



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

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

Friday, March 03, 2000

National Transportation Safety Board  
Du Page Airport  
West Chicago, IL 60185

ACCIDENT # 0304    VICTIM # 001    NAME BRINELL, JOSEPH E.    MODE AVIATION ACCIDENT  
DATE OF ACCIDENT 12/09/1999    DATE RECEIVED 12/14/1999    PUTREFACTION: No  
LOCATION OF ACCIDENT BRANSON, MO    CAMI REF # 199900304001  
SPECIMENS    Brain, Heart, Kidney, Liver, Lung, Muscle, Vitreous

### FINAL FORENSIC TOXICOLOGY FATAL ACCIDENT REPORT

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

>> NOT PERFORMED.

**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.

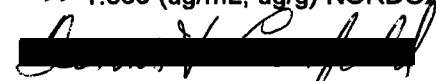
>> NOT PERFORMED.

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

>> NO ETHANOL detected in Vitreous

**DRUGS:** Immunoassay and chromatography are used to screen for legal and illegal drugs which include: amphetamine (0.010), opiates (0.010), marijuana (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.

>> 0.376 (ug/mL, ug/g) DOXEPIN detected in Kidney  
>> 0.134 (ug/mL, ug/g) NORDOXEPIN detected in Kidney  
>> 4.169 (ug/mL, ug/g) DOXEPIN detected in Liver  
>> 1.886 (ug/mL, ug/g) NORDOXEPIN detected in Liver

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

MAR 08 2000



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Mike Monroney  
Aeronautical Center

P.O. Box 25082  
Oklahoma City, Oklahoma 73125

Thursday, January 13, 2000

National Transportation Safety Board  
Du Page Airport  
West Chicago, IL 60185

CAMI CASE # 9900304002                      NAME MOORE, BARTON A.                      PUTREFACTION: No  
DATE OF ACCIDENT 12/9/99                      DATE RECEIVED 12/14/99  
LOCATION OF ACCIDENT BRANSON, MO  
SPECIMENS Blood, Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, Spleen, Urine

**FINAL FORENSIC TOXICOLOGY FATAL ACCIDENT REPORT**

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

>> NOT PERFORMED.

**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.

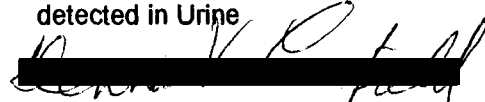
>> NOT PERFORMED.

**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.

- >> 0.037 (ug/ml, ug/g) TETRAHYDROCANNABINOL (MARIHUANA) detected in Liver
- >> 0.095 (ug/ml, ug/g) TETRAHYDROCANNABINOL CARBOXYLIC ACID (MARIHUANA) detected in Liver
- >> 0.014 (ug/ml, ug/g) TETRAHYDROCANNABINOL CARBOXYLIC ACID (MARIHUANA) detected in Urine

  
Dennis V. Canfield, Ph.D.  
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JAN 25 2000