount of magnesium had been ignited, and the scene grew hazy with white smoke. At the same time at the center of the explosion, and a short while later in other areas, a tremendous roaring sound was heard and a crushing blast wave and intense heat were felt. The people of Nagasaki, even those who lived on the outer edge of the blast, all felt as though they had sustained a direct hit, and the whole city suffered damage such as would have resulted from direct hits everywhere by ordinary bombs."

"The Zero area where the damage was most severe was almost completely wiped out and for a short while after the explosion no reports came out of that area. People who were in comparatively damaged areas reported their condition under the impression that they had received a direct hit. If such a great amount of damage could be wreaked by a near miss, then the power of the atomic bomb is unbelievably great."

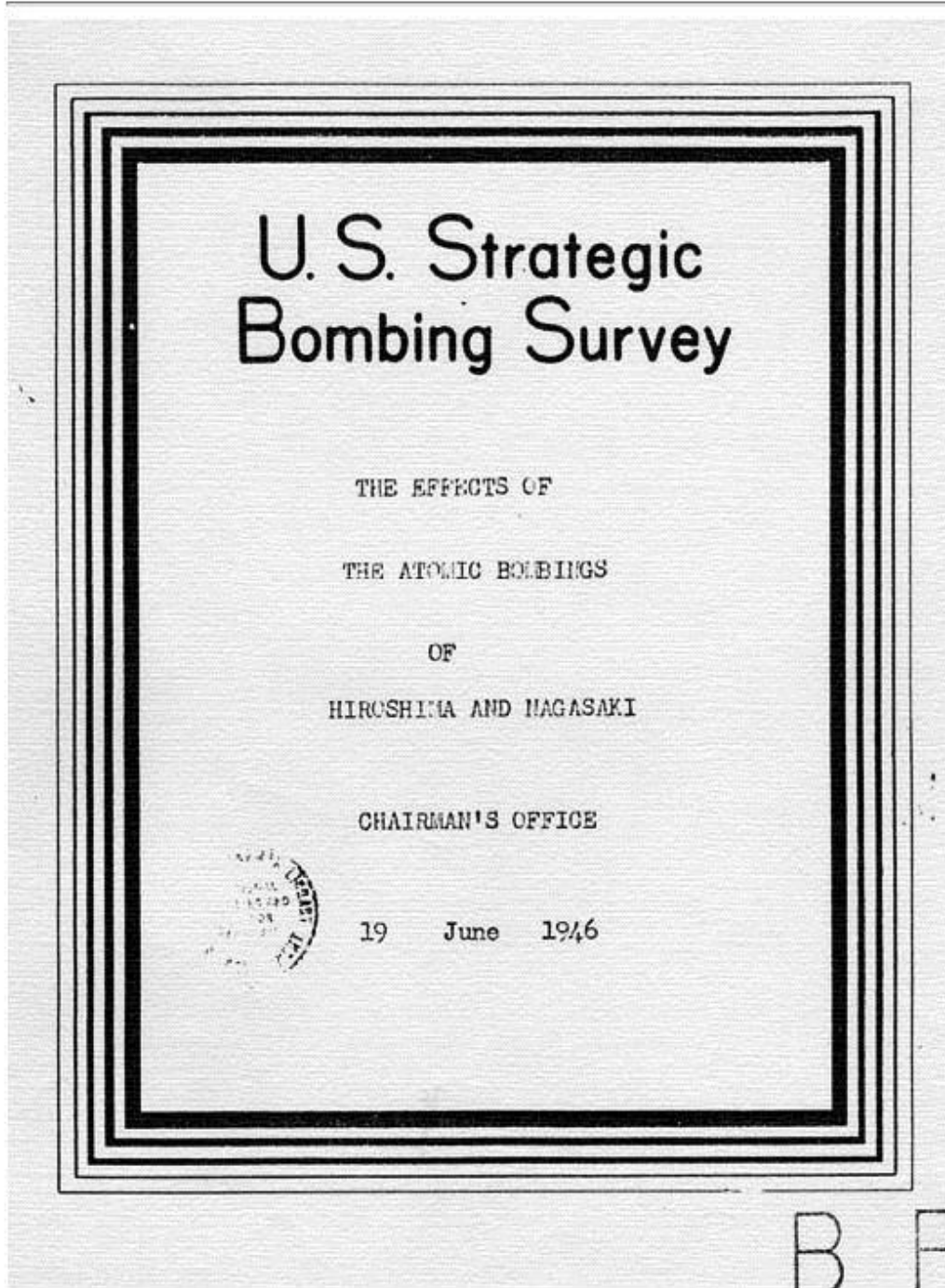
In Nagasaki, no fire storm arose, and the uneven terrain of the city confined the maximum intensity of damage to the valley over which the bomb exploded. The area of nearly complete devastation was thus much smaller: only about 1.8 square miles. Casualties were lower also; between 35,000 and 40,000 were killed, and about the same number injured. People in the tunnel shelters escaped injury, unless exposed in the entrance shaft.

