



UNDERSTANDING
SACRIFICE

Activity: Industry's Role in the Strategic Bombing Campaign



Guiding question:

How did industrial workers contribute to the U.S. strategic bombing campaign in Europe?

DEVELOPED BY MICHELE ANDERSON

Grade Level(s): 6-8, 9-12

Subject(s): Social Studies

Cemetery Connection: Epinal American Cemetery

Fallen Hero Connection: Sergeant Norman J. Stewart



Overview

Using interactive technology from the American Battle Monuments Commission, timelines, and primary and secondary sources, students will learn about the strategic bombing campaign during World War II, while analyzing why Americans worked in wartime industries, such as the B-24 Willow Run bomber plant.

Historical Context

Part of United States military preparations before the bombing of Pearl Harbor involved the production of large B-24 heavy bombers. The B-24 was capable of flying long missions and delivering explosives to enemy targets. The strategic bombing campaign, for which the B-24 Liberator bomber would be used, would traverse dangerous enemy territory and engage in air-to-air combat against faster enemy aircrafts. Henry Ford, president of the Ford Motor Company, entered into a government contract to build the Consolidated Aircraft Company's design of the B-24 bomber. Ford announced that his company could build a B-24 faster than the Consolidated Aircraft Company. He pledged to have a completed B-24 bomber roll off of his assembly line every hour. By 1944, Henry Ford's Willow Run bomber plant in Michigan lived up to his promise. He avoided labor shortages by expanding the employee pool to include women. People from across the country moved near the Willow Run bomber plant to build the bomber that some local young men would fly in missions during World War II.

“Time restrictions often force teachers to generalize World War II events during instruction. I wanted to personalize World War II for students by providing a soldier’s name, face, and plane, while helping students connect how the soldier’s hometown was linked to his role in the war.”

— Michele Anderson

Anderson teaches at John Glenn High School in Westland, Michigan.

Objectives

At the conclusion of this lesson, students will be able to

- Describe the strategic bombing campaign;
- Analyze and describe the dangers associated with the strategic bombing campaign;
- Identify some of the reasons why Americans worked in war factories; and
- Demonstrate how one lone B-24 fit into the larger context of World War II.

Standards Connections

Connections to Common Core

CCSS.ELA-LITERACY.SL.9-10.1 Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.

CCSS.ELA-Literacy.RH.11-12.3 Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.

CCSS.ELA-Literacy.RH.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

Connections to C3 Framework

D1.5.9-12. Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration multiple points of view represented in the sources, the types of sources available, and the potential uses of the sources.

D2.His.8.9-12. Analyze how current interpretations of the past are limited by the extent to which available historical sources represent perspectives of the people at the time.

Documents Used ★ indicates an ABMC source

Primary Sources

Film, *The Story of Willow Run*

Ford Motor Company

<https://archive.org/details/74182StoryOfWillowRun>

"School Principal Accepts Position at Bomber Plant," *The Farmington Enterprise*, May 28, 1942

<http://history.farmlib.org/localhist/npageturn.cgi?papername=Farmington+Observer+et+al&id=4823>

Photograph, *Golden Crew*

Kassel Mission Historical Society

<http://www.kasselmission.com/galleryKMCrews.html#golden>

Photograph, *Norman J. Stewart*, 1943
Farmington High School

Photograph, *Ole Baldy*
Roger Freeman Collection, American Air Museum in Britain (FRE 7899)
<http://www.americanairmuseum.com/media/10514>

Poster, *Front Lines of Labor Help Win the War*
National Archives and Records Administration (NWDNS-44-PA-846)
<https://www.flickr.com/photos/usnationalarchives/3903231345/>

Willow Run Recruitment Handbill, Ford Motor Company
Benson Ford Research Library

Secondary Sources

Detroit: The Arsenal of Democracy Interactive Map
Detroit Historical Society
<http://wwii.detroithistorical.org/>

