

# EMBRACING THE IMPOSSIBLE

POPULAR RESPONSE *to the* AERIAL AGE



# *Embracing the Impossible*

## POPULAR RESPONSE TO THE AERIAL AGE

**Grade Level: 5 through 8**

**Time Required: 3 class periods**

### OVERVIEW

Students review primary sources to learn about the popular response to the airplane during the early 1900s. They use their primary source study to understand how people felt about this new technology. Then, they choose a technological invention of today and document the popular response to that invention.

### NATIONAL STANDARDS FOR UNITED STATES AND WORLD HISTORY ADDRESSED IN THIS ACTIVITY

Standard 2F: Historical Thinking. Appreciate historical perspectives — describing the past on its own terms, through the eyes and experiences of those who were there, as revealed through their literature, diaries, letters, debates, arts, artifacts, and the like; considering the historical context in which the event unfolded — the values, outlook, option, and contingencies of that time and place.

### OBJECTIVES

In this teaching poster students will:

- ★ Learn about popular response toward aviation by studying primary sources.
- ★ Conduct research in the library, on the web and in person to document the popular response toward a technological invention of today.
- ★ Create a final project — cartoon, report or essay — based on their research.

### TEACHER BACKGROUND INFORMATION ON POPULAR RESPONSE TO EARLY AVIATION

The decade after the Wright brothers flew at Kitty Hawk in 1903 witnessed a wide range of reactions to the new technology. Human flight was so revolutionary a breakthrough that its influence went well beyond the aeronautical community. The airplane had meaning for everyone — from popular enthusiasm for the pilots and their aerial exhibitions, to the commercial and military potential of aviation, to the broad cultural implications of flight, to the artistic expression it inspired. The early 20th century was an increasingly technological world. But more so than any other technical marvel of the period, the airplane caused an emotional reception. It produced utopian hopes as well as unsettling fears.

The airplane rapidly took its place in popular culture. The public was fascinated with aeronautical exhibitions and competitions and the daring pilots of the day; soon flight motifs began to appear on jewelry, clocks, games, decorative boxes, postcards, and the like. These aviation keepsakes were one sign that the aerial age had begun. The airplane became part of the scenery. The sight of an airplane overhead is a defining cultural experience of the 20th century, and it did not take long for the new technology to become part of the visual landscape. People became familiar with seeing photographs of airplanes over famous sites, such as the Statue of Liberty or the Eiffel Tower, as well as familiar sites such as the beach or the family farm.

Aviation captured the attention of many of the great writers of the day, who traveled to aviation exhibitions, rode in airplanes, and recorded their reactions in words. Some writers, such as Franz Kafka and Italian poet and novelist Gabriele

D'Annunzio, saw aviation as a messenger of a new life, a new civilization. They believed an aerial world would revitalize culture, refashion laws and rituals, and provide an escape from the current reality of life.

Other writers, such as Futurist F. T. Marinetti, responded to the Aerial Age in a darker way. They saw the coming of a machine-driven civilization that would divorce humanity from its past with unexpected and disturbing consequences, although in their view this would ultimately lead to a desirable end. To them the airplane was the symbol of modernity; it represented a new beauty of speed and technology. It would enable civilization to escape the constraints of nature. It would liberate humanity from what the Futurists considered society's two great enemies: time and space. Flight was the realization of the age-old desire to conquer the elements.

Some writers were critics of the Aerial Age. Viennese journalist Karl Kraus believed that while people were clever enough to create sophisticated machines, they often lacked the intelligence to use them properly. Now that the air had been conquered, he feared Earth was condemned to be bombarded. His prediction would in part come true.

A suggested resource for background information on the popular response to the Aerial Age is Robert Wohl's book, *A Passion for Wings: Aviation and the Western Imagination 1908 - 1918*.