The difference in the totals of destruction to lives and property at the two cities suggests the importance of the special circumstances of layout and construction of the cities, which affect the results of the bombings and must be considered in evaluating the effectiveness of the atomic bombs. An account of the nature and history of each city will give meaning to the details of the damage and disorganization at each.

2. HIROSHIMA.

The city of Hiroshima is located on the broad fan-shaped delta of the Ota River, whose seven mouths divide the city into six

U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946. President's Secretary's File, Truman Papers.



B. GENERAL EFFECTS

1. Casualties

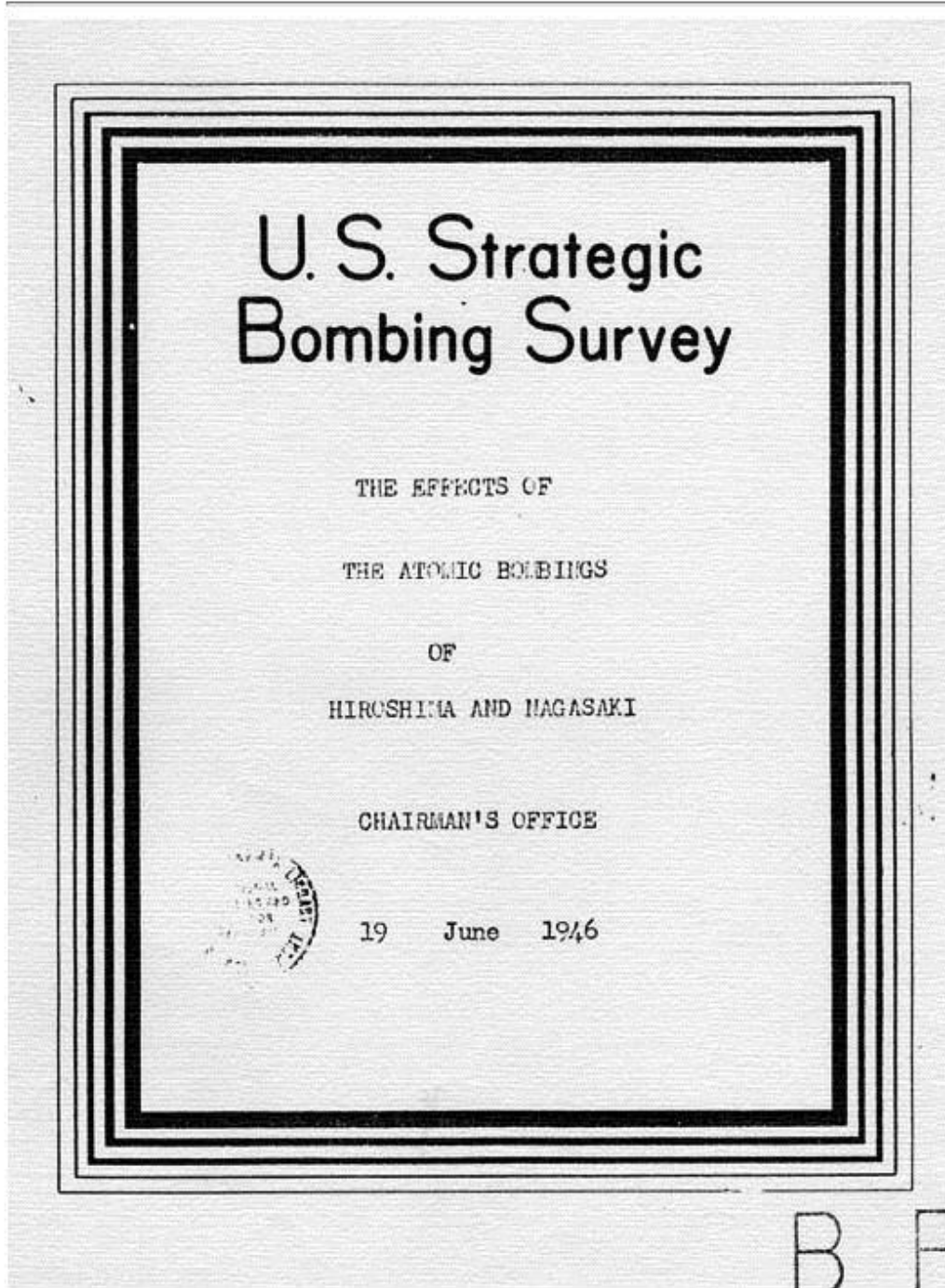
The most striking result of the atomic bombs was the great number of casualties. The exact number of dead and injured will never be known because of the confusion after the explosions. Persons unaccounted for might have been burned beyond recognition in the falling buildings, disposed of in one of the mass cremations of the first week of recovery, or driven out of the city to die or recover without any record remaining. No sure count of even the pre-raid populations existed. Because of the decline in activity in the two port cities, the constant threat of incendiary raids, and the formal evacuation programs of the government, an unknown number of the inhabitants had either drifted away from the cities or been removed according to plan. In this uncertain situation, estimates of casualties have generally ranged between 100,000 and 180,000 for Hiroshima, and between 50,000 and 100,000 for Nagasaki. The Survey believes the dead at Hiroshima to have been between 70,000 and 80,000, with an equal number injured; at Nagasaki over 35,000 dead and somewhat more than that injured seem the most plausible estimate.

