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



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

Administration

Monday, August 18, 2014

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

ACCIDENT # 0117 INDIVIDUAL#: 001 NAME: OBERSTEG, ALEXANDER G. MODE: AVIATION

DATE OF ACCIDENT DATE RECEIVED 06/26/2014 PUTREFACTION: 06/07/2014 Nο

> N # 86NW NTSB # CEN14FA278 CAMI REF# 201400117001

LOCATION OF ACCIDENT Duluth, MN

SPECIMENS Bile, Blood, Blood (Cavity), 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 Blood (Cavity)

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/).

>> 0.146 (ug/ml, ug/g) Diphenhydramine detected in Blood (Cavity)

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