



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Mike Monroney  
Aeronautical Center

P.O. Box 25082  
Oklahoma City, Oklahoma 73125

Monday, July 1, 2019

National Transportation Safety Board  
45065 Riverside Parkway  
Ashburn, VA 20147

ACCIDENT # 0122    INDIVIDUAL#: 001    NAME: **PILOT**    MODE: AVIATION  
DATE OF ACCIDENT 06/07/2019    DATE RECEIVED 06/13/2019    PUTREFACTION: No  
N # 709CH    NTSB # ERA19FA188    CAMI REF # 201900122001  
LOCATION OF ACCIDENT Castalia, NC  
SPECIMENS Kidney, Liver, Lung, Muscle, Spleen

### FINAL FORENSIC TOXICOLOGY FATAL ACCIDENT REPORT

**CARBON MONOXIDE:** The carboxyhemoglobin (COHb) saturation is determined by spectrophotometry with a 10% cut off and confirmed by chromatography.

- NOT PERFORMED

**CYANIDE:** The presence of cyanide is screened by Conway Diffusion, when the COHb level is equal to or greater than 10% or upon special request. Cyanides are quantitated by spectrophotometry and confirmed by chromatography. The reporting cutoff for cyanide is 0.25 ug/mL. Normal blood cyanide concentrations are less than 0.15 ug/mL, while lethal concentrations are greater than 3 ug/mL.

- NOT PERFORMED

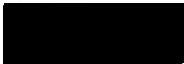
**VOLATILES:** The volatile concentrations are determined by headspace gas chromatography at a cut off of 10 mg/dL. Where possible, positive ethanol values are confirmed by Radiative Energy Attenuation.

- 20 (mg/dL, mg/hg) Ethanol detected in Liver
- NO ETHANOL detected in Muscle

**DRUGS:** Specimens are analyzed using immunoassay, chromatography, mass spectrometry, or spectrophotometry. Concentrations (ug/mL) at or above those in ( ) can be determined for, but not limited to, the following drugs: amphetamines (0.010), opiates (0.010), marijuana (0.001), cocaine (0.020), phencyclidine (0.002), benzodiazepines (0.030), barbiturates (0.060), antidepressants (0.100), and antihistamines (0.020). Drugs and/or their metabolites, that are not impairing or abused, may be reported from the initial tests. See the CAMI Drug Information Web Site for additional information (<http://jag.cami.jccbi.gov/toxicology/>).

- NO DRUGS listed above detected in Liver

c=US, o=U.S. Government, ou=AMC, ou=AMC, cn=RUSSELL J LEWIS  
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