Most of the immediate casualties did not differ from those caused by incendiary or high explosive raids. The outstanding difference was the presence of radiation effects, which became unmistakable about a week after the bombing. At the time of impact, however, the causes of death and injury were flash burns, secondary effects of blast and falling debris, and burns from blazing buildings. No records are available that give the relative importance of the various types of injury, especially for those who died immediately after the explosion. Indeed, many of these people undoubtedly died several times over, theoretically, since each was subjected to several injuries any one of which would have been fatal. The Hiroshima prefectural health department placed the proportion of deaths from burns (flash or flame) at 60 percent, from falling debris at 30 percent and from other injuries at 10 percent; it is generally agreed that burns caused at least 50 percent of the initial casualties. Of those who died later, an increasing proportion succumbed to radiation effects.

The seriousness of these radiation effects may be measured by the fact that 95 percent of the traced survivors of the immediate explosion who were within 3,000 feet suffered from radiation disease. Colonel Stafford Warren, in his testimony before the Senate Committee on Atomic Energy, estimated that radiation was responsible for 7 to 8 percent of the total deaths in the two cities. Most medical investigators who spent some time in the areas feel that this estimate is far too low; it is generally felt that no less than 15 to 20 percent of the deaths were from radiation. In addition, there were an equal number who were casualties but survived, as well as uncounted thousands who probably were affected by the gamma rays but not enough to produce definite illness.

A plausible estimate of the importance of the various causes of death would range as follows:

U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946. President's Secretary's File, Truman Papers.



the war continued many more weeks, whether sanctioned by the censors or spread by the ever-active rumor channels so common in the country.

It is apparent that the effect of the atomic bombings on the confidence of the Japanese civilian population was remarkably localized. Outside of the target cities, it was subordinate to other demoralizing experiences. The effect which it did have was probably due largely to the number of casualties and the nature of the injuries received. These consequences were in part the result of surprise and the vulnerability of the raid defense system. Properly enforced warnings, precautions, and an emergency care organization of the scale of the bomb's effects might have reduced casualties and, therefore, the effects on morale.

Even in the target cities, it must be emphasized, the atomic bombs did not uniformly destroy the Japanese fighting spirit. Hiroshima and Nagasaki, when compared with other Japanese cities, were not more defeatist than the average. The bombs were tremendous personal catastrophes to the survivors, but neither time nor understanding of the revolutionary threat of the atomic bomb permitted them to see in these personal catastrophes a final blow to Japan's prospects for victory or negotiated peace.

3. The Japanese Decision to Surrender.

The further question of the effects of the bombs on the morale of the Japanese leaders and their decision to abandon the war is tied up with other factors. The atomic bomb had more effect on the thinking of government leaders than on the morale of the rank and file of civilians outside of the target areas. It cannot be said, however, that the atomic bomb convinced the leaders who effected the peace of the necessity of surrender. The decision to surrender, influenced in part by knowledge of the low state of popular morale, had been taken at least as early as 26 June at a meeting of the Supreme War Guidance Council in the presence of the Emperor.

