

Flying Cheap Classroom Activities

VIDEO OVERVIEW

The airline industry's practice of outsourcing more than half of U.S. domestic flights to regional carriers has raised serious safety concerns. In this video clip from *Flying Cheap*, students will learn about this trend and examine the some of the many factors that may have contributed to the accident from a variety of perspectives.

GETTING STARTED

For classrooms studying social studies, economics and technology, FRONTLINE provides a set of themes and discussion questions for *Flying Cheap* to help students analyze and understand key current events. Watch the video clip and start a discussion to examine how the airline industry seeks to save money and ensure safety. Go further into this topic with the *Flying Cheap Lesson Plan*, which asks students to make flight safety recommendations from various perspectives.

VIDEO THEMES

- As a way of cutting costs, major airlines increasingly use smaller regional carriers, like Colgan Air, to operate more than half of U.S. domestic flights.
- Passengers are generally not aware that their flights are frequently outsourced to regional carriers; they believe when they buy a ticket from Continental, they are getting "Continental pilots, Continental safety and Continental service."
- After the National Transportation Safety Board (NTSB) investigation revealed that pilot error was the likely cause of the crash of Continental Flight 3407, it began to investigate the professional backgrounds of the pilots, which raised questions about pilot qualifications, training and pay.
- The crash of Continental Flight 3407 was a "watershed accident" which forced regulators to focus their attention on the safety of regional airline operations.

DISCUSSION QUESTIONS

- What were some of the factors that led to the crash of Continental Flight 3407? Who do you think might be responsible for these factors: Continental Airlines, Colgan Air, the pilots, the government airline industry regulators? Explain your reasons.
- What economic incentive is there for Continental Airlines to work with a
 regional carrier like Colgan Air? Do you think any of these economic
 incentives might compromise passenger safety? Do you think any of these
 economic incentives are a benefit to the industry? Are there benefits to
 passengers?
- How up front with passengers should airlines be about the use of regional carriers? Did Continental Airlines make it sufficiently clear to its passengers that it would be using a regional carrier for Flight 3407? Why or why not? If not, what should Continental have done differently?
- Government regulators describe the crash of Continental Flight 3407 as a
 "watershed accident." Describe why this accident might be so important to
 both the regional and major airlines. Can you think of any other
 "watershed accidents" from other industry sectors in the recent past?
 (Answers might include Deepwater Horizon Oil Spill in the Gulf of Mexico;
 Upper Big Branch Coal Mine in West Virginia; and Hurricane Katrina
 disaster relief response in New Orleans.) How can these accidents help
 these industries/agencies improve?

GO FURTHER

Featured Lesson Plan: Improving Flight Safety

Web-exclusive Resource: Map of Top U.S. Airports for Regional Departures http://www.pbs.org/wgbh/pages/frontline/flyingcheap/map/

Flying Cheap

FEATURED LESSON PLAN: IMPROVING FLIGHT SAFETY

Overview:

In this lesson, students will explore the airline industry's common practice of outsourcing flights to regional airlines and examine what caused the crash of Continental Flight 3407. Students will then simulate a simplified process that the FAA (Federal Aviation Administration) would use to develop safety recommendations.

Subject Areas:

Social Studies, Government, Technology, Economics

Grade Level:

Grades 9-12

Objectives:

Students will:

- Examine core services of the airline industry from multiple perspectives and evaluate which services are the most essential
- Identify factors that led to the crash of Continental Flight 3407
- Analyze ideas for improving flight safety and reach a consensus on the top two recommendations that seem the most feasible

Estimated Time Needed:

One 50-minute class period

Materials Needed:

- Internet access and equipment to show the class an online video clip and conduct research
- Chapter One of *Flying Cheap*: "The Crash of Continental 3407"
- Handout 1: Prioritize Your Flight (PDF file)
- Handout 2: (Optional) Viewing Guide (PDF file)
- Handout 3: Focus on Flight Safety (PDF file)
- Handout 4: Gameplan for Aviation Safety Improvements (PDF file)

Procedure:

Opening Activity:

- 1. Distribute the **Prioritize Your Flight** worksheet and ask students to rank the airline services in the order that is most important to them. Invite students to explain their prioritized lists to the class. Point out where students ranked safety-related issues.
- 2. Watch the first chapter of *Flying Cheap*, "The Crash of Continental 3407," which describes the country's deadliest plane crash in nearly a decade. Consider providing the **Viewing Guide** handout to focus students' attention while they watch.
- 3. Ensure student understanding of the video themes by discussing the factors that led to the crash of Continental Flight 3407.
- 4. Ask students to go back to the **Prioritize Your Flight** activity. Now ask students to take a different perspective on this exercise and rank these services in the order most important to other groups, such as airline executives, passengers, pilots and government regulators.

Invite several students to explain their prioritized lists to the class. Discuss any differences from the earlier activity in how services were ranked.

Main Activity: Improving Flight Safety

- 5. Tell students that the airline industry in the U.S. is regulated by the FAA. Explain that the class is going to simulate a similar but simplified process to the one the FAA would use to develop safety recommendations:
 - Students will meet in working groups to consider safety ideas proposed by the families of those who died in the crash of Continental Flight 3407.
 - Each working group will represent a different constituency that would be affected by these safety ideas.
 - Groups will discuss the proposed ideas from their given perspective, reach a consensus about which two recommendations seem the most feasible, and present these to the executive committee (the full class).
 - The executive committee will then discuss and consolidate these recommendations into one document for the FAA to review and potentially act upon.
- 6. Begin the simulation by dividing the class into groups and assigning each group a particular role, such as representatives from major airlines, representatives from regional airlines, relatives of airline crash victims, and representatives from the pilots' union.

- 7. Provide the handouts <u>Focus on Flight Safety</u> and <u>Gameplan for Aviation Safety Improvements</u>. Students will review the ideas proposed in the Gameplan document and discuss them from the perspective of their assigned role.
- 8. Have a member from each group give a two-minute presentation of their group's findings to the executive committee (the full class). Allow the other groups to ask questions or challenge the recommendations after each presentation. Recommendations should be collected in a final "Recommendations Document" that the committee/class votes to approve at the end of the "meeting." Explain that this Recommendations Document will be sent to the FAA for review and potential action.

CREDITS

This teacher's guide was developed by Cari Ladd. It was written by Andrew Pass. Advisers were Mark Pearcy of Braden River High in Bradenton, Fla., and Molly Lynde of Mills E. Godwin High School in Richmond, Va.

LESSON EXTENSIONS

- Explore the history of recent U.S. plane crashes in greater detail. Have students study the narratives from Major Crashes, 2002-2009
 (http://investigativereportingworkshop.org/flying-cheap/major-crashes/). Ask them to choose one and then pretend to be a news reporter "live" at the crash site who summarizes what happened.
- Show the class Chapter Two of Flying Cheap, "Growth of Regional Airlines." Using the video transcript (http://www.pbs.org/wgbh/pages/frontline/flyingcheap/etc/script.html) as a reference, have each student write two video-based questions and answers that begin with Who, What, Where, When, Why or How. Instruct students to keep questions simple so they can be answered in one sentence. Then collect these questions and answers and use them to play a class quiz show game.

RELATED RESOURCES

FRONTLINE: Flying Cheap

http://www.pbs.org/wgbh/pages/frontline/flyingcheap/continental-3407/
View the entire program and read about the Continental Flight #3407 families and their crusade to improve airline safety.

"Colgan-Buffalo Plane Crash: Errors Began Pre-Flight"

http://www.npr.org/blogs/thetwo-way/2010/02/colganbuffalo plane crash erro.html This NPR News Blog post describes findings by investigators about the crash of Continental Flight 3407.

Families of Continental Flight 3407

http://www.3407memorial.com/

The loved ones of the victims of Continental Flight 3407 describe their work to improve flight safety and provide a memorial for those who died in the crash.

"Regional Air Safety in Focus Following Buffalo Crash"

http://www.npr.org/templates/story/story.php?storyId=105201348

This article discusses specific safety concerns about the pilots of Continental Flight 3407.

Purchasing the Film

Flying Cheap can be purchased from PBS Educational Media. http://teacher.shop.pbs.org/product/index.jsp?productId=3975313

RELATED STANDARDS

These standards are drawn from "Content Knowledge," a compilation of content standards and benchmarks for K-12 curriculum by McRel (Mid-continent Research for Education and Learning) at http://www.mcrel.org/standards-benchmarks/.

Economics, Standard 2: Understands characteristics of different economic systems, economic institutions and economic incentives

Geography, Standard 2: Knows the location of places, geographic features and patterns of the environment

Historical Understanding, Standard 1: Understands and knows how to analyze chronological relationships and patterns

Historical Understanding, Standard 2: Understands the historical perspective

Technology, Standard 3: Understands the relationships among science, technology, society and the individual

Thinking and Reasoning, Standard 1: Understands and applies the basic principles of presenting an argument