Norman J. Stewart Fallen Hero Profile ★
American Battle Monuments Commission

Strategic Bombing Campaign Interactive ★
American Battle Monuments Commission
https://www.abmc.gov/sites/default/files/interactive/interactive_files/SBC_Web/index.html

World War II: A Visual History ★
American Battle Monuments Commission
https://www.abmc.gov/sites/default/files/interactive/interactive_files/WW2/index.html

Materials

- Strategic Bombing Campaign Organizer
- Crew Cards
- *Ole Baldy's* World War II Timeline
- *Ole Baldy's* World War II Timeline Rubric
- Teacher access to a computer with a projector or Smartboard
- Speakers
- Paper to create a timeline

Lesson Preparation

- Make one copy for each student:
 - Strategic Bombing Campaign Organizer
 - *Ole Baldy's World War II Timeline*
 - *Ole Baldy's World War II Timeline Rubric*
- Print and cut copies of the Crew Cards.
 - *Teacher Tip:* There are six crew cards. Duplicate as needed to have enough for your class.
- Set up classroom technology and test all online resources before class.
- Cue the *ABMC Strategic Bombing Campaign Interactive* clips.
- Make copies of the primary source documents if not projecting the images.

Procedure

Activity One: Introduction to Strategic Bombing (15 minutes)

- Describe to students the purpose of the strategic bombing campaign. Using the Strategic Bombing Campaign Organizer, have students predict what dangers might be associated with this type of campaign.
- Go to the *Strategic Bombing Campaign Interactive*. Play for the students:
 - Prelude
 - July 1941-Dec. 1941
 - Jan. 1942-Dec. 1942
 - Dec. 1942-May 1943
- Allow students to compare and contrast their predictions to the dangers described in the video using the Strategic Bombing Campaign Organizer.
- Ask students, *What additional dangers might the crewmen of the heavy bombers have faced if the U.S. was unable to build enough warplanes?* Reveal the bomber crews also faced the stress of cold temperatures at high altitudes, long flights in confined spaces, and higher casualty rates than other military personnel.
- Ask students to complete the reflection question regarding the reasons women worked in wartime industries.
- Discuss student responses.

Activity Two: The Factory Workers (20 minutes)

- Ask students, *Why might someone want to go to work in a dirty wartime factory?*
- Project (or distribute copies) of the *Front Lines of Labor Help Win the War* poster. Have students analyze the message the author was trying to convey.

- *Teacher Tip:* Make sure students do not miss the description of women as girls, women's patriotism, and the modern Betsy Ross.
- Ask students, *In what ways might this poster entice women to want to work at the Willow Run bomber plant?*
- Project (or distribute copies) of the Willow Run Recruitment Handbill. Facilitate a discussion about the expectations of women in American society:
 - *In what ways did this poster go against those expectations?*
 - *Why might women have answered the handbill and gone to work at the Willow Run plant despite women's roles in American society?*
 - *How might men have responded to the Willow Run Recruitment Handbill?*
 - *In what ways could workers at Willow Run be connected to the bomber crewmen that flew in the B-24 Liberators?*
- Distribute the newspaper article, "School Principal Accepts Position at Bomber Plant." Ask students to read the article and report how the principal might be connected to the bomber crews.

Activity Three: The Golden Crew (15 minutes)

- Randomly give each student a Crew Card.
- Project (or distribute copies) of the photograph of the Golden Crew. Ask students to examine the picture.
 - *Who do they think took the picture?*
 - *Where do they think the picture was taken?*
 - *Which crew member in the picture do they think matches their Crew Card? Why?*
- Project onto the screen the senior picture of Norman J. Stewart.
- Ask students, *Can you identify Stewart in the crew picture?*
- Explain that Norman was the tail turret gunner on *Ole Baldy*. Norman graduated from Farmington High School in Farmington, Michigan. His former junior high principal was Robert Stewart (no relationship to Norman).
- Show students the picture of *Ole Baldy*, Norman's B-24 bomber built at the Willow Run bomber plant in Michigan.
- Instruct students they will be watching a four-minute video segment from a film called *The Story of Willow Run*. As they watch, have students write down a short description of the job found on their Crew Card.
- Play for the students Norman Stewart's eulogy from his fallen hero profile. This will allow the students to find out what happened to *Ole Baldy*.