This decision did not, of course, represent the unanimous feeling of those influential in government circles. As early as the spring of 1944 a group of former prime ministers and others close to the Emperor had been making efforts toward bringing the war to an end. This group, including such men as Admiral Okada, Admiral Yonai, Prince Konoye, and Marquis Kido, had been influential in effecting Tojo's resignation and in making Admiral Suzuki Prime Minister after Koiso's fall. Even in the Suzuki cabinet, however, agreement was far from unanimous. The Navy Minister, Admiral Yonai, was sympathetic, but the War Minister, General Anami, usually represented the fight-to-the-end policy of the Army. In the Supreme War Guidance Council, a sort of inner cabinet, his adherence to that line was further assured by the participation of the Army and Navy Chiefs of Staff, so that on the peace issue this organization was evenly divided, with these three opposing the Prime

Minister, Foreign Minister, and Navy Minister. At any time military (especially Army) dissatisfaction with the Cabinet might have eventuated at least in its fall and possibly in the "liquidation" of the anti-war members.

Thus the problem facing the peace leaders in the government was to bring about a surrender despite the hesitation of the War Minister and the opposition of the Army and Navy Chiefs of Staff. This had to be done, moreover, without precipitating counter measures by the Army which would eliminate the entire peace group. This was done ultimately by bringing the Emperor actively into the decision to accept the Potsdam terms. So long as the Emperor openly supported such a policy and could be presented to the country as doing so, the military, which had fostered and lived on the idea of complete obedience to the Emperor, could not effectively rebel.

A preliminary step in this direction had been taken at the Imperial Conference on 26 June. At this meeting, the Emperor, taking an active part despite his custom to the contrary, stated that he desired the development of a plan to end the war as well as one to defend the home islands. This was followed by a renewal of earlier efforts to get the Soviet Union to intercede with the United States, which were effectively answered by the Potsdam Declaration on 26 July and the Russian declaration of war on 9 August.

