

Attachment 19

**Operational Factors and Human Performance
Group Chairman's Factual Report**

DCA01MA034

Toxicology Report

DCA