## PREPARATION

1. Read the Teacher Background section.
2. Familiarize yourself with the Wright brothers' accomplishments.
3. For each child, photocopy the following primary sources on this poster:
  - ★ Figure 1. *Bonne Année* (Happy New Year) postcard, circa 1910
  - ★ Figure 2. "The New Disease: Aviation Neck," 1910
  - ★ Figure 3. Illustration from *Le Sourire*, 1908
  - ★ Figure 4. "Altar of Progress," 1910
  - ★ Figure 5. Illustration from *Le Sourire*, 1910
  - ★ Excerpt from *The Aeroplanes at Brescia* by Franz Kafka, 1909
  - ★ Quotations about the Aerial Age.

You may want to use your copier to enlarge the items to make them easier for students to study.

4. Consider reviewing resources for teaching with cartoons:

- ★ "Teaching with Cartoon Art: A Selected Bibliography," from the Ohio State University's Cartoon Research Library at [www.lib.ohio-state.edu/cgaweb/teaching.htm](http://www.lib.ohio-state.edu/cgaweb/teaching.htm).
- ★ A Teachers' Guide for using the Professional Cartoonists Index website at <http://cagle.slate.msn.com/teacher/>.

## PROCEDURE

1. Make sure the class is familiar with the Wright brothers, their accomplishments, and the celebration in 2003 of the centenary of flight. Visit the educators' section of the NASM website, "The Wright Brothers & the Invention of the Aerial Age," for a list of books and web resources to introduce the Wright brothers and their accomplishments to the class, [www.nasm.si.edu/wrightbrothers](http://www.nasm.si.edu/wrightbrothers).

2. Ask students to take a look at the poster image of aviation-related sheet music covers from the early 1900s. Ask them if, while still seated at their desks, they can see what all the sheet music covers have in common. They should be able to tell that all the covers show an airplane or flying machine of some kind.

3. Explain to students that they are looking at sheet music covers from the early 1900s. Explain what a sheet music cover is. Ask students why they think people might have been writing and publishing music about airplanes and flying machines in the early 1900s?

4. Write the following question on the board, Based on what these sheet music covers show, how did people feel about aviation in the early 1900s? Then, invite students to come examine the covers up close. You may want to put them in small groups and ask each small group to study one cover.

5. As a class, answer the question in step 4. Possible responses:

- ★ Aviation looked like fun.
- ★ Aviation was for average people, not just pilots.
- ★ Aviation (flying in airplanes) would fit into daily life the way cars and boats did.

6. Explain to the class that they are going to study one aspect of what happened *after* the Wright brothers invented the airplane: they are going to study how people responded to the aerial age, to living in a time when people could fly (in airplanes!). Together, as a class, they will study the Aerial Age by examining people's responses through their visual, literary, and musical expressions.

7. Begin by having students imagine/discuss what life would be like without the technological marvel of their own age: the computer. Then ask them to list changes in their lifetime in the way they study, communicate, do research, and play. Has the computer caused changes in the way they live? Ask them if, on the whole, they think computers have had a good or a bad effect on their lives.

8. Then ask about the fears or concerns people have about computer use? What can be dangerous or bad about using computers? (Loss of privacy, contact with dangerous people, isolation, identity theft, etc.) Ask students to think about the computer's impact on their personal lives and generalize to the larger society.

9. Explain to students that how people feel about an invention can change as the invention becomes more familiar or accepted. Their attitude toward computers is probably different than their parents' or grandparents' attitude.

10. Tell students that they are now going to ask some of the same questions about the airplane; they are going to study a set of primary sources to find out how people responded to an invention of an earlier time—100 years ago—the airplane. Give each student a copy of each of the primary sources on this poster and a copy of the handout, *How Did They Feel About Flying? Examining Primary Sources to Learn about the Popular Response to the Aerial Age*.

11. To practice as a class, examine the *Bonne Année* (Happy New Year) postcard. Lead students through the questions on the handout, *How Did They Feel About Flying?* On the board or chart paper, post the students' responses to Section V, *What Feelings or Attitudes About Aviation Are Revealed in this Primary Source?* to serve as a guide.

12. Working alone or in small groups, have students examine the primary sources (listed in the Preparation section, item 3) on this poster. Have them complete the *How Did They Feel about Flying?* handout for each item they study.