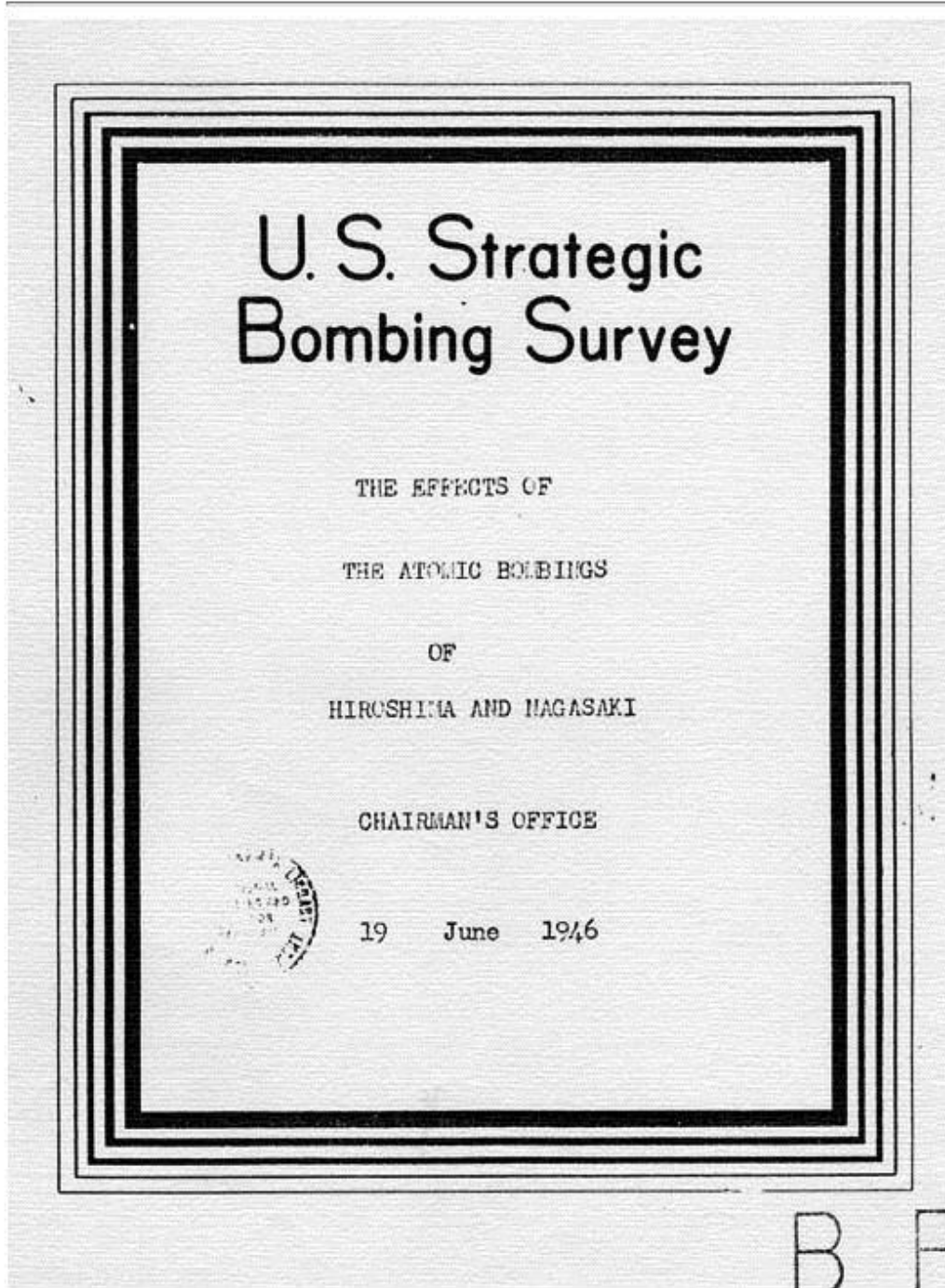
The atomic bombings considerably speeded up these political maneuverings within the government. This in itself was partly a morale effect, since there is ample evidence that members of the Cabinet were worried by the prospect of further atomic bombings, especially on the remains of Tokyo. The bombs did not convince the military that defense of the home islands was impossible, if their behavior in government councils is adequate testimony. It did permit the Government to say, however, that no army without the weapon could possibly resist an enemy who had it, thus saving "face" for the Army leaders and not reflecting on the competence of Japanese industrialists or the valor of the Japanese soldier. In the Supreme War Guidance Council voting remained divided, with the War Minister and the two Chiefs of Staff unwilling to accept unconditional surrender. There seem little doubt, however, that the bombing of Hiroshima and Nagasaki weakened their inclination to oppose the peace group.

The peace effort culminated in an Imperial conference held on the night of 9 August and continued into the early hours of 10 August, for which the stage was set by the atomic bomb and the Russian war declaration. At this meeting the Emperor, again breaking his customary silence, stated specifically that he wanted acceptance of the Potsdam terms.

A quip was current in high government circles at this time that the atomic bomb was the real Kamikaze, since it saved Japan from

further useless slaughter and destruction. It is apparent that in the atomic bomb the Japanese found the opportunity which they had been seeking, to break the existing deadlock within the government over acceptance of the Potsdam terms.

U. S. Strategic Bombing Survey: The Effects of the Atomic Bombings of Hiroshima and Nagasaki, June 19, 1946. President's Secretary's File, Truman Papers.



III. HOW THE ATOMIC BOMB WORKS

Out of the stories of Hiroshima and Nagasaki can be built up, detail by detail, the picture of how the atomic bomb works: the different forms of energy given off, the velocity and intensity of each, the sort of effects each has on animate and inanimate objects. In these factors is the real story of what happened at Hiroshima and Nagasaki, for in them chance circumstances are ruled out.

Spectators' accounts, whether of the New Mexico, the Hiroshima, or the Nagasaki explosion, describe similar pictures. At Nagasaki, for example, the bomb exploded at 1102 with a tremendous flash of blue-white light, like a giant magnesium flare. The flash was accompanied by a rush of heat and was followed by a huge pressure wave and the rumbling sound of the explosion. Curiously enough, this sound was not distinctly noted by those who survived near the center of the explosion, although it was heard as far as 15 miles away. People on the hillsides in the country at a considerable distance from Nagasaki told of seeing the blue-white and then multi-colored flash over the city, followed some seconds later by a tremendous clap, like thunder very close overhead. A huge snow-white cloud shot rapidly into the sky and the scene on the ground was obscured first by a bluish haze and then by a purple-brown cloud of dust and smoke.