- Ask students to complete their Crew Card and collect.

Assessment (50 minutes)

- Explain to students they will be creating a timeline of a special B-24, *Ole Baldy*, built at the Willow Run bomber plant. It was special because *Ole Baldy's* tailgunner, Norman Stewart, was from Farmington, Michigan. Some of the Farmington residents, like Norman's former junior high principal, worked at the Willow Run bomber plant.
- Distribute copies of *Ole Baldy's* World War II Timeline and Rubric and review the instructions.
- Allow students time to complete the timeline using various resources such as the ABMC *World War II: A Visual History*.
- Allow students to present their finished timelines. Have them describe why the events included on their timeline were important.
- Display completed timelines throughout the room.

Methods for Extension

- Students can identify the geographical places *Ole Baldy* traveled by drawing a circle on a world map of each place and writing in the event.
- Students may use the *Detroit: The Arsenal of Democracy Interactive Map* to discover companies who built war materials during World War II.
- Students can research war materiel built in or near their community and how those materiel contributed to helping the Allies win the war.
- The American Battle Monuments Commission maintains U.S. military cemeteries overseas. These cemeteries are permanent memorials to the fallen, but it is important that students know the stories of those who rest here. To learn more about the stories of some of the men and women who made the ultimate sacrifice, visit www.abmceducation.org/understandingsacrifice/abmc-sites.

Adaptations

- Teachers can adapt the lesson by allowing students to work with a partner on the Strategic Bombing Campaign Organizer.
- Teachers can do a read-aloud with students for the newspaper reading.

Strategic Bombing Campaign Organizer

Before watching the film clips from the *Strategic Bombing Campaign Interactive*, predict the dangers you believe United States heavy bombers faced during World War II. As you watch the clips, write down at least three dangers you viewed. After watching the video, reflect with your classmates and list other difficulties heavy bomber crews may have experienced that the film did not portray.

| Your Predictions | Dangers You Saw | Additional Dangers |
|------------------|-----------------|--------------------|
| | | |

Strategic Bombing Campaign Organizer

Reflection: The film showed women working in the airplane factories. During an era of workplace discrimination, what events and attitudes might have influenced women to work in wartime industrial plants?

Ole Baldy's World War II Timeline

Your task is to follow the journey of *Ole Baldy*, a B-24, through World War II. Using the events listed below and the American Battle Monuments Commission's interactive, *World War II: A Visual History*, (https://www.abmc.gov/sites/default/files/interactive/interactive_files/WW2/index.html), you will conduct research to gather information about events surrounding *Ole Baldy's* time in service.

Create a timeline using words and illustrations to represent the events. All events must include the month, date, and year. You need to include all of the elements included in the rubric.

Ole Baldy's Major World War II Events

May 5, 1944: *Ole Baldy* rolled off of the Willow Run assembly line and was flown to England by Second Lieutenant Charles E. Hauge.

May 13, 1944: *Ole Baldy* arrives at Debach, England and becomes part of the 493rd Bomb Group.

June 6, 1944: *Ole Baldy* flies its first combat mission at Normandy, France as part of D-Day air support.

August 15, 1944: *Ole Baldy* is transferred to the 445th Bomb Group and becomes the Golden Crew's plane.

September 27, 1944: *Ole Baldy* is shot down during the Kassel Mission near Fulda, Germany.