13. Bring the class together for a wrap-up discussion to answer the main question of this lesson, *How did people feel about the airplane and a world where people used machines to fly?*

14. Individually, in small groups, or as a class, have students examine the popular response to an invention of today. Some inventions that would make for interesting study include the computer, the cell phone, IPODs, DVDs. Students should gather both primary and secondary sources that reveal popular response to the invention they choose to study. They might gather editorial cartoons, artwork, writing (song lyrics, poetry, articles, novels), websites, advertisements, movies, etc.

15. Students should interview people of different ages to document their responses to the invention being studied. You may want to help students by developing an interview script or short questionnaire for them to use or by developing interview questions as a class.

16. Students write a brief paragraph summarizing the popular response to the invention they studied. In this writing, they make an overall statement about whether the popular response is positive or negative and then discuss some of the evidence they found.

17. Students participate in a culminating activity in which they both document the popular response to the invention they studied and respond to the invention themselves. This culminating activity can include any of the student products listed on page 4.

DOCUMENTING POPULAR RESPONSE	YOUR OWN RESPONSE
A scrapbook of editorial cartoons about the invention	Draw an editorial cartoon that indicates your response to the invention.
A collage of how the invention is depicted in advertising	Draw a sheet music cover for a song you write about how you feel about the invention.
An essay about popular response to the invention in several media or in one medium	Write an essay about how you feel about the invention or how life would be better or worse if the invention hadn't been invented.
A classroom exhibit on popular response to one particular invention	Write an editorial for the school newspaper about your response to the invention.
A CD of music that reveals popular attitudes toward the invention combined with "liner notes" about the attitudes	

## EXTENSION

1. Go to the NASM website, "The Wright Brothers & the Invention of the Aerial Age," to listen to aviation-related music of the early 1900s.
2. Advertisers were quick to capitalize on the aerial age to bring excitement to their products. Extend this lesson by studying early advertisements that included images of planes. The NASM online collection includes these ads:
  - ★ Italian trade card featuring a Wright airplane and endorsing a canned meat product, 1909.
  - ★ Advertisement for Lash's Bitters laxative, 1911. (USAF Library, Gimbel Collection)
  - ★ Advertisement for a grape soft drink called Vin Fiz. The Vin Fiz logo had been painted on pilot **Calbraith Perry Rodger's** Wright EX; Rodgers made the first airplane crossing of the United States in his *Vin Fiz*.

Students could study today's ads to see whether one of today's new inventions is lending excitement to a product.

3. With the Wright brothers' flight, songwriters found a popular new subject, and soon people worldwide were singing and playing aviation-related songs. Ask your school's music teacher to play "The Song of the Wright Boys," and to teach your class to sing this popular tune of 1909. The music can be printed from the Museum's website, "The Wright Brothers & the Invention of the Aerial Age." From the home page, select Resources.

## RESOURCES

### Student Books

*First to Fly: How Wilbur and Orville Wright Invented the Airplane*, by Peter Busby.

*A Photobiography of Wilbur and Orville Wright: Airborne*, by Mary Collins.

*The Wright Brothers: How They Invented the Airplane*, by Russell Freedman.

### Adult Books

*The Bishop's Boys*, by Tom Crouch.

*The Wright Brothers and the Beginning of the Aerial Age*, by Tom Crouch and Peter Jakob.

*Slipping the Surly Bonds: Great Quotations on Flight*, edited by Dave English.

*Because I Fly: A Collection Of Aviation Poetry*, edited by Helmut Reda.

*A Passion for Wings: Aviation and the Western Imagination 1908 - 1918*, by Robert Wohl.

### Wright Websites

The National Air and Space Museum's website for *The Wright Brothers & the Invention of the Aerial Age* exhibition at [www.nasm.si.edu/wrightbrothers](http://www.nasm.si.edu/wrightbrothers).

Centennial of Flight Commission website at [www.centennialofflight.gov/index.cfm](http://www.centennialofflight.gov/index.cfm).

The Wright Experience website at [www.wrightexperience.com/](http://www.wrightexperience.com/).

Figure 1.

Bonne Année (Happy New Year) postcard, circa 1910, depicts a family out for a flight on a Voisin airplane (USAF).

