Aerospace Industry In WWII

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Title: The Aircraft War Production Council

Objective: Students will learn about the changes that happened in the West Coast industrial complex and factories due to the entry of the United States into WWII.

Students will answer guided questions from selected quotes taken directly from a 1943 primary source newspaper article about the Aircraft War Production Council which was created to increase production of warplanes in WWII, moving away from traditional competitive capitalism.

Final Task: Students will be able to rank and analyze the actions taken by the Aircraft War Production Council that were most and least effective in the production of warplanes to meet President Roosevelt’s quota.

Time: 30 minutes to present PowerPoint; 60 minutes to complete lesson

Materials:
- Document “The Aircraft War Productions Council: Primary Source Document Analysis” - one per student (attached below on P. 3)
- Copy of the article “60,000 Warplanes a Year!” for teacher reference [pg 1, pg 2] Hyperlinked here
- Copy of Essential Question
- Google slides/powerpoint of “WWII American Aerospace Industry” background information. [This can be used by teacher to learn about basics of the historical event, or shared with students, at discretion of teacher]

Essential Question: What actions did West Coast industrial factories take to drastically increase production of warplanes deemed necessary to win WWII?

LESSON:
1. Show Powerpoint to provide background to the topic (this can be presented to the students by teacher for synchronous discussion, or given access ahead of time, asynchronously, then discussed)
2. Present the Essential Question to students and discuss its meaning with students, clarifying terms as needed.
3. Each student will receive a copy of the document “The Aircraft War Productions Council: Primary Source Document Analysis” (either online copy or paper copy)
4. Students will answer questions embedded in document that are aligned to the text excerpts
5. Students will use answers from worksheet to complete FINAL TASK - ranking of the most and least effective collaborative actions of the Airplane War Production Council.

**Assessment:** Teachers will assess the responses written by students in the “The Aircraft War Productions Council: Primary Source Document Analysis.” If point value is weighted, more value should be given to the last two questions that require students to rank choices and provide evidence to support claims.

**Extensions (optional):**
1. Compile the data from the FINAL TASK - the student rankings for the most and least effective collaborative actions of the Airplane War Production Council. Create a chart or graph that visually shows the results from the class ranking and discuss the data, ex.: why were certain actions considered more effective than others?. [Possible ways to gather/sort data can be done through Google Forms, mentimeter.com, etc.]

2. Give each student a copy of the *Map of the Aircraft War Production Council Warplane Factories* document. Have students complete the two questions assigned. (This could be done in pairs, or small groups)
   
   [**Note: This would have to be done after “The Aircraft War Production Council Primary Source Document Analysis” and the PowerPoint discussion.**]

3. Provide students copies of the pdf of the entire primary source “60,000 War Planes A Year!” so they can read and discuss the entire document.

4. Document: *Economic Concentration and World War II (1946 Congressional Report)* Have students analyze the data. [suggestions:]
   a. Compare sizes of usable facilities square footage
   b. Compare values and percentages of prime war supply contracts
   c. Look for the names of the nine members of the Aircraft War Production Council. Draw inferences from names present or missing.

5. Discuss other times in US history when companies or industries with competing interests have united or allied to solve or address a problem. [One example could be the pursuit to create a vaccination for the COVID-19 pandemic]
   a. What prompted these collaborations?
   b. How successful were these collaborations?
   c. What were the long-term effects of these collaborations?
The Aircraft War Production Council: Primary Source Document Analysis

“60,000 WARPLANES A YEAR!” by Donald Douglas

**Source:** The Evening Star, Washington D.C. December 13, 1942

1. Look at the source for this document. What importance would the publication date and publication location have?

2. The image above is the title of the newspaper article, and the main image for the article.

2a. Describe what is happening in the image.

2b. Explain what is meant by the title: “60,000 Warplanes A Year!”
3. The text above is the beginning of the article. Read it and answer the following questions:

3a. What did President Franklin Roosevelt demand?

3b. What was the event that led the President to make this demand?

3c. Douglas believes they will meet and surpass the demand of 60,000 warplanes by 125,000 warplanes. He claims this is true because: “It has been possible only because of the ability of free enterprise to submerge private interests in the emergency and voluntarily function as a free industry.”
Finish the sentence starter below by restating Douglas’s claim using simplified terms:

“It has been possible only because:

4. Read this excerpt and answer the two questions below:

Let me take you backstage for a glimpse of how democracy functions when it is behind the eight ball. The presidents of eight aircraft companies located in Southern California — Consolidated, Douglas, Lockheed, North American, Northrop, Ryan, Vega and Vultee — and frequently a spokesman for the Boeing Aircraft Company of Seattle, are seated around a big table in an office in Los Angeles. We are all rugged individualists and keen rivals. Prior to the war, we had almost nothing to do with each other, and this zealous competitive spirit swept down through the ranks of our thousands of employees.

AROUND the table, we discovered that the sudden plunge into all-out warfare had given us much in common. We had to black out our plants, protect them from sabotage, train women to replace thousands of our men whom the Army and Navy wanted, develop new sources of supplies, find ways of turning out planes as they had never been produced before. Working around the clock, our factories were building 64 per cent of the warplanes manufactured in this country. Straining every resource, we had managed to step up the combined industry production to 1,800 planes a month for the Army, the Navy, and for our allies.

4a. List the nine aircraft companies that are members of the partnership listed in the text above. Eight of the nine are from Southern California, highlight the one that is located in Washington State.

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4b. Prior to the war, these nine companies were direct business competitors, yet this was changed by the United States joining WWII. In the table below, list the five challenges they found in common:

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President Roosevelt upped his request to 185,000 warplanes by the end of 1943. The Aircraft War Production Council felt that they could meet this quota.

5. According to Douglas, what actions had to be taken to meet the 185,000 warplane quota?

5a. Instead of being in competition with other industrial manufacturers, who was the Aircraft War Production Council in competition with now?
5b. Was the alliance of these aircraft industrialists intended to be permanent after the war? Explain your answer with evidence from the article.

5c. What was the ultimate goal for all members of the Aircraft War Production Council and the aircraft workers?

Donald W. Douglas claims in the article that there were multiple ways that the nine different aircraft corporations supported each other to successfully build 185,000 warplanes.

FINAL TASK: In the chart below rank their importance from #1 - #5 (with #1 being the MOST EFFECTIVE, and #5 being the LEAST EFFECTIVE)

<table>
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<th>Your ranking (#1 - #5)</th>
<th>The collaborative actions of the Airplane War Production Council:</th>
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<td>Providing quick access of all 110,000 separate parts needed to make the warplanes to all factories (even if not made in the factory assembling the plane)</td>
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<td>Pooling $250,000+ worth of materials owned by each company for all to use to manufacture warplanes</td>
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<td>Borrowing machine time to repair equipment when it breaks down in the factories due to round the clock usage to build warplanes</td>
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<td>Sharing of knowledge and trade secrets (such as best practices to make harder and stronger metals)</td>
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<td>Sharing of research and “brain power” of engineers - dividing the work and ending duplication to engineer the best product</td>
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Answer these two questions after completing the chart:

Explain why you chose #1 as the *most effective* collaborative action that lead to the success in meeting President Roosevelt’s quota in the production of warplanes:

Explain why you chose #5 as the *least effective* collaborative action that lead to the success in meeting President Roosevelt’s quota in the production of warplanes: