

ACCIDENT CASE STUDY



COLGAN AIR FLIGHT 3407

Name _____

Class _____

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.

STEP 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.

“GO TEAM” RESPONSIBILITY	TEAM MEMBER ASSIGNED
OPERATIONS Collect history of the accident flight and crewmembers’ duties for as many days before the crash as appears relevant.	
STRUCTURES Document the airframe wreckage and the accident scene.	
POWERPLANTS Examine engines (and propellers) and engine accessories.	
SYSTEMS Study components of the plane’s hydraulic, electrical, pneumatic and associated systems, together with instruments and elements of the flight control system.	
AIR TRAFFIC CONTROL Reconstruct the air traffic services provided to the pilot, including acquisition of ATC radar data and transcripts of controller-pilot radio transmissions.	
WEATHER Gather all pertinent weather data from the National Weather Service, and sometimes from local TV stations, for a broad area around the accident scene.	
HUMAN PERFORMANCE Study crew performance and all before-the-accident factors that might be involved in human error, including fatigue, medication, alcohol, drugs, medical histories, training, workload, equipment design and work environment.	



STEP 2

Using the reanimation video and the information provided in your accident packets, each team member should evaluate their area of responsibility. Provide research in the space below for your area of responsibility.

PROPRIETARY



STEP 3

After your individual research, regroup and compile this information as a team. Review these items with your teacher before moving on to step 4.

- Identify at least three factors that may have contributed to the accident.
- List the limitations or challenges that would have been factors in conducting an effective investigation of this accident.
- Based on what you learned about the party system in the last lesson, name at least three other parties that might be brought into this investigation.



STEP 4

Identify several safety recommendations that your “Go Team” creates as a result of your investigation.

Recommendation 1

Recommendation 2

Recommendation 3

PROPRIETARY

STEP 5

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 “Go Team” presentation should include conclusions regarding the following:

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

The presentations should be 5 minutes long.