Gulfstream Aerospace Corporation G-IV
Bedford, Massachusetts
May 31, 2014
ERA14MA271

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ATTACHMENT 3

FAA CIVIL AEROSPACE MEDICAL INSTITUTE'S
BIOAERONUTICAL SCIENCES RESEARCH LABORATORY
TOXICOLGICAL REPORTS FOR OCCUPANTS A AND B.

2 - Pages

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

U.S. Department of Transportation
Federal Aviation Administration

Mike Monroney Aeronautical Center

P O Box 25082
Oklahoma City, Oklahoma 73125

Monday, August 04, 2014

National Transportation Safety Board
45065 Riverside Parkway
Ashburn, VA 20147

ACCIDENT # 0086 **INDIVIDUAL#:** 002 **NAME:** DEVRIES, BAUKE E. **MODE:** AVIATION

DATE OF ACCIDENT 05/31/2014 **DATE RECEIVED** 06/04/2014 **PUTREFACTION:** No

N # 121JM **NTSB #** ERA14MA271 **CAMI REF #** 201400086002

LOCATION OF ACCIDENT Bedford, MA

SPECIMENS Blood (Cavity), Brain, Gastric, Heart, 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.

>> 27 (%) CARBON MONOXIDE 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.

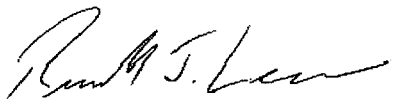
>> NO CYANIDE detected in Blood

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.

>> 35 (mg/dL, mg/hg) Ethanol detected in Blood
>> NO ETHANOL detected in Brain
>> NO ETHANOL detected in Muscle
>> N-Butanol detected in Blood

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 Blood



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Russell Lewis, Ph.D.
TC, FAA, Forensic Toxicology
Research Team CAMI

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U.S. Department of Transportation
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Mike Monroney Aeronautical Center
P O Box 25082
Oklahoma City, Oklahoma 73125

Monday, August 04, 2014

National Transportation Safety Board
45065 Riverside Parkway
Ashburn, VA 20147

ACCIDENT # 0086 **INDIVIDUAL#:** 001 **NAME:** MCDOWELL, JAMES P. **MODE:** AVIATION
DATE OF ACCIDENT 05/31/2014 **DATE RECEIVED** 06/04/2014 **PUTREFACTION:** No
N # 121JM **NTSB #** ERA14MA271 **CAMI REF #** 201400086001
LOCATION OF ACCIDENT Bedford, MA
SPECIMENS Blood (Cavity), Brain, Gastric, Heart, 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.

>> 61 (%) CARBON MONOXIDE 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.

>> NO CYANIDE detected in Blood

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, 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 Blood

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Russell Lewis, Ph.D.
TC, FAA, Forensic Toxicology
Research Team CAMI