U.S. Department of Transportation
Federal Aviation Administration

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

Wednesday, September 14, 2016

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

PILOT

ACCIDENT # 0129 **INDIVIDUAL#:** 001 **NAME:** [redacted] **MODE:** AVIATION

DATE OF ACCIDENT 07/06/2016 **DATE RECEIVED** 07/13/2016 **PUTREFACTION:** Yes

N # 525TA **NTSB #** DCA16FA199 **CAMI REF #** 201600129001

LOCATION OF ACCIDENT Italy, TX

SPECIMENS Brain, 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.

>> 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.

>> 32 (mg/dL, mg/hg) Ethanol detected in Muscle
>> NO ETHANOL detected in Brain

DRUGS: Specimens are analyzed using immunoassay, chromatography, GC/MS, HPLC/MS, or GC/FTIR. 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 Liver

c=US, o=U.S. Government, ou=AMC, ou=AMC, cn=RUSSELL J LEWIS
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Russell Lewis, Ph.D.
TC, FAA, Forensic Toxicology
Research Team CAMI

U.S. Department of Transportation
Federal Aviation Administration

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

Thursday, September 15, 2016

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

CO-PILOT

ACCIDENT # 0129 **INDIVIDUAL#:** 002 **NAME:** [redacted] **MODE:** AVIATION

DATE OF ACCIDENT 07/06/2016 **DATE RECEIVED** 07/13/2016 **PUTREFACTION:** Yes

N # 525TA **NTSB #** DCA16FA199 **CAMI REF #** 201600129002

LOCATION OF ACCIDENT Italy, TX

SPECIMENS Heart, Kidney, Liver, Lung, Muscle

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.

>> 65 (mg/dL, mg/hg) Ethanol detected in Muscle

>> NO ETHANOL detected in Liver

>> Propanol (N-) detected in Muscle

DRUGS: Specimens are analyzed using immunoassay, chromatography, GC/MS, HPLC/MS, or GC/FTIR. 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 Lung

>> 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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