MAJOR GENERAL
WILLIAM “BILLY” MITCHELL
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INTRODUCTION

Since World War II, there has been a need to provide classroom teachers with materials to aid them in teaching about the aerospace world. One area needing such help is the study of people who moved us from Kitty Hawk to the Sea of Tranquility and beyond. The feats of individuals that made history in this or any other field are often misunderstood, ignored, or forgotten after the first notoriety has been achieved.

This aerospace education learning packet contains information about Major General William “Billy” Mitchell. He, more than any other American, pioneered the development of military air power.

Between the end of World War I and his death in 1936, Mitchell never deviated in his attempt to convince the military leaders, the administration, and the American public of the importance of aviation and its dominant role in future wars. Thwarted at every turn and ignored by the tradition-bound generals and admirals in the military hierarchy, Mitchell persisted in his struggle even though it cost him his career and shortened his life.

His aviation theories and tactics predicted the direction of aviation development during World War II and even into the missile age, and the majority of his “radical” theories have been vindicated by time.

Understanding any subject requires a knowledge of the terminology associated with the subject. A background of the subject’s origin and subsequent development is also required. This packet on Major General Mitchell provides information in narrative form, and students will experience reinforcement of their knowledge as they complete the various task cards and study the accompanying posters. When used as a visual display, the posters will capture the students’ attention and will provide information and motivation as they complete the task cards.

We have compiled this packet to include posters (artwork) and this booklet to assist the teacher. This booklet includes a recommended teaching method and a short text that covers the life of General Mitchell. Also, there are a materials list, a test with a test key, a student record sheet, student task cards, suggestions for evaluating student activities, an aerospace education achievement award, and sheets of reproducible art.

The recommended teaching method is a list of steps you can take to guide your students down the path toward successful completion of the entire learning packet. You, of course, may diverge from the path any way you see fit. Use your academic discretion to arrive at the desired learning outcome. The materials list tells you what is required to complete each of the tasks. This list will allow you to gather all the materials necessary for the activities.

Also included in this booklet is a test with a test key. If you wish, you may use this evaluation tool as a pretest before the students begin work on their first task. After all tasks have been finished, it may be used again as a posttest to identify gained knowledge. If you use the test, a block is provided on the student record sheet for the scores and dates administered.

The student record sheet gives you and your students a record of their progress through the packet. Students will enter start and finish dates for each of the tasks and will, in return, expect your initialed acceptance of that work in the block provided for your initials plus any comments necessary.

The task cards are designed for study and activities. Each card provides information and instructions for completing a related activity. There are 20 task cards. Subjects covered in the task cards include reading, mathematics, language, spelling, social studies, geography, values clarification, careers, science, health, art, and music.

A list of suggestions is provided which you may find useful in evaluating the work done by your students as they progress through the tasks.

The blank aerospace education achievement award may be copied on the school duplicating machine for presenting to your students.

Sheets of reproducible art are provided for use as transparencies or as handouts.
TEACHING METHOD

PREPARATION

• Cut each task card along the dashed line and glue to a piece of card stock.
  —A student may accomplish this job.
  —The cards will last longer if they are laminated in plastic.

• Provide materials and supplies in a designated place.
  —Materials list is included.

• Display the enclosed posters (artwork) on a bulletin board where they will be visible and can serve as a source of information.

• Make two tagboard packets and label them SELECT and FINISHED.
  —With this organization, there is less chance of loss. Also, you can quickly see if the cards are being used.

• Write or type the following directions on a 3 x 5 card and tack it between the two tagboard packets.

<table>
<thead>
<tr>
<th>DIRECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Take a task card from the SELECT packet.</td>
</tr>
<tr>
<td>2. Enter the date on your record sheet when you start the task.</td>
</tr>
</tbody>
</table>

AFTER YOU HAVE FINISHED EACH TASK

| 1. Enter the date on your record sheet. |
| 2. Place your work in your folder. |
| 3. Place the task card in the FINISHED packet. |

• Prepare a personalized folder for each student.

• Duplicate a copy of the student record sheet for each student.

PRESENTATION

• Introduce the bulletin board materials.
  —Explain the information that is provided as part of the display.

• Instruct the students on:
  —The text.
  —How to use the task cards.
  —Where the materials are located.

• Assign task cards or instruct the students to select them in the order of their choice.
• Hand out personalized folders and copies of students' record sheets.
  — Explain how to fill out the record sheets.
  — Assign a location for the folders.

• Administer the pretest before the students begin their activities.
  — The test key is included.
  — Record the scores on the students' record sheets.

• Tell students when you will meet again.

NOTE: If small groups will be doing the tasks, it is beneficial to have heterogeneous groups with a stronger reader assigned to a weaker reader.

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EVALUATION

• Have students bring in their folders during individualized instruction or reading time, conference time, or at some other acceptable time.

• Go over assignments and initial students' record sheets.
  — Unacceptable work should be returned for reaccomplishment, completion, or proofreading. Make appropriate comments on the students' record sheets.

• Meet with small groups to evaluate and schedule future plans (skits, etc.). The folder should be initialed when acceptable.
  — Students may monitor and accept assignments but only with your permission.

• Administer the posttest and record the scores on the students' record sheets.

• Award a copy of the Aerospace Education Achievement Award to students who have satisfactorily completed the activities given on the task cards and who have shown a gain in knowledge about Major General William Mitchell.
MAJOR GENERAL WILLIAM “BILLY” MITCHELL’S BACKGROUND

EARLY YEARS

Billy Mitchell, one of seven children, was born in Nice, France, on December 29, 1879, to John and Harriet Mitchell. In 1882, the family left France and returned to their estate Meadowmere near Milwaukee, Wisconsin. After a period of private tutoring, Mitchell was enrolled in Rancine College of Wisconsin, a preparatory school, where he spent six years. Billy transferred from Rancine to Columbia Preparatory in Washington, D.C., and after graduating from Columbia entered George Washington University in the fall of 1895. In April 1898, while Mitchell was a college junior, the United States declared war on Spain.

EARLY MILITARY CAREER

Eager to get into the war, Billy left school and enlisted as a private in the First Wisconsin Volunteer Regiment. Billy’s father was a United States Senator, and he used his influence to get his son a commission as a second lieutenant in a volunteer signal company. Lieutenant Mitchell was accustomed to this type of influence. His grandfather, Alexander Mitchell, was a millionaire banker, railroad baron, and an influential force in the Democratic Party. Billy grew up in the political arena and utilized the political process and influence channels to further his military career. His family’s finances enabled him to travel and socialize, enhancing his career in a manner an army salary would not permit. Lieutenant Mitchell and his unit were sent to Florida where he was promoted to first lieutenant. The unit was finally ordered to Cuba, but by this time the war had been over for three months. While in Cuba, Mitchell’s unit was responsible for setting up a massive communications system that was needed by the American occupation forces.

In October 1899, Lieutenant Mitchell was sent to the Philippine Islands where he fought against Filipino guerrillas led by Emilio Aguinaldo. During some lulls in the fighting, Mitchell pondered his future and toyed with the idea of leaving the Army, completing his formal education, and going to work for some business. His parents encouraged him in this thinking; however, the saber rattling of the Germans changed his mind. Believing that a new war might break out in Europe, he decided to stay in the military.

Mitchell returned to the United States in April 1901. During the next 12 years, he had a number of varied assignments in the United States, Alaska, Cuba, and the Philippines. It was also during this time that Mitchell married. He married Caroline Stoddard, a Vasser graduate and a member of a prominent New York family, on December 2, 1903. This marriage lasted nineteen years and produced three children. The Mitchell’s divorced in 1922.

In 1913, Mitchell was posted to the War Department General Staff. Prior to the outbreak of World War I, he had not emerged as the radical pioneering advocate of aviation, and in particular military aviation, that he was to become in the years that followed. However, with his assignment to the General Staff, his interest in aviation grew so much that at the age of 36 (considered quite old at that time) he learned to fly. After World War I began in 1914 (the United States entered in April 1917), he started pushing for a separate and independent air force. In 1916, Mitchell was promoted to major and appointed chief of the Signal Corps’s Aviation Section.

MITCHELL IN FRANCE

In March 1917, Major Mitchell was sent to France as an aeronautical observer. He was the first American officer to fly over enemy lines while a battle was in progress, observing firsthand the futility of trench warfare. In May, Mitchell met the commander of the Royal Air Force, General Hugh Trenchard. Mitchell embraced the general’s air power doctrine:

The airplane is an offensive and not a defensive weapon. Airplanes should attack the rear of the German Army through the air and destroy all its means of supply, subsistence, and replacement.

Mitchell formulated a plan for the tactical and strategic use of American aviation, but General John J. Pershing, commander of the American Expeditionary Forces, ignored it.

Mitchell was promoted to colonel in September 1917 and assigned as commander, Air Service, Zone of Advance. In January 1918, he was assigned as chief of Air Service, First Army. In September 1918, he was promoted to brigadier general. Two battles, the Battle of St. Mihiel and Meuse-Argonne, became the proving grounds for Mitchell’s air power doctrine. His doctrine stated:

Assign to the troops the aviation which they need for their own operations; that is, the Observation Squadron to the Army Corps for use by the infantry and artillery, and the Pursuit Group for their local protection. All the rest, which is made up of the great bulk of the aviation, particularly pursuit and bombardment, is to be put into a central mass and hurled at the enemy’s aviation, no matter where he might be found, until a complete ascendency has been obtained over him in the air; after this, to attack his ground troops, his trains, his depots of ammunition and supplies, and his railroad stations, and line of communications.

In addition to this, his airstrobes are attacked both day and night, so as to force him to either arise and accept combat or to lose his airplanes in the hangars themselves on his own fields.

From November 1918 (the time the war ended) through
March 1919, Mitchell traveled through Europe studying other nations’ doctrines of air power.

