

# How safe are oxygen generators?

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From Correspondent Al Hinman

ATLANTA (CNN) -- Industry experts like chemical engineer [J. Wilson Mausteller](#) say oxygen canisters carried aboard airplanes are harmless if used and stored correctly. (60K [AIFF](#) or [WAV](#) sound)



In the wake of the crash of ValuJet Flight 592, the safety of emergency oxygen generators has been questioned. The oxygen is used by passengers if there is a drop in cabin pressure.

As more wreckage is found from the ValuJet plane that crashed last Saturday, killing 110 people, federal officials are pointing to generators as the cause of a possible fire or explosion on board before the plane plummeted into the Florida Everglades.

Mausteller, who is experienced with oxygen systems on planes, says such a fire is hard to imagine, but would be possible if several of the canisters started emitting oxygen.



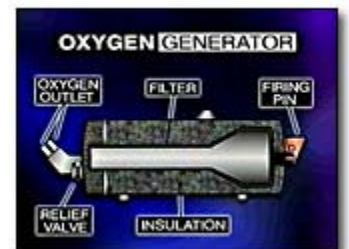
"It would enrich the air supply ... if there were an initiating source. Conceivably that could have started a fire, or to use your term -- an explosion," Mausteller said.

A fire that destroyed a DC-10 jumbo jet at Chicago's O'Hare International Airport 10 years ago was blamed on a generator that accidentally began producing oxygen in the cargo hold. .

While no passengers were hurt in that accident, the incident caused the Federal Aviation Administration to classify the canisters "hazardous material." ValuJet was not authorized to carry hazardous material, the FAA said.



The hair spray-size generators produce oxygen by heating chemicals at close to 1,200 degrees Fahrenheit. They are activated when the firing pin is pulled, usually when a passenger pulls the mask from an overhead compartment.



Once installed, the canisters are heavily insulated to protect the plane from damage or fire, but the surfaces of some models can reach temperatures as high as 500 degrees.

Experts say it is virtually impossible for the generators to malfunction, citing tests where the devices have been thrown on the floor and jostled without problems.

However, the oxygen generators have malfunctioned at least once, possibly twice, in a fatal aviation disaster.