The survivors were not aware at the time that a radically new bomb had been used. They were conscious of an explosion of tremendous power, but even the government had no conception, until President Truman's announcement was broadcast, of the new principle of operation. If we strip our minds of any lingering prejudice that the atomic bomb is supernatural or incomprehensible in its operation, we shall see why its uniqueness was not at first recognized.

1. The Nature of the Explosion

The atomic bomb works by explosion. An explosion is, in the words of the Smyth report, simply a "sudden and violent release of a large amount of energy in a small region." As do ordinary high explosives, atomic bombs release energy, though on an unprecedented scale. The energy takes three forms (one of which is new), and all the effects of the bomb can be referred directly to these three kinds of energy. They are:

- (1) Heat (which is present in other explosions, as the familiar injuries known as "flash burns" on warships illustrate, but ordinarily not at high enough diffused temperatures to burn a man or set fire to combustible objects at any considerable distance from the explosion.)
- (2) Radiation (similar to x-rays or to that from radium.)
- (3) Blast or pressure (as from a demolition bomb.)

The whole discussion of the effects of the atomic bomb will be phrased in terms of these three kinds of energy. No other more mysterious or immeasurable forces acted; these were all.

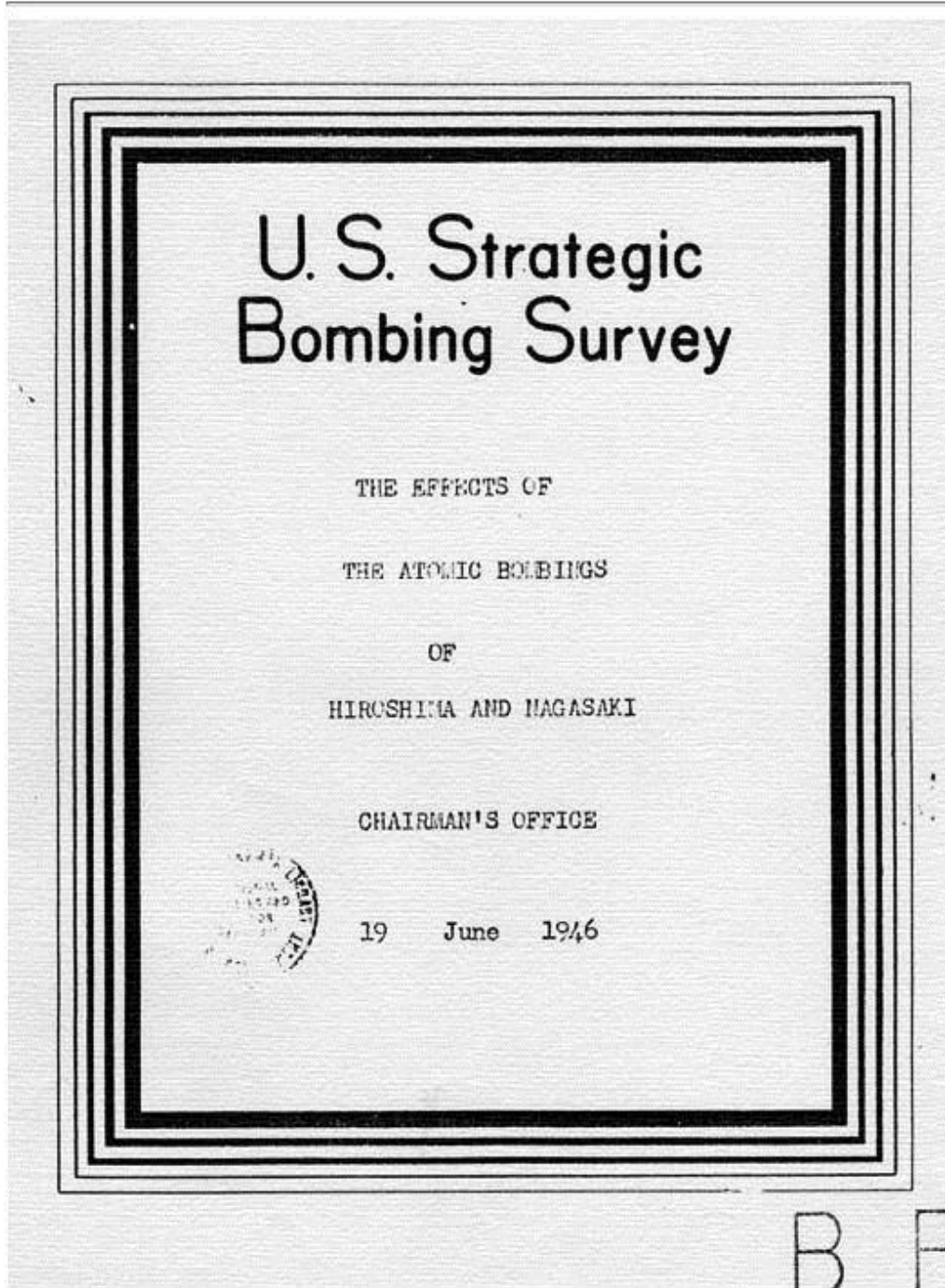
These were enough. The energy released in atomic explosion is of such magnitude and from so concentrated a source that it sets entirely new problems in its use or in protection against it. Ordinary burning or explosion is a chemical reaction in which energy is released during the rearrangement of the atoms of the explosive material. In an atomic reaction, however, the identity of the atoms, not simply their arrangement, is changed. The change is more fundamental: in it, matter is transformed into energy. The energy released when a pound of nitroglycerine explodes, would, when converted into heat, raise the temperature of 150 pounds of water by 18° Fahrenheit. The explosion of a pound of uranium would produce an equal temperature rise in 2 billion pounds of water. Clearly, only a small part of the mass in the bomb's active core need be transformed to give an explosion of tremendous power.