Ole Baldy's World War II Timeline Rubric

| | Advanced | Proficient | Basic | Emerging |
|--|--|--|--|---|
| Ole Baldy's major events are included. | All major events are included and enhanced with additional details. | All major events are included. | Most major events are included. | Few or none of these events are included in the final product. |
| Illustrations included for Ole Baldy's events. | At least three of <i>Ole Baldy's</i> events are accompanied by illustrations. | At least two of <i>Ole Baldy's</i> events are accompanied by illustrations. | At least one of <i>Ole Baldy's</i> events are accompanied by illustrations. | None of <i>Ole Baldy's</i> events are accompanied by illustrations. |
| Five additional relevant World War II events are included. | Five additional relevant World War II events are included. These events demonstrate historical thinking. | Four additional relevant World War II events are included. It is clear how these events connect to the story of <i>Ole Baldy</i> . | Three additional relevant World War II events are included. These events are somewhat connected to the story of <i>Ole Baldy</i> . | Zero to two additional relevant World War II events are included. These events may or may not be connected to the story of <i>Ole Baldy</i> . |
| Illustrations included for World War II important events. | At least three additional events are accompanied by appropriate illustrations. | At least two additional events are accompanied by appropriate illustrations. | At least one additional event is accompanied by an appropriate illustration. | No additional events are accompanied by appropriate illustrations. |
| The beginning and end of World War II is included with appropriate illustrations. | The beginning and end of World War II is included with appropriate illustrations. | The beginning and end of World War II is included, but lack illustrations. | The events are noted but illustrations may not be accurate or appropriate. | These events and illustrations are missing from the timeline. |
| The timeline has an appropriate title. | The timeline has an appropriate title that grabs the reader's attention. | The timeline has an appropriate title. | The timeline has a title that does not describe the content. | The timeline lacks a title. |
| The content is historically accurate. | The content is historically accurate with no errors. | The content is historically accurate with only minor errors. | The content contains significant errors. | The content contains significant errors. |
| The timeline is free of grammatical mistakes. | The content is grammatically accurate with no errors. | The content is grammatically accurate with only minor errors. | The content contains multiple grammatical errors. | The content contains significant grammatical errors that impede understanding. |
| The timeline is neat and easy to read. | The timeline is neatly and professionally produced. | The timeline is neatly and professionally produced with only minor issues. | The timeline is challenging to read and follow. | The timeline is unprofessional and difficult to understand. |

Crew Card

Sergeant Earl Romine

1. Look at the caption on the picture. Which job on the B-24 was he assigned?
2. After watching the video and using your own ideas, describe why his job was important on a B-24.
3. After watching Norman's eulogy, write down what you think your crew member would say at Norman's grave.



Crew Card

Sergeant Edward Feltus

1. Look at the caption on the picture. Which job on the B-24 was he assigned?
2. After watching the video and using your own ideas, describe why his job was important on a B-24.
3. After watching Norman's eulogy, write down what you think your crew member would say at Norman's grave.

Crew Card

Sergeant Jack Erickson

1. Look at the caption on the picture. Which job on the B-24 was he assigned?
2. After watching the video and using your own ideas, describe why his job was important on a B-24.
3. After watching Norman's eulogy, write down what you think your crew member would say at Norman's grave.



Crew Card

Sergeant Norman Stewart

1. Look at the caption on the picture. Which job on the B-24 was he assigned?
2. After watching the video and using your own ideas, describe why his job was important on a B-24.
3. After watching Norman's eulogy, write down what you would say at Norman's grave.

Crew Card

Sergeant Robert Bagley

1. Look at the caption on the picture. Which job on the B-24 was he assigned?
2. After watching the video and using your own ideas, describe why his job was important on a B-24.
3. After watching Norman's eulogy, write down what you think your crew member would say at Norman's grave.



Crew Card

Lieutenant William Golden

1. Look at the caption on the picture. Which job on the B-24 was he assigned?
2. After watching the video and using your own ideas, describe why his job was important on a B-24.
3. After watching Norman's eulogy, write down what you think your crew member would say at Norman's grave.

