



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

THESE RECORDS MAY BE RELEASABLE UNDER THE FOIA REQUEST 15
DAYS AFTER SIGNATURE DATE UNLESS WE HEAR OTHERWISE FROM
FAA NTSB COUNSEL

Mike Monroney
Aeronautical Center

P.O. Box 25082
Oklahoma City, Oklahoma 73125

Wednesday, October 24, 2018

National Transportation Safety Board
45065 Riverside Parkway
Ashburn, VA 20147

ACCIDENT # 0161 INDIVIDUAL#: 001 NAME: [REDACTED] MODE: AVIATION
DATE OF ACCIDENT 08/24/2018 DATE RECEIVED 08/28/2018 PUTREFACTION: No
N # 65HM NTSB # ERA18FA230 CAMI REF # 201800161001
LOCATION OF ACCIDENT Hanson, MA
SPECIMENS Bile, Blood, Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, Spinal Fluid, Spleen, Vitreous

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.

- NO CARBOXYHEMOGLOBIN detected in Blood

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.

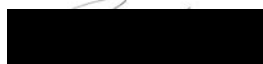
- NO ETHANOL detected in Blood

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), marihuana (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/>).

- 0.468 (ug/mL, ug/g) Ketamine detected in Blood
- 1.535 (ug/mL, ug/g) Ketamine detected in Liver
- 0.316 (ug/mL, ug/g) Norketamine detected in Blood
- 1.708 (ug/mL, ug/g) Norketamine detected in Liver
- 0.019 (ug/mL, ug/g) Midazolam detected in Blood
- 0.11 (ug/mL, ug/g) Midazolam detected in Liver
- 0.008 (ug/mL, ug/g) Lorazepam detected in Blood
- 0.073 (ug/mL, ug/g) Lorazepam detected in Liver
- Fentanyl detected in Blood
- 12 (ng/mL, ng/g) Fentanyl detected in Liver
- 0.04 (ug/mL, ug/g) Morphine detected in Blood
- 0.441 (ug/mL, ug/g) Morphine detected in Liver

Wednesday, October 24, 2018

CONTINUATION OF REF#: 201800161001 — [REDACTED]



Russell Lewis, Ph.D., F-ABFT
Supervisor, Forensic Sciences
Bioaeronautical Sci. Research Lab
CAMI, FAA

c=US, o=U.S. Government, ou=AMC, ou=AMC, cn=RUSSELL
J LEWIS
2018.10.24 15:10:16 -05'00'