

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

Friday, May 31, 2013

National Transportation Safety Board

Ashburn, VA 20147

 ACCIDENT # 0076
 INDIVIDUAL#: 001
 NAME: ADAIR, WILLIAM S.

 DATE OF ACCIDENT
 04/29/2013
 DATE RECEIVED 05/02/2013

 N # 85KY
 NTSB # ERA13FA219

MODE: AVIATION PUTREFACTION: No CAMI REF # 201300076001

LOCATION OF ACCIDENT Valkeria, FL

SPECIMENS Bile, Blood, 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 CARBON MONOXIDE 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 Urine

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/).

>> 0.038 (ug/ml, ug/g) Diphenhydramine detected in Blood (Cavity)

> Diphenhydramine detected in Urine

2013.05.31 14:46:12 -05'00'

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



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No

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National Transportation Safety Board 45065 Riverside Parkway Ashburn, VA 20147

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## **CLINICAL REPORT**

CLINICAL: Vitreous and Urine are tested for the presence of glucose with reagent strips and by enzymatic spectrophotometric analysis. Postmortem vitreous glucose levels above 125 mg/dL are considered abnormal and postmortem urine levels above 100 mg/dL are considered abnormal. Hemoglobin A1C is analyzed using a latex immunoagglutination inhibition methodology. Hemoglobin A1C blood levels above 6% are considered abnormal. Urine specimens are defined as "dilute" if the creatinine concentration is < 20 mg/dL and the specific gravity is < 1.003. Concentrations of serotonin metabolites 5-hydroxytryptophol (5-HTOL) and 5-hydroxyindole-3-acetic acid (5-HIAA) are measured by LC/MS. A 5-HTOL/5-HIAA ratio value < 15 pmol/nmol is not consistent with ethanol ingestion, while a ratio value > 15 pmol/nmol is indicative of ethanol ingestion.

>> 484 (mg/dl ) Glucose detected in Urine >> 9.2 (%) Hemoglobin A1C detected in Blood (Cavity)

## 2013.05.31 14:46:22 -05'00'

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