THE FIGHT FOR AVIATION

Returning to the United States in May 1919, Mitchell was even more convinced that the airplane was an offensive weapon and would bring about a revolution in American military policy. Mitchell returned to the United States assuming he would be named chief of the Air Service but instead was named assistant to Major General Charles Menoher, a successful wartime infantry officer but a nonflying. For the remainder of his career, Mitchell was to be plagued by generals and admirals in positions of command who did not understand aviation and were not interested in changing their traditional thinking.

Following World War I, the nation’s return to normalcy resulted in demobilization of the military and drastic reductions in military budgets. An intense rivalry soon developed between the Army and Navy for the small amount of military funds. Since the Air Service was subordinate to the Army, its share of money was very small. General Pershing convened the Dickman Board, headed by General Joseph T. Dickman, to consider the lessons learned in World War I insofar as they affected tactics. The board reported that aviation was of great value as a servant of the Army in the roles of reconnaissance and ground support but not as an offensive weapon. The War Department General Staff believed the defense of America rested on three forces: first, the battle fleet of the Navy; second, naval coastal defenses; and third, the Army’s coastal network. Mitchell challenged this view by verbally attacking the first line of defense—the battle fleet. He declared that the airplane was superior to the battleship and challenged the Navy to a test in 1920. The challenge was ignored until public pressure forced the joint Army-Navy bombing tests in July 1921. In these tests, Mitchell’s fliers sank every ship the Navy furnished. A board’s evaluation of the bombings recognized the importance of aviation, but they stated that the battleship was still the first line of defense. It was recommended that the Navy should build aircraft carriers.

During the 1922-1924 time frame, Mitchell planned many Air Service flights to gain public recognition and support. These included the first nonstop transcontinental flight, the first round-the-world flight, and many speed- and altitude-record flights. In October 1923, Mitchell married his second wife, Elizabeth Trumbull, a Michigan socialite. For their honey-moon, Mitchell took her on a fact-finding tour of aviation in the Pacific. As a result of an earlier European trip and the Pacific tour, Mitchell became even more convinced that aviation was being neglected in America and that the rest of the world was superior to America in aviation. Returning from the tour in 1924, he found an increased attitude of normalcy, isolationism, and economy in the government and public. Feeling more than ever that his ideas were being ignored, he embarked on a campaign of writing and speaking about the neglect in American aviation. These articles and speeches were very critical of the military and the Coolidge Administration. In March 1925, Mitchell’s reappointment as assistant chief of the Air Service was denied; he reverted from his temporary grade of brigadier general to his permanent grade of colonel and was transferred to Fort Sam Houston, Texas.

In September 1925, a Navy flight from the West Coast to Hawaii disappeared and the Navy dirigible Shenandoah crashed killing 13 crew members. Because of these two disasters, Mitchell issued a statement saying, “The high command of both the Army and the Navy are guilty of incompetency, criminal negligence, and almost treasonable administration of the national defense.” The War Department finally had enough of Mitchell and decided to court-martial him on charges of conduct prejudicial to good order and discipline. In December 1925, after a seven-week trial, Mitchell was found guilty. He was suspended from rank, command, and duty, and required to forfeit all pay and allowances for five years. President Coolidge, after reviewing the sentence, changed the forfeiture from all to half of his pay and allowances for five years.

On February 1, 1926, Billy Mitchell resigned from the Army. From his resignation until his death in 1936, Mitchell continued his campaign for a strong and separate Air Service. However, as the Great Depression worsened and the country’s isolationism became more prevalent, the public grew weary of Mitchell’s proclamations. Fewer people listened to his speeches and magazines stopped printing his articles. Realizing the declining interest in his air power doctrines, Mitchell decided to write a biography of his friend General Adolphus Greely, former chief of the Signal Corps. This project was never completed; he died on February 17, 1936, from influenza and heart trouble.

World War II vindicated Mitchell’s theories. In 1946, in recognition of his foresightedness, the United States Congress posthumously awarded him the Medal of Honor. In 1947, they promoted him to major general, retroactive to the date of his death.
# MATERIALS LIST

<table>
<thead>
<tr>
<th>TASK</th>
<th>MATERIALS NEEDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. READING</td>
<td>Biographical profile, one of the books listed on task card, biography on Mitchell, paper, and pencil.</td>
</tr>
<tr>
<td>2. MATHEMATICS</td>
<td>Paper and pencil.</td>
</tr>
<tr>
<td>3. MATHEMATICS</td>
<td>Paper, pencil, measuring tape or ruler, chalk, tape, string, and a large open area.</td>
</tr>
<tr>
<td>4. MATHEMATICS</td>
<td>Graph paper, ruler, and colored pencils or crayons.</td>
</tr>
<tr>
<td>5. LANGUAGE</td>
<td>Dictionary, thesaurus, paper, and pencil.</td>
</tr>
<tr>
<td>6. LANGUAGE</td>
<td>Paper, pencil, stamp, and envelope.</td>
</tr>
<tr>
<td>7. LANGUAGE</td>
<td>Paper and pencil.</td>
</tr>
<tr>
<td>8. SPELLING</td>
<td>Dictionary, paper, and pencil.</td>
</tr>
<tr>
<td>9. SOCIAL STUDIES</td>
<td>Paper and pencil.</td>
</tr>
<tr>
<td>10. SOCIAL STUDIES</td>
<td>Atlas, paper, and colored pencils or crayons.</td>
</tr>
<tr>
<td>11. SOCIAL STUDIES</td>
<td>Atlas, dictionary, paper, and colored pencils or crayons.</td>
</tr>
<tr>
<td>12. SOCIAL STUDIES</td>
<td>Library resources, paper, and pencil.</td>
</tr>
<tr>
<td>13. VALUES CLARIFICATION</td>
<td>Library resources, paper, and pencil.</td>
</tr>
<tr>
<td>14. VALUES CLARIFICATION</td>
<td>Paper and pencil.</td>
</tr>
<tr>
<td>15. CAREERS</td>
<td>Encyclopedia, paper, and pencil.</td>
</tr>
<tr>
<td>16. SCIENCE</td>
<td>Encyclopedia, paper, and pencil.</td>
</tr>
<tr>
<td>17. SCIENCE</td>
<td>Library resources, paper, and pencil.</td>
</tr>
<tr>
<td>18. HEALTH</td>
<td>Encyclopedia, paper, and pencil.</td>
</tr>
<tr>
<td>19. ART</td>
<td>Construction paper, magazines, glue, scissors, and crayons or colored pencils.</td>
</tr>
</tbody>
</table>
1. Billy Mitchell began his career in the
   a. Army as a private and advanced to general.
   b. Navy as a private and advanced to colonel.
   c. Air Force as an airman and advanced to general.
   d. Army as a lieutenant and advanced to general of the Army.

2. Billy's father was
   a. a general in the Army.
   b. an ambassador to France.
   c. a United States Senator.
   d. the Governor of Wisconsin.

3. During the war with Spain, Mitchell was
   a. in France.
   b. wounded in Cuba.
   c. stationed in Florida.
   d. a student at Rancine College.

4. What World War II airplane was named after Billy Mitchell?
   a. B-17.
   b. B-25.
   c. B-29.

5. Select the aviation book that Mitchell wrote.
   a. *Aviation.*
   c. *The History of Air Power.*
   d. *Victory Through Air Power.*

6. In what country was Mitchell born?
   a. Spain.
   b. Japan.
   c. France.
   d. America.

7. Billy Mitchell declared that the airplane was superior to the
   a. tank.
   b. infantry.
   c. submarine.
   d. battleship.
8. Billy Mitchell thought the Air Service should be
   a. a separate service.
   b. the only branch of service.
   c. a division of the Air Corps.
   d. duplicated by the Army and Navy.

9. From the following list, select the country which Mitchell visited.
   a. Egypt.
   b. India.
   c. Columbia.
   d. Yugoslavia.

10. Mitchell's book Skyways, *A Book on Modern Aeronautics* was about the
    a. future of aviation.
    b. problems of commercial aviation.
    c. government regulation of aviation.
    d. theory and technical aspects of aviation.

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**TEST KEY**

1. a
2. c
3. c
4. b
5. b
6. c
7. d
8. a
9. b
10. d
# Student Record Sheet

**Major General William “Billy” Mitchell**

**By**

**Student’s Name**

<table>
<thead>
<tr>
<th>Task</th>
<th>Started</th>
<th>Finished</th>
<th>Comments</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
<td>—READING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 2</td>
<td>—MATHEMATICS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 3</td>
<td>—MATHEMATICS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 4</td>
<td>—MATHEMATICS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 5</td>
<td>—LANGUAGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 6</td>
<td>—LANGUAGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 7</td>
<td>—LANGUAGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 8</td>
<td>—SPELLING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 9</td>
<td>—SOCIAL STUDIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 10</td>
<td>—SOCIAL STUDIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 11</td>
<td>—SOCIAL STUDIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 12</td>
<td>—SOCIAL STUDIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 13</td>
<td>—VALUES CLARIFICATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 14</td>
<td>—VALUES CLARIFICATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 15</td>
<td>—CAREERS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 16</td>
<td>—SCIENCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 17</td>
<td>—SCIENCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 18</td>
<td>—HEALTH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 19</td>
<td>—ART</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 20</td>
<td>—MUSIC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Pretest Score: | Date: | Posttest Score: | Date: |
STUDENT TASK CARDS

TASK 1—READING


Do two of the following tasks:

1. Have your teacher reproduce the biographical profile on Billy Mitchell. Read the profile and write a half-page report on your impression of Mitchell.

2. Find one of the books that Mitchell wrote, read one or two chapters, and write a half-page report on what you read.

3. Find a book on the life of Billy Mitchell, read it, and give either an oral report to the class or a written report to your teacher.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

---

TASK 2—MATHEMATICS

Billy Mitchell was born in December 1879 and died in February 1936. Study the time line below and then answer the questions.