At the time of the explosion, then, energy was given off in the forms of light, heat, gamma radiation, and pressure. The whole range of radiations, indeed, seems to have been present. There were heat radiations in the low frequency band below infra-red, visible waves of all colors (as the eyewitness accounts show), and penetrating radiations of very high frequency generally grouped as "gamma rays". Light and radiant heat ("flash heat") sped out in all directions at a rate of 186,000 miles per second, and the gamma rays at the same rate (though their effect was not immediately obvious.) The shock waves travelled much more slowly: it may be inferred from tests with high explosives that the rate at a relative short distance from the point of explosion was about two miles per second, and dropped rapidly to the speed of sound, or about one fifth of a mile per second. Thus the light, heat, and gamma radiation reached the target first, followed by shock and sound and the high winds of the blast.

(2) Heat

The center of the explosions--several hundred feet above ground--was a ball of fire. Because the radiant heat given off at the explosion easily charred combustible objects while passing so quickly that surfaces not in the direct line of radiation were unaffected, there are clearly marked "shadows" visible where objects were shielded against the heat. By projecting back the sharply defined outlines of these shadows, Japanese and Allied scientists have determined the height and diameter of the fireball. The two fireballs were apparently several hundred feet in diameter. The temperature at their core was virtually inconceivable--millions of degrees Centigrade. Even at its edge, the temperature was several thousand degrees; reasoning from the heat effects observed on human beings, bubbled roof tile,

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IV. SIGNPOSTS. The Danger, and What We Can Do About It.

A. The Danger.

The Survey's investigators, as they proceeded about their study, found an insistent question framing itself in their minds: "What if the target for the bomb had been an American city?" True, the primary mission of the Survey was to ascertain the facts just summarized. But conclusions as to the meaning of those facts, for citizens of the United States, forced themselves almost inescapably on the men who examined thoughtfully the remains of Hiroshima and Nagasaki. These conclusions have a different sort of validity from the measurable and ponderable facts of preceding sections, and therefore they are presented separately. They are not the least important part of this report, however, and they are stated with no less conviction.

No two cities, whether in Japan or the United States, are exactly alike. But the differences in terrain, layout and zoning, density, and type of construction can be allowed for one by one; when that is done, comparisons become possible. The most striking difference between American and Japanese cities is in residential districts: what happened to typical Japanese homes is not directly applicable to American residential districts. But in Japanese cities were many brick and wood frame buildings of Western or similar design and of good workmanship. It was the opinion of the Survey's engineers, with their professional familiarity with American buildings, that these Japanese buildings reacted to the bomb much as typical American buildings would have. And these buildings were exceedingly vulnerable: multi-story brick buildings with load-bearing walls were destroyed or seriously damaged over an area of 3.6 square miles at Hiroshima, while similar one-story brick buildings were destroyed or seriously damaged within an area of six square miles. Wood frame buildings built as industrial or commercial shops suffered similar damage in an area of over eight miles, while Japanese residences were destroyed or seriously damaged within an area of six square miles. This was at Hiroshima, where the less powerful bomb was used!