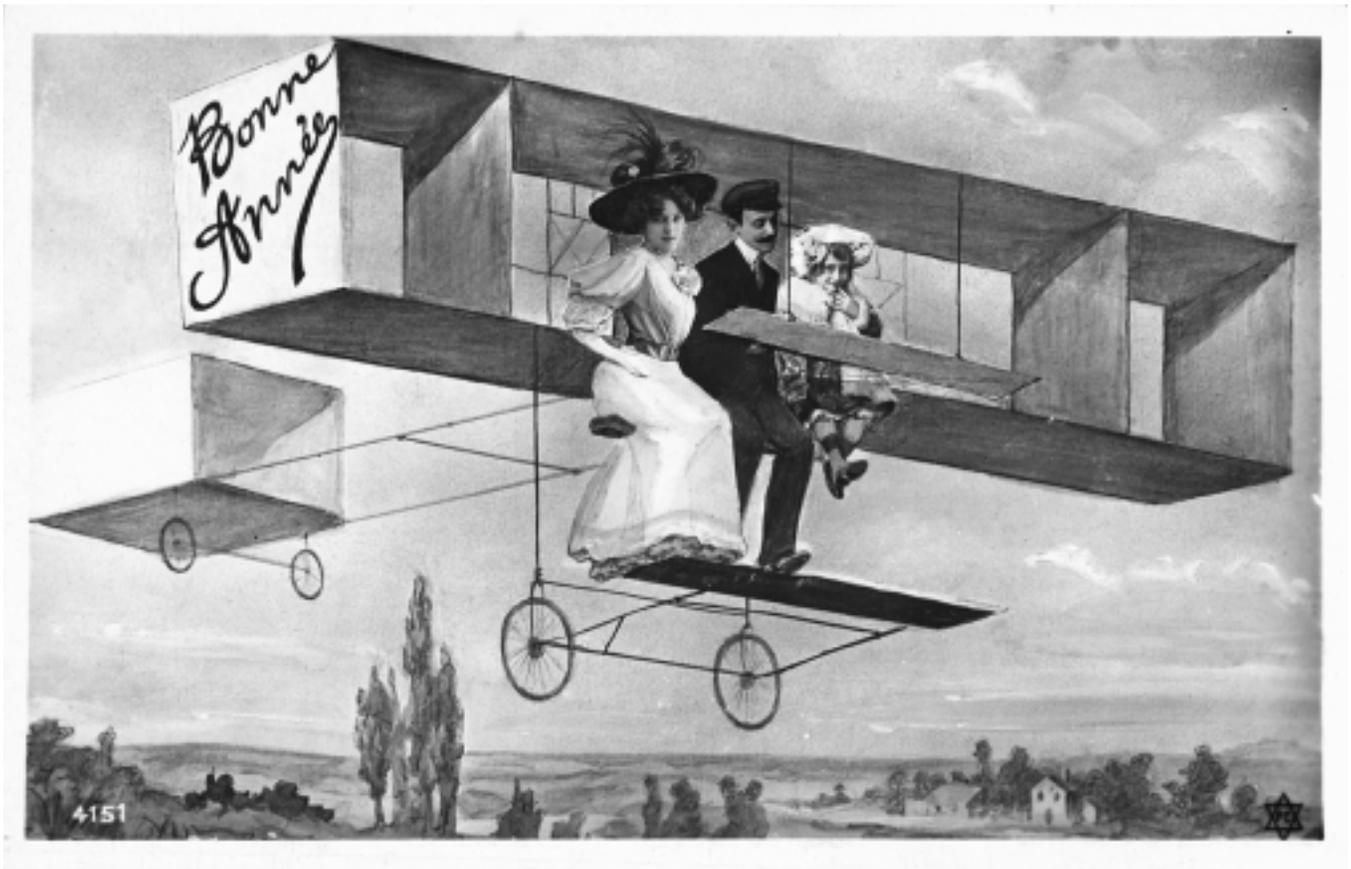
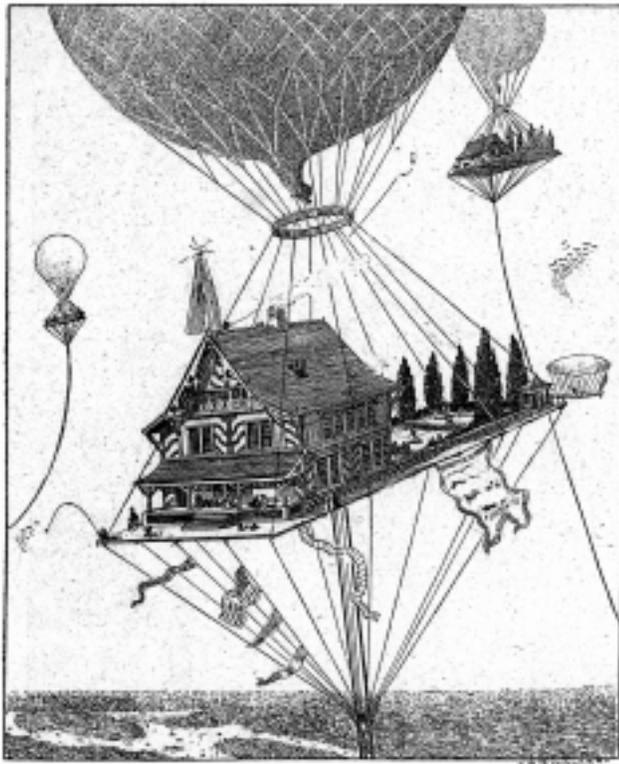


Figure 2.

The “hazards” of the new aviation age included straining your neck in order to see flying airplanes, as humorously depicted in this cartoon, circa 1910 (NASM).



A VENDRE OU A LOUER... POUR 1908  
 Joli chalet captif à 500 mètres d'altitude; tennis, vétédrozou, pêche aux moustiques. Télégraphe sans fil. Service de l'aéroposte deux fois par jour.

Figure 3.

This 1908 illustration, appearing in the French magazine *Le Sourire*, depicts the aerial world of the future with a flying house.

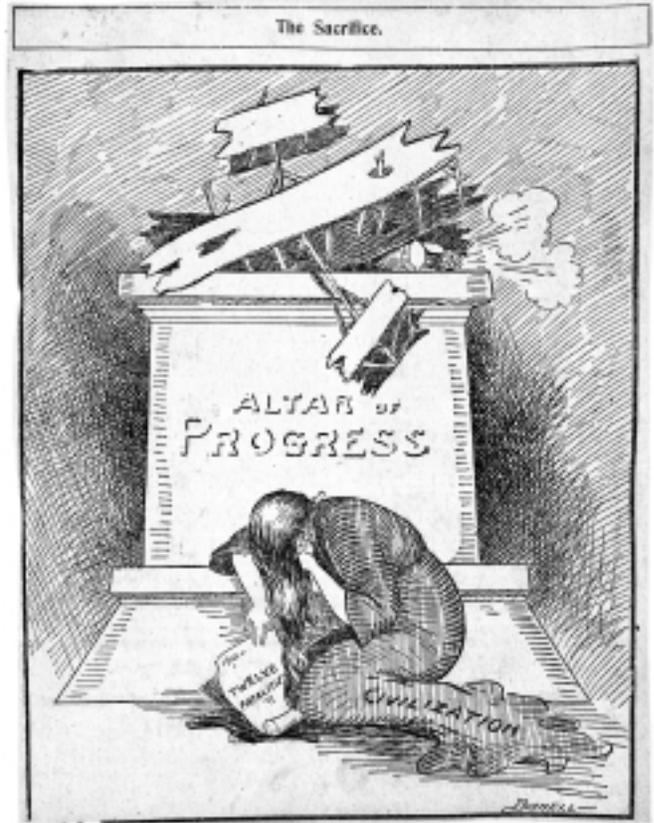
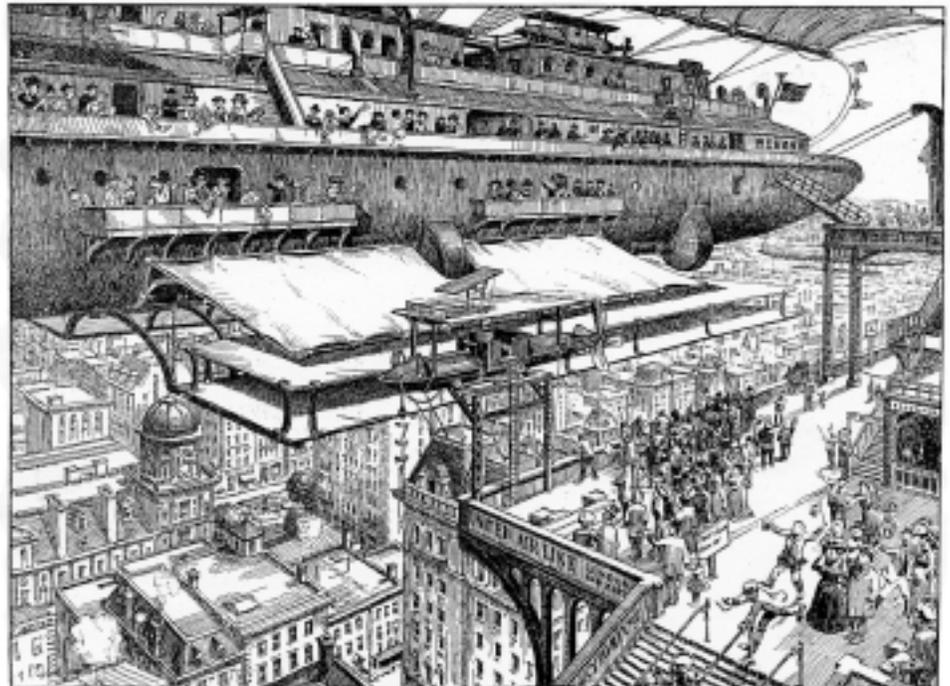


Figure 4.

Not everyone saw aviation as the salvation for civilization, as this illustration dated 1910 shows. A woman is mourning twelve pilot's deaths at the Altar of Progress (NASM).



LE DÉPART D'UN TRANSSATLANTIQUE EN 1905.

Figure 5.

This 1910 illustration, appearing in the French magazine *Le Sourire*, depicts the imagined aerial world of the future with the departure of a transatlantic aircraft.

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### Excerpts from *THE AEROPLANES AT BRESCIA* by FRANZ KAFKA, 1909

*La Sentinella Bresciana* of September 9, 1909, announces its air show with delight. As my two friends and I read about it, we were filled with courage and fear simultaneously....The aerodrome is at Montechiari, and can be reached in a bare hour by the local line [train] that goes to Mantua. We arrive. We pass the hangars. On their pediments are written the names of the aviators...and over that lie the colors [flags] of their countries.

In the fenced-in ground in front of his hangar, Rougier...is darting about in his shirt sleeves. In the next hangar [Glenn] Curtiss is sitting all alone. Through the curtains... his machine can be seen; it is bigger than we had heard.

We see Bleriot's hangar, and next to it that of his pupil LeBlanc....Is Bleriot going to go up in the air in this tiny thing? People on the water have an easier job. They can practice in puddles first, then in ponds, and not venture out to sea until much later. For this man there is only the sea.

Bleriot is going to fly now....But there is a problem with the engine. The young Mrs. Bleriot passes by with a motherly face, two children behind her. If her husband can't fly, that does not suit her, and if he flies she is afraid.

Here comes the machine in which Bleriot flew over the [English]Channel....Here, above us, there is a man 20 meters above the earth imprisoned in a wooden box, pitting his strength against an invisible danger which he has taken on of his own free will.

Curtiss is going to fly for the Grand Prix of Brescia. Curtiss's engine roars and one has hardly had time to look at it before he is flying away from us...toward the woods in the distance. He disappears from sight. From behind some houses...he reappears and races towards us....He flies 50 kilometers in 49 minutes, 24 seconds, and so wins the Grand Prix — 30,000 liras.