<table>
<thead>
<tr>
<th>1879</th>
<th>1898</th>
<th>1903</th>
<th>1914</th>
<th>1921</th>
<th>1926</th>
<th>1936</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>Cuba</td>
<td>Wright Brothers' First Flight</td>
<td>World War I</td>
<td>Bombing Demonstration</td>
<td>Court-Martial</td>
<td>Death</td>
</tr>
</tbody>
</table>

1. Billy’s grandfather came to the United States from Scotland in 1837. How many years passed before Billy was born?

2. How old was Billy when he went to Cuba?

3. How old was Billy when he was court-martialed?

4. The Wright brothers’ first flight was in 1903. How many years ago was that?

5. How old was Billy when he died?

6. Do you know anyone alive now that was living during Mitchell’s lifetime? How old are they?

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.
TASK 3—MATHEMATICS

The B-25 Mitchell bomber was used in World War II and was named in honor of General William Mitchell.

Take a measuring tape or ruler and find a large open space. Measure out the dimensions of the B-25. Using string, tape, or chalk, create an outline of the airplane.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

TASK 4—MATHEMATICS

During Billy Mitchell's lifetime, airplane speeds increased to over 300 miles per hour (mph). Make a graph showing the increase in speed from the years 1906 to 1936 using the following airplanes:

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Speed (mph)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santos-Dumont 14bis</td>
<td>25</td>
<td>1906</td>
</tr>
<tr>
<td>Hawker Hurricane</td>
<td>330</td>
<td>1936</td>
</tr>
<tr>
<td>Lockheed Vega</td>
<td>170</td>
<td>1927</td>
</tr>
<tr>
<td>Fokker E. III</td>
<td>80</td>
<td>1915</td>
</tr>
<tr>
<td>Boeing P-26A</td>
<td>235</td>
<td>1932</td>
</tr>
<tr>
<td>Bleriot XI</td>
<td>50</td>
<td>1909</td>
</tr>
<tr>
<td>SE 5a</td>
<td>125</td>
<td>1917</td>
</tr>
</tbody>
</table>
TASK 5—LANGUAGE

Billy Mitchell was a controversial figure in military history. Because he was an outspoken advocate of air power before others saw the need for an air force, he was court-martialed. Some people said he was an extremist and insurgent. Early in World War II, events confirmed what Billy Mitchell had predicted. Congress condemned the court-martial and removed the sentence from his record. Unfortunately, Billy Mitchell never knew his record had been cleared because he died in 1936.

Many people thought his claims were exaggerated. He persuaded others to his side when he sank three German ships by air. Later he sank obsolete U.S. battleships in tests to demonstrate air power. Yet, Mitchell failed to achieve his goal.

Using a dictionary and a thesaurus, look up seven of the words italicized above. Write each word and its meaning beside it. Find another word or synonym which could be substituted for each word you chose.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

TASK 6—LANGUAGE

Billy Mitchell was a strong supporter of air power. Five years after his death (1941), an organization known as the Civil Air Patrol was formed. The Civil Air Patrol is made up of civilians of all ages who aid our country in emergencies. Two other important functions of Civil Air Patrol are the training of cadets and aerospace education. Young people 13 through 17 may become Civil Air Patrol cadets.

1. Write to the national headquarters and ask for information about the Civil Air Patrol.

   Headquarters CAP-USAF/PA
   Maxwell AFB AL 36112-5572

2. After you read the information, share it with your class. Next, write a paragraph on how you think Billy Mitchell would feel about the Civil Air Patrol.

PLACE A COPY OF YOUR LETTER AND PARAGRAPH IN YOUR FOLDER. DATE YOUR RECORD SHEET.
TASK 7—LANGUAGE

Billy Mitchell gave many speeches supporting aviation. Prepare a 1- to 3-minute speech on one of the following topics:

1. Why America needs a strong space program.
2. Why aviation is important to America.
3. How America would be different if there were no airplanes.
4. Why Billy Mitchell should not have been court-martialed.
5. Why America should always be a world leader in aviation.

PLACE A COPY OF YOUR SPEECH IN YOUR FOLDER. DATE YOUR RECORD SHEET.

TASK 8—SPELLING

There are several military words that are difficult to spell. Study the following words for a week and then have a friend test you. Retest yourself in two weeks to see how well you remember the words. Also, look the words up in a dictionary and write down the definitions.

1. Corporal
2. Sergeant
3. Lieutenant
4. Colonel
5. Brigadier General
6. Ensign
7. Court-martial
8. Guerrilla
9. Aeronautics
10. Tactical

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.
TASK 9—SOCIAL STUDIES

Billy Mitchell believed in a powerful air force to protect and make America strong. Since Mitchell was an army officer, he spoke and wrote primarily about military air power.

Write a report on how you believe aviation can be used peacefully and still keep America strong. Do you think General Mitchell would agree with you?