"School Principal Accepts Position at Bomber Plant," May 28, 1942

The Farmington Enterprise

RESIGNS



ROBERT STEWART
**SCHOOL PRINCIPAL
ACCEPTS POSITION
AT BOMBER PLANT**

Robert Stewart, who has been principal of the Farmington Elementary and Junior High School for the past five years, will leave his teaching duties here at the end of the school year. Mr. Stewart came to Farmington in 1937, and since that time has been a familiar figure in local activity.

Mr. Stewart graduated from Clinton High School, and holds a B.S. degree from Michigan State Normal School. His graduate work was taken at Wayne University. Before coming to Farmington he was at the Marlette Township Unit School where he was principal of the Junior High School for three years.

Mr. Stewart is leaving Farmington to take a position at the Willow Run Bomber plant at Ypsilanti. He and Mrs. Stewart expect to move about the middle of June to their new home in Ann Arbor.

Besides his work in the school, Mr. Stewart was a member of the Methodist Men's Club and was active in the Parent Teachers Association, and the Michigan Education Association. His friendship and help will be missed by those who knew him and worked with him.

Photograph, *Golden Crew*

Kassel Mission Historical Society



Standing left to right: Sergeant Earl Romine, engineer; Lieutenant Norman Lubitz, navigator; Lieutenant William Golden, pilot; Lieutenant Chester Droog, bombardier

Kneeling: Sergeant Edward Feltus, waist gunner; Sergeant Jack Erickson, radio operator and gunner

Sitting: Sergeant Pendleton Raines, waist gunner; Sergeant Norman Stewart, tail gunner; Sergeant Robert Bagley, ball turret gunner

Photograph, *Norman J. Stewart*, 1943

Farmington High School



Photograph, *Ole Baldy*

Roger Freeman Collection, American Air Museum in Britain (FRE 7899)



Poster, *Front Lines of Labor Help Win the War*

National Archives and Records Administration (NWDNS-44-PA-846)



Willow Run Recruitment Handbill, Ford Motor Company

Benson Ford Research Library

FORD MOTOR COMPANY

WILLOW RUN

The Largest Bomber Plant in the World

Located in Detroit Area

NEEDS: MEN and WOMEN

to train for work in aircraft industry. MINIMUM AGE: 18 years.

INEXPERIENCED PERSONS WILL BE GIVEN 8 WEEKS' TRAINING WITH PAY
at the following rates:

| | |
|--------------------------------|--------------------------------|
| 1st 2 weeks at \$.85 per hour | 3rd 2 weeks at \$.95 per hour |
| 2nd 2 weeks at .90 per hour | 4th 2 weeks at 1.00 per hour |

*Trainees then should be qualified for semi-skilled classification paying top rates.
Women paid same rates as men.*

WORKING HOURS: 9 hours per day, 6 days per week—total 54 hours per week. Time and one-half is paid for all time over 40 hours per week.

EDUCATIONAL PROGRAM: Ford Motor Company has one of the finest training schools in the country. There are 32 mechanical courses offered, for which any employee is eligible without cost.

EXCELLENT OPPORTUNITY FOR FURTHER ADVANCEMENT

Clean, Interesting and Pleasant Work in New, Modern Building

Physical Examination

Men Must Be Draft Deferred

TRANSPORTATION PAID

Federal Housing Available for All Employees at Reasonable Rates

Housing Located About Two Miles From Plant

| | | |
|---------------------------------------|-------|---|
| Single Rooms | - - - | \$ 5.00 per week |
| Double Rooms | - - - | 3.50 per week each person |
| Furnished Apartments for man and wife | | 6.50 per week |
| Family Housing of 1-2-3 Bedrooms | | 23.50 to \$38.50 per month, depending upon size of family |

Churches, School, Cafeterias, Theatre and Recreational Facilities on Housing Premises.

PERSONS NOW EMPLOYED IN ESSENTIAL WAR WORK NOT CONSIDERED UNLESS
RELEASED THROUGH WAR MANPOWER COMMISSION

Company Representative Will Interview at:

UNITED STATES EMPLOYMENT SERVICE
of the WAR MANPOWER COMMISSION



From the Collections of The Henry Ford (THF129178)