These figures indicate what would happen to typical wood, brick, and stucco structures in American cities. Modern reinforced concrete and steel frame buildings would fare better here -- as they did in Japan. But the following table shows how American cities are built, and how few are of blast-resistant construction.

CITY	TYPES OF STRUCTURES BY EXTERIOR MATERIAL (U.S. CITIES)					OTHER NUMBER	%
	TOTAL STRUCTURES REPORTED	WOOD	BRICK	STUCCO			
New York	591,319	236,879	299,482	41,661	13,297	2.2%	
Washington	156,359	48,971	95,939	5,764	5,685	3.5%	
Chicago	382,628	131,148	238,959	5,797	6,724	1.7%	
Detroit	267,677	165,488	94,333	1,923	5,933	2.2%	
San Francisco	105,180	61,172	2,334	40,902	722	0.7%	

SOURCE: 16th Census of U.S. (1940) Vol. II.

The overwhelming bulk of the buildings in American cities could not stand up against an atomic bomb bursting a mile or a mile and a half from them.

And the people? We must not too readily discount the casualty rate because of the teeming populations of congested Japanese cities. American cities too have their crowded slums, and in addition tend to build vertically so that the density of the population is high in a given area even though each apartment dweller may have more living space than his Japanese equivalent.

CITY	POPULATION DENSITIES U.S. AND JAPANESE CITIES		
	POPULATION	AREA SQ. MI.	POPULATION DENSITY PER SQ. MILE
New York	7,492,000	322.8	23,200
Manhattan (day)	3,200,000	22.2	145,000
Manhattan (night)	1,689,000	22.2	76,000
Bronx	1,493,700	41.4	34,000
Brooklyn	2,792,600	80.9	34,200
Queens	1,340,500	121.1	11,000
Staten Island	176,200	57.2	3,000
Washington	663,091	61.4	11,000
Chicago	3,396,808	206.7	16,500
Detroit	1,623,452	137.9	11,750
San Francisco	634,536	44.6	14,250
Hiroshima	340,000	26.5	12,750
	(pre-war)		
Center of City	184,000	4.0	46,000
	(1 Aug 45)		
Nagasaki	250,000	35.	7,000
	(pre-war)		
Built-up area	220,000	3.4	65,000
	(1 Aug '45)		

SOURCE: New York: Fortune, July, 1939 - Other U.S. cities: 16th Census of U.S. (1940)

Most of the population densities in this table are merely averages for people within a city limits. Most meaningful, therefore, are the figures for the central areas of Hiroshima and Nagasaki, and for the boroughs of New York. The casualty rates at Hiroshima and Nagasaki, applied to the massed inhabitants of Manhattan, Brooklyn, and the Bronx, yield a grim conclusion. These casualty rates, it must never be forgotten, result from the first atomic bombs to be used and from bombs burst at considerable distances above the ground. Improved bombs, perhaps detonated more effectively, may well prove still more deadly.

B. What We Can Do About It.

The danger is real -- of that, the Survey's findings leave no doubt. Scattered through those findings, at the same time, are the clues to the measures that can be taken to cut down potential losses of lives and property. These measures must be taken or initiated now, if their cost is not to be prohibitive. But if a policy is laid down, well in advance of any crisis, it will enable timely decentralization of industrial and medical facilities, construction or blueprinting of shelters, and preparation for life-saving evacuation programs. The almost unprotected, completely surprised cities of Japan suffered maximum losses from atomic bomb attack. If we recognize in advance the possible danger and act to forestall it, we shall at worst suffer minimum casualties and disruption.

Since modern science can be marshalled for the defense as well as the attack, there is reason to hope that protective weapons and techniques will be improved. Even protective devices and vigilance, however, cannot be perfect guards against surprise or initial attack, or against the unlimited choices of targets offered an enemy through the range and speed of modern weapons. In our planning for the future, if we are realistic, we will prepare to minimize the destructiveness of such attacks, and so organize the economic and administrative life of the nation that no single or small group of successful attacks can paralyze the national organism. The foregoing description of the effectiveness of the atomic bomb has shown clearly that, despite its awesome power, it has limits of which wise planning will take prompt advantage.

B File