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

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TASK 10—SOCIAL STUDIES

Billy Mitchell was born in France. He enjoyed traveling and toured many countries studying their aviation policies. From the following list, select three places he visited or was stationed and accomplish the following tasks:

1. Draw three maps—one for each place you selected.

2. On the maps, place the capital of the country or state.

3. Put two other types of information on the maps that you think are important; such as rivers, languages, crops, mountains, etc.

   a. Alaska  
   b. Kansas  
   c. Wisconsin  
   d. Texas  
   e. Florida  
   f. France  
   g. Great Britain  
   h. China  
   i. Japan  
   j. India

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.
TASK 11—SOCIAL STUDIES

Billy Mitchell was born in Nice, France, and spent three years there until his parents moved back to the United States. He learned to speak French while visiting the country as a young man. In April 1917, he was sent to France as an aeronautical observer, and when the United States entered the war, he stayed in the country until November 1918. After the war, he made several more trips to the country studying its aviation policies.

Draw a map of France and place the following cities on it.


Look in a dictionary and find out what the following French words and phrases mean:

1. Au sérieux  
2. Ballon d’essai  
3. Bon jour  
4. Comme ci comme ça  
5. Fils  
6. Sans pareil  
7. Sur place  
8. Tous frais faits

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

TASK 12—SOCIAL STUDIES

Select one of the following countries Billy Mitchell visited and write a two-page paper on the social customs of its people.

1. The Philippines  
2. China  
3. Japan  
4. Germany  
5. France  
6. Cuba  
7. Great Britain  
8. Italy  
9. Russia  
10. India

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.
TASK 13—VALUES CLARIFICATION

Perhaps Billy Mitchell failed to achieve his goal because he was frequently aggressive in arguments with superiors who disagreed with him. He wrote three books and several magazine articles to enlist the support of the public which further angered his superiors. The American public supported him, but his fellow officers court-martialed him for insubordination. Mitchell didn’t give up his beliefs but felt forced to resign his commission in the service. There are ways to say or write things which make people want to support us. By changing words, expressions, or behavior, we can cause these very same people to turn away from us.

1. Pretend you are Billy Mitchell, holding tightly to your emotions, trying to convince your superiors that the airplane is a necessary line of defense. You will want to consider the coastlines, the threat to our safety from other countries, how you can prove the airplane is important and necessary, and how to convince your superiors of this and persuade them to face facts and do something about your ideas.

2. Using the same topic, write or behave in such a way that your language or manner will cause your superiors to turn away from you.

3. You may either write a short newspaper article or give a one-minute speech on each way of dealing with the topic. You might prefer to write one and speak the other.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

TASK 14—VALUES CLARIFICATION

Billy Mitchell’s father was a United States Senator. When Billy entered the Army, he enlisted as a private. His father used his political influence and got Billy promoted to second and first lieutenant.

Select one of the following statements and write a paragraph about how you feel.

1. It is all right for a person to use his/her parents’ influence to get ahead in life.

2. It was unfair of Billy’s father to use his influence to get Billy promoted.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.
TASK 15—CAREERS

A country remains safe and strong only as long as it can defend itself. To defend the United States, we must have wise, intelligent decision-makers as our leaders. We must have thousands of men and women willing to devote some years of their lives in military service to their country. Leaders cannot be free to make decisions unless there is visible proof that the country can enforce these decisions.

Consider the military as a place where you might spend some of your productive years. If you spend time in the service, you can earn many benefits.

1. Use an encyclopedia to read about the Army, Navy, Marines, Air Force, Coast Guard, or the Reserves. If you call a recruiting station, they may give you pamphlets, pictures, and additional information.

2. Select one of the branches of the service listed above. Find out about pay, time spent in training, traveling, education, housing, academics, history, machinery, the uniform, rank, kinds of assignments, and any problems you might encounter.

3. Write at least one page on your findings. You may wish to trade and share your findings with someone who chose a different branch. You may include drawings.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

TASK 16—SCIENCE

In 1930, General Mitchell published a book entitled Skyways, A Book on Modern Aeronautics. This book was a survey of the theory and technical aspects of aviation.

![Diagram of forces of flight on an airplane]

The above illustration shows the four forces of flight on an airplane. Using an encyclopedia, write a 1- to 2-page report on how these forces affect flight.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.
TASK 17—SCIENCE

In Billy Mitchell’s book *Skyways, A Book on Modern Aeronautics*, he made predictions about the possibilities of interstellar space travel. Man has set foot only on the moon so far, but scientists are exploring the possibilities of sending people to Mars sometime after the year 2000. Using various library resources, write a 1- to 2-page report predicting advances in aerospace after the year 2000.

Suggestions:

How I spent my summer vacation on Mars.

What airplanes will look like in the future.

Living in a space station.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

TASK 18—HEALTH

During the Spanish-American War in 1898, Mitchell was stationed at a National Guard camp near Jacksonville, Florida. The men had to sleep on the ground and share their tents with mosquitoes and flies. The camp was not kept clean and this, along with the insects, helped infect the men with typhoid fever, malaria, smallpox, and other diseases.

