



Mike Monroney Aeronautical Center PO Box 25082 Oklahoma City, Oklahoma 73125

Administration

Thursday, February 16, 2012

National Transportation Safety Board 624 Six Flags Drive, Suite 150 Arlington, TX 76011

ACCIDENT # 0001 INDIVIDUAL#: 001 NAME: BUTLER, MICHAEL D. MODE: AVIATION

DATE RECEIVED 01/06/2012 PUTREFACTION: Yes DATE OF ACCIDENT 12/19/2011

> CAMI REF # 201200001001 N# 3590T NTSB# CEN12FA108

LOCATION OF ACCIDENT Bryan, TX

Bile, Brain, Gastric, Heart, Kidney, Liver, Muscle, Spleen, Vitreous **SPECIMENS**

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. Positive 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 ethanol concentration is determined by Radiative Energy Attenuation at a cut off of 20 mg/dl.

>> NO ETHANOL detected in Vitreous

DRUGS: Immunoassay and/or chromatography are used to screen for drugs. GC/Mass Spec, HPLC/Mass Spec, or GC/FTIR is used to confirm most positive results. 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). For comprehensive information concerning all drugs detected by the laboratory, see the CAMI Drug Information Web Site http://jag.cami.jccbi.gov/toxicology/.

>> 0.008 (ug/ml, ug/g) Tetrahydrocannabinol Carboxylic Acid (Marihuana) detected in Liver

>> 0.0064 (ug/ml, ug/g) Tetrahydrocannabinol Carboxylic Acid (Marihuana) detected in Kidney

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

Date: 2012.02.16 09:29:27 -06'00'