Just as Curtiss passes over us after his winning flight,...Bleriot begins a little trip which everybody is immediately confident will be successful. Rougier climbs in small circles, flies above Bleriot, turns him into an onlooker and continues to climb without stopping.

Human beings in these aeroplanes have perspectives on the world never possible before. Would anyone have dreamed we could have conquered the air 100 years ago? What will be possible 100 years from now? No wonder flight has captured our imaginations, and has inspired artists as well as scientists.

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### QUOTATIONS ABOUT THE AERIAL AGE

"I don't have any regrets about my part in the invention of the airplane, though no one could deplore more than I do the destruction it has caused. I feel about the airplane much as I do in regard to fire. That is, I regret all the terrible damage caused by fire. But I think it is good for the human race that someone discovered how to start fires and that it is possible to put fire to thousands of important uses."  
— Orville Wright, *the Published Writings of Wilbur and Orville Wright*

"If ever men presented a spectacle of sheer insanity it is now when, having at long last triumphed in their struggle to subordinate to their welfare the unconquered element, they have straightaway commenced to defile that element, so heroically mastered, by filling it with engines of destruction. If the gods were justified of their ironic smile—by the gods, it is now!"  
— John Galsworthy, *British author, 1911*

"The new instrument seemed to exalt man above his fate, to endow him not only with new dominion but with a sixth sense."

— Gabriele D'Annunzio, *Forse che sì forse che no*

"The aeroplane has unveiled for us the true face of the earth."  
— Antoine de Saint-Exupéry, *French aviator and author, Wind, Sand, and Stars, 1939.*

"It's only the beginning but the implications are terrific."  
— Gerald Sayer, *first flight in the Gloster-Whittle E28 jet, 1941*

**HANDOUT**

# How Did They *Feel* About Flying?

**EXAMINING PRIMARY SOURCES  
TO LEARN ABOUT POPULAR RESPONSE  
TO THE AERIAL AGE**

Use this handout to guide your examination of the primary sources that your teacher has copied for you. Answer as many questions as you can.

**I. Observations About a Primary Source**

Item type: \_\_\_\_\_

Item date: \_\_\_\_\_

Item title: \_\_\_\_\_

Creator, publisher, or author:  
\_\_\_\_\_

**II. Examining a Primary Source**

List separately the people, objects and activities in the primary source

People: \_\_\_\_\_  
\_\_\_\_\_

Objects: \_\_\_\_\_  
\_\_\_\_\_

Activities: \_\_\_\_\_  
\_\_\_\_\_

What is happening in this picture?  
\_\_\_\_\_

**III. Inferences (Your Own Conclusions)  
About a Primary Source**

Can you tell who was meant to read or see this source?  
\_\_\_\_\_

What does this source say about aviation at the beginning of the 20th century?  
\_\_\_\_\_

Why do you think this cartoon or illustration was drawn?  
\_\_\_\_\_

List two things this source tells you about life the United States and Europe.  
\_\_\_\_\_

What can you infer about the popular response to the Aerial Age from the people's expressions or postures?  
\_\_\_\_\_

**IV. What Are Your Questions About the Primary Source or About Early Aviation?**

What information do you need to fully understand the source?  
\_\_\_\_\_

Does it contain words or concepts you do not understand?  
\_\_\_\_\_

Write a question that you have about the source to the creator of the source.  
\_\_\_\_\_

What further research might you need to do in the library or on the internet?  
\_\_\_\_\_

**V. What Feelings or Attitudes About Aviation Are Revealed in This Primary Source?**

Write a brief paragraph discussing how you think the creator of the document felt about aviation.  
\_\_\_\_\_

## **VISITING THE NATIONAL AIR AND SPACE MUSEUM ON THE NATIONAL MALL**

The Museum is open from 10:00 a.m. to 5:30 p.m. daily except December 25. For more information on school programs or to schedule a tour or request a School Programs Guide, call 202-633-2563 or visit the Museum's website at [www.nasm.si.edu/edu](http://www.nasm.si.edu/edu)

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