1. Choose one of the three diseases mentioned above and write a 1- to 2-page paper about it.

2. Choose either the mosquito or fly and write a 1-page report on how the insect spreads disease.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.
TASK 19—ART

Billy Mitchell grew up on a farm estate where he hunted, fished, flew kites, played ball, and learned how to ride and handle horses. He took up photography, learned to sail, and played polo. A naturalist in the Milwaukee Museum taught Billy how to stuff and mount birds. Billy Mitchell's collection of over 100 birds is still on view in the museum.

It has been said that Billy Mitchell was born with a silver spoon in his mouth because he grew up in a wealthy family. He was born in Nice, France, and did a lot of traveling as a youngster.

It isn't surprising to learn that Billy was interested in American history. His grandmother belonged to the group which bought and restored Mount Vernon, George Washington's home.

Look at the chart of Billy's background, think of the impression you have of Billy and the one you gained from this card.

Using a piece of construction paper, magazines, scissors, and glue, make a collage of Billy Mitchell's interests, achievements, and life.

PLACE YOUR WORK IN YOUR FOLDER. DATE YOUR RECORD SHEET.

TASK 20—MUSIC

Jazz is a 300-year-old mixture of African and European music created in America. The harmony is European, the rhythm is mostly African, and the melody is a blend of both.

Although there is no mention of Billy Mitchell's reaction to this music, it became popular during his lifetime. Music can take us away from our problems for a short time. Maybe jazz could have lifted Billy Mitchell's spirits.

1. Look up jazz in an encyclopedia or music book. Try to obtain some of the songs mentioned.

2. Either list five names associated with jazz or play a record you found for the class.

WHEN YOU PUT YOUR LIST IN YOUR FOLDER OR PLAY YOUR RECORD, DATE YOUR RECORD SHEET.
SUGGESTIONS FOR EVALUATING STUDENT ACTIVITIES

TASK 1—READING

Evaluate composition, content, presentation, and creativity.

TASK 2—MATHEMATICS


TASK 3—MATHEMATICS

Evaluate how well the student carried out this task.

TASK 4—MATHEMATICS

Evaluate the construction of the graph.

TASK 5—LANGUAGE

Controversial—Of, subject to, or marked by controversy. Syn - given to controversy.

Advocate—One who supports or defends a cause. Syn - champion, supporter, expounder.

Court-martialed—Tried by a court of military officers appointed by a commander.

Extremist—One who advocates or resorts to drastic measures. Syn - radical, fanatic.

Insurgent—A person who revolts against civil authority. Syn - rebel, revolter.


Predicted—Told about or made known beforehand. Syn - foretold, forecasted.

Exaggerated—Made greater than is actually the case. Syn - overstated, magnified.

Persuaded—Made someone believe something. Syn - convinced, won over.

Obsolete—No longer current. Syn - out-of-date, outmoded.

Demonstrate—To display, operate, and explain. Syn - show, exhibit.

TASK 6—LANGUAGE

1. Evaluate composition and letter format.
2. Evaluate writing skills.

TASK 7—LANGUAGE

Evaluate content and delivery.
TASK 8—SPELLING

1. Corporal—A noncommissioned officer ranking in the army above private first class and below sergeant.

2. Sergeant—Any of several ranks of noncommissioned officers.

3. Lieutenant—A commissioned officer ranking below a captain.

4. Colonel—A commissioned officer ranking above a lieutenant colonel and below a brigadier general.

5. Brigadier General—A commissioned officer ranking above a colonel and below a major general.

6. Ensign—A commissioned officer in the navy ranking above a chief warrant officer and below a lieutenant junior grade

7. Court-martial—A trial by a court of military officers appointed by a commander to try offenders under military law.


9. Aeronautics—A science dealing with the operation of aircraft.

10. Tactical—The art of deploying military forces in coordinated maneuvers against an enemy.

TASK 9—SOCIAL STUDIES

Evaluate composition and content.

TASK 10—SOCIAL STUDIES

Evaluate the maps on neatness, research, and correct positioning of physical features.

TASK 11—SOCIAL STUDIES

Evaluate the quality and accuracy of the map.

1. Au sérieux—seriously
2. Ballon d’essai—trial balloon
3. Bon jour—good day, hello
4. Comme ci comme ça—so-so, neither good nor bad
5. Fils—son
6. Sans pareil—without equal
7. Sur place—in place
8. Tous frais faits—all expenses paid

TASK 12—SOCIAL STUDIES

Evaluate composition and facts.

TASK 13—VALUES CLARIFICATION

Evaluate the speech on content and presentation and the written work on writing skills and content.
TASK 14—VALUES CLARIFICATION

Paragraph should consist of student’s opinion and explanation.

TASK 15—CAREERS

Report should consist of facts about one of the branches of the service and show the efforts of the student’s research.

TASK 16—SCIENCE

Lift—That component of the total aerodynamic force acting on a body perpendicular to the undisturbed airflow relative to the body.

Drag—A retarding force acting upon a body in motion.

Thrust—The pushing or pulling force developed by an aircraft engine.

Weight—The force with which a body is attracted toward the earth.

