

WPR12FA274

Veneta, OR

MEDICAL FACTUAL

The Chief Medical Officer for the National Transportation Safety Board, Mary Pat McKay, MD, MPH, reviewed the following documents in this case: the investigator's report, the autopsy and toxicology results, and the FAA medical evaluation.

Per the FAA medical evaluation, the pilot did not report any medications or chronic medical conditions to the FAA. The autopsy listed the cause of death as blunt force chest trauma and did not identify any preexisting medical conditions. On toxicology testing, no tetrahydrocannabinol (marijuana) was found in blood but 0.1831ug/ml was detected in lung. In addition, 0.0068ug/ml of tetrahydrocannabinol carboxylic acid (marijuana's primary metabolite) was detected in blood and 0.0058ug/ml was found in lung.

Marijuana is a psychoactive drug with therapeutic levels as low as 0.001 ug/ml.¹ Marijuana has mood altering effects causing euphoria and relaxation. The ability to concentrate and maintain attention are decreased during marijuana use, and impairment of hand-eye coordination is dose-related over a wide range of dosages. Impairment in retention time and tracking, subjective sleepiness, distortion of time and distance, vigilance, and loss of coordination in divided attention tasks have all been reported. Users may be able to "pull themselves together" to concentrate on simple tasks for brief periods of time. Significant performance impairments are usually observed for at least 1-2 hours following marijuana use, and residual effects have been reported up to 24 hours.²

¹ Federal Aviation Administration. CAMI toxicology Drug Information for: Marijuana
<http://jag.cami.jccbi.gov/toxicology/DrugDetail.asp?did=154> Accessed 1/28/2013

² National Highway Traffic Safety Administration. Drugs and Human Performance Fact Sheets. Marijuana. <http://www.nhtsa.gov/people/injury/research/job185drugs/cannabis.htm> Accessed 1/28/2013