

**CEN12FA086**

**Riverwood, IL**

**MEDICAL FACTUAL**

The following information was reviewed by Mary Pat McKay, MD, MPH, Chief Medical Officer for the National Transportation Safety Board, regarding the accident pilot in the above referenced case: the autopsy record, toxicology results, FAA blue ribbon medical file, pre-employment drug testing, and the investigator's reports.

The pilot's most recent FAA medical certificate (first class, issued 2/15/2011) required hearing amplification and corrective lenses. Chronic obstructive pulmonary disease (COPD or emphysema), with a single large area of scarring where lung tissue is missing, was first identified in 1999. From that time, the pilot was awarded a special issuance medical certificate requiring annual follow up until 2008 when follow up examinations revealed increasing size of the scarring, indicating increasing potential for developing a collapsed lung while flying (pneumothorax). After surgery to remove the scarring, the pilot received a special issuance second class medical certificate which required annual follow up with documentation of stable disease.

The cause of death was blunt force trauma. Samples from the autopsy were tested by the FAA Civil Aerospace Medical Institute for toxins. There was no evidence of carbon monoxide poisoning, cyanide, or ethanol. The pilot's blood was unsuitable for analysis of tetrahydrocannabinol (marijuana) but a small amount of its primary metabolite (0.0024 ug/ml of tetrahydrocannabinol carboxylic acid) was detected in the blood sample. In addition, tetrahydrocannabinol (marijuana) was identified in liver (0.1077 ug/ml) and lung (0.0198 ug/ml) and its primary metabolite (0.0157 ug/ml tetrahydrocannabinol carboxylic acid) was detected in the pilot's liver.