The report should consist of more than definitions. It should discuss how these forces affect an aircraft in flight.

TASK 17—SCIENCE

Evaluate the report on writing skills and creativity.

TASK 18—HEALTH

Evaluate the reports on writing skills and facts.

TASK 19—ART

Evaluate the project on creativity and neatness.

TASK 20—MUSIC

Evaluate the effort that went into this task.
AEROSPACE EDUCATION

ACHIEVEMENT AWARD

has successfully completed

THE AEROSPACE EDUCATION LEARNING PACKET ON

MAJOR GENERAL

WILLIAM "BILLY" MITCHELL

Given this ______ day of ______ 19___

Teacher

Principal
MAJOR GENERAL WILLIAM “BILLY” MITCHELL’S BACKGROUND

A GRANDFATHER WHO
- IMMIGRATED TO THE UNITED STATES FROM SCOTLAND IN 1837.
- BECAME A “ROBBER BARON” IN WISCONSIN WITH WEALTH BASED ON BANKING AND RAILROADS.
- WAS A POLITICAL FORCE IN WISCONSIN AND THE NATION.

A FATHER WHO
- RAISED A VOLUNTEER INFANTRY COMPANY AND PARTICIPATED IN THE AMERICAN CIVIL WAR.
- WAS A MILITARY HISTORY DEVOTEE, WAS EDUCATED, AND TRAVELED WIDELY IN EUROPE WITH HIS FAMILY.
- WAS A BANKER, HORSE RAISER, AND POLITICIAN WHO DIED IN 1904 AFTER SERVING AS A UNITED STATES REPRESENTATIVE AND SENATOR.
- WAS VERY INFLUENTIAL WITH MILITARY, GOVERNMENT, AND SOCIAL LEADERS IN WISCONSIN AND THROUGHOUT THE COUNTRY AND WAS WILLING TO USE INFLUENCE IN BILLY’S INTEREST.

A MOTHER WHO
- WAS FROM A SOCIALLY PROMINENT FAMILY.
- WAS SOURCE OF FINANCIAL ASSISTANCE FOR MUCH OF BILLY’S CAREER.
- MOTIVATED BILLY TO SEEK A CAREER AS PREEMINENT AS THOSE OF HIS FATHER AND GRANDFATHER.
- GAVE BIRTH TO BILLY MITCHELL IN 1879 IN NICE, FRANCE, FOLLOWED BY SIX OTHER CHILDREN.
1898
TRAINING CAMP NEAR JACKSONVILLE, FLA.

SPANISH AMERICAN WAR 1898 - 1899

- BILLY MITCHELL JOINED THE ARMY AT 18 YEARS OF AGE.
- DUE TO HIS FATHER'S INFLUENCE, HE WAS COMMISSIONED AS A SECOND LIEUTENANT.
- HE WAS ASSIGNED TO TRAIN WITH THE SIGNAL CORPS AT JACKSONVILLE, FLORIDA.
- HE SERVED IN CUBA WITH THE ARMY OF OCCUPATION IN 1899.

WITNESSED SPANISH SURRENDER CEREMONY JANUARY 1, 1899

ERECTED 138 MILES OF TELEGRAPH LINE
THE PHILIPPINE INSURRECTION

1899 - 1900

- He was assigned to the Philippines during the insurrection of 1899-1900.
- He returned to America via Japan, China, India, Egypt, etc.
- He began a lifelong study of the balance of power in the Pacific.
1901 - 1904

- A gold rush was in the Yukon and Alaska.

- The United States Army was given the task of establishing communications in the vast unsettled Alaskan wilderness.

- Captain Mitchell was tasked with solving problems of supply and transportation in the Arctic environment.

- More than 1,000 miles of telegraph line was constructed between Valdez and Nome.
1904 - 1909

- He was the commander of a signal company supporting the Army's Staff College at Ft. Leavenworth, KS.

- He had brief assignments to San Francisco (earthquake), Wyoming, the Texas border, and Cuba.

- He graduated from the Army's two-year staff college.
HE WAS ASSIGNED AS SIGNAL OFFICER IN THE PHILIPPINES WITH AN APPARENT INTELLIGENCE-GATHERING MISSION WITH REGARDS TO JAPANESE ACTIVITIES IN ISLANDS NORTH OF THE PHILIPPINES.

HE VISITED HONG KONG AND MANCHURIA (SITE OF RUSSO-JAPANESE WAR).

HE REPORTED TO THE GENERAL STAFF THAT WAR WITH JAPAN WAS INEVITABLE.
GENERAL STAFF ASSIGNMENT
1913 - 1916

- He was the youngest officer and only signal corps officer assigned to the general staff.

- Army aviation was assigned to the signal corps—this was Mitchell's first association with aviation.

- He screened war reports from Europe and reported on uses of aviation in warfare to the general staff.

- He came to believe aviation had a future in warfare and that America was far behind most other nations in aviation.

- He was a proponent of preparedness—said American tradition was to wait until after war started before preparing.

- He took off-duty private flying lessons at his own expense in 1916.