

**DOCKET NO.: SA-519  
EXHIBIT NO. 14F**

**NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.**

**HUMAN PERFORMANCE GROUP CHAIRMAN'S FACTUAL REPORT  
ATTACHMENT 5: FINAL FORENSIC TOXICOLOGY FATAL  
ACCIDENT REPORT**

**American Airlines flight 1420  
Little Rock, Arkansas  
June 1, 1999**

**DCA99MA060**



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Mike Monroney  
Aeronautical Center

P.O. Box 25082  
Oklahoma City, Oklahoma 73125

Friday, June 11, 1999

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

CAMI CASE 9900116001                      NAME BUSCHMANN, RICHARD W.                      PUTREFACTION: No  
DATE OF ACCIDENT 6/1/99                      DATE RECEIVED 6/8/99  
LOCATION OF ACCIDENT LITTLE ROCK, AR  
SPECIMENS Bile, Blood, Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, Spleen, Urine, Vitreous

**FINAL FORENSIC TOXICOLOGY FATAL ACCIDENT REPORT**

**CARBON MONOXIDE:** The carboxyhemoglobin saturation was determined by spectrophotometry with a 10% cut off.

>> NO CARBON MONOXIDE detected in Blood

**CYANIDE:** The presence of cyanide was screened by Conway Diffusion. Positive cyanides are quantitated using spectrophotometry. The limit of quantitation of cyanide is 0.25 ug/mL. Normal blood cyanide concentrations are less than 0.15 ug/mL, while lethal concentrations are greater than 3ug/mL.

>> NO CYANIDE detected in Blood

**VOLATILES:** The volatile concentrations were determined by headspace gas chromatography at a cut off of 10 mg/dL. All positive ethanols were confirmed by Radiative Energy Attenuation.

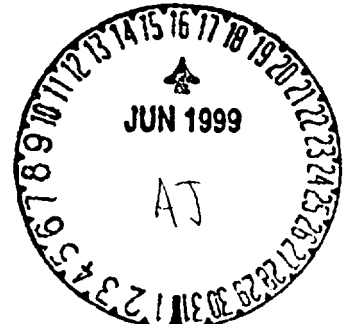
>> NO ETHANOL detected in Urine

**DRUGS:** Immunoassay and chromatography are used to screen for legal and illegal drugs which include: amphetamine (0.010), opiates (0.010), marihuana (0.001), cocaine (0.020), phencyclidine (0.002), benzodiazepines (0.030), barbiturates (0.060), antidepressants (0.100), antihistamines (0.020), meprobamate (0.100), methaqualone (0.100), and nicotine (0.050). The values in ( ) are the threshold values in ug/mL used to report positive results. Values below this concentration are normally reported as not detected. GC/Mass Spec, HPLC/Mass Spec, or GC/FTIR, is used to confirm most positive results.

>> NO DRUGS detected in Urine

Dennis V. Canfield, Ph.D.  
Manager, Toxicology and Accident  
Research Laboratory

JUN 11 1999



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