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UNIT 6 | SECTION B | LESSON 2 | PRESENTATION

ACCIDENT CASE STUDY

LEARNING OBJECTIVES

At the end of this lesson, students will be able to:

- **Describe the role of the NTSB during an aircraft accident investigation.**
- **List and describe the general elements related to the aircraft accident investigation process.**
- **Formulate various safety recommendations that might result from accident case studies.**



WARM-UP

In your small groups, list:

- The seven components of an NTSB “Go Team”
- The four major stages of an NTSB accident investigation

To complete this exercise, think back to what you learned in the previous lesson.

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NTSB “GO TEAM”

1. Operations
2. Structures
3. Powerplants
4. Systems
5. Air Traffic Control
6. Weather
7. Human Performance

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THE STAGES OF AN ACCIDENT INVESTIGATION

1. Notification and Initial Response

- NTSB “Go Team” is formed

2. On-Scene Activities

- Preserve, collect, record, and report

3. Post On-Scene Activities

- Analyze, prepare, present, and publish

4. Safety Recommendations

- Research, test, develop, and publish



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FORMATIVE ASSESSMENT

Watch the first 4-5 minutes of a media briefing for a helicopter crash over New York City's East River.

Be prepared to write a response to the following question:

Will an aircraft accident investigation always result in knowing what really caused the accident?



VIDEO



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ACCIDENT CASE STUDY

Using the information contained in your accident case study packet and a reanimation video, your “Go Team” will evaluate the crash of Colgan Air Flight 3407.

Each team will present its “findings” and “recommendations” upon completing the study.

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ACCIDENT SCENARIO



- Date** February 12, 2009
- Time** 10:17 p.m.
- Airline** Colgan Air, operating as Continental Connection Flight 3407
- Aircraft** Bombardier DHC-8-400
- Location** Buffalo-Niagara International Airport, New York
- Severity** Crashed into a residence in Clarence Center, N.Y., about 5 nautical miles northeast of the airport. The two pilots, two flight attendants, and 45 passengers aboard the airplane died; one person on the ground died; and the airplane was destroyed by impact and fire.

REANIMATION VIDEO

Listen for “Colgan 3407”



VIDEO

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Editorial credit: InsectWorld / Shutterstock.com

GO!

1. Each member of your team will choose one element of the “Go Team.” If you have less than seven members, some students will need to accept more than one “Go Team” responsibility.
2. Using the reanimation video and the information provided in your accident packets, each team member should evaluate his or her area of responsibility.

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GO! (CONTINUED)

3. After your individual research, regroup as a team and compile the information below.

- **Identify at least three factors that may have contributed to the accident**
- **List limitations or challenges that would have been factors in conducting an effective investigation of this accident**
- **Name at least three other parties that might be brought into this investigation.**

4. Identify at least three safety recommendations that have come as a result of your investigation.



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SUMMATIVE ASSESSMENT

Each “Go Team” will present their accident investigation findings and recommendations to a “review board” (the rest of the class) who will ask probing and clarifying questions. Each presentation should be 5 minutes and include the following:

- An assessment of the factors that contributed to the accident
- Uncertainties or unanswered questions that remain regarding the accident
- At least two recommendations for preventing similar accidents



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