U.S. Department of Transportation
Federal Aviation Administration

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

Tuesday, August 21, 2018

National Transportation Safety Board
505 South 336th Street, Suite 540
Federal Way, WA 98003

ACCIDENT # 0147 **INDIVIDUAL#:** 002 **NAME:** [redacted] **MODE:** AVIATION

DATE OF ACCIDENT 08/02/2018 **DATE RECEIVED** 08/08/2018 **PUTREFACTION:** No

N # 56039 **NTSB #** WPR18FA210 **CAMI REF #** 201800147002

LOCATION OF ACCIDENT Lopez Island, WA

SPECIMENS Bile, Blood (Cavity), 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 (Cavity)

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/).

- NO DRUGS listed above detected in Blood (Cavity)

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

U.S. Department of Transportation
Federal Aviation Administration

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

Tuesday, September 04, 2018

National Transportation Safety Board
505 South 336th Street, Suite 540
Federal Way, WA 98003

ACCIDENT # 0147 **INDIVIDUAL#:** 001 **NAME:** [redacted] **MODE:** AVIATION

DATE OF ACCIDENT 08/02/2018 **DATE RECEIVED** 08/07/2018 **PUTREFACTION:** No

N # 56039 **NTSB #** WPR18FA210 **CAMI REF #** 201800147001

LOCATION OF ACCIDENT Lopez Island, WA

SPECIMENS Bile, Blood (Cavity), Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, Spleen, Urine, 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.

- 28 (mg/dL, mg/hg) Ethanol detected in Blood (Cavity)
- N-Butanol detected in Blood (Cavity)
- NO ETHANOL detected in Vitreous

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/).

- Atenolol detected in Blood (Cavity)
- Atenolol detected in Urine
- Triamterene detected in Blood (Cavity)
- Triamterene detected in Urine
- Famotidine detected in Blood (Cavity)
- Famotidine detected in Urine

[redacted]

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CONTINUATION OF REF#: 201800147001 [redacted]

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