U.S. Department of Transportation
Federal Aviation Administration

Mike Monroney Aeronautical Center
P.O. Box 25082
Oklahoma City, Oklahoma 73125

Wednesday, July 10, 2019

National Transportation Safety Board
4760 Oakland Street, Suite 500
Denver, CO 80239

ACCIDENT # 0089 **INDIVIDUAL#:** 001 **NAME:** [redacted] **MODE:** AVIATION

DATE OF ACCIDENT 05/08/2019 **DATE RECEIVED** 05/14/2019 **PUTREFACTION:** No

N # 111JP **NTSB #** CEN19FA139 **CAMI REF #** 201900089001

LOCATION OF ACCIDENT Moose Lake, MN

SPECIMENS Blood (Cavity), Blood (Heart), Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, 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 (Cavity)

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 (Heart)

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/).

- 15 (ng/mL, ng/g) Amino-clonazepam (7-) detected in Blood (Cavity)
- Amino-clonazepam (7-) detected in Liver
- Clonazepam detected in Blood (Cavity)

c=US, o=U.S. Government, ou=AMC, ou=AMC, cn=RUSSELL J LEWIS
2019.07.11 14:24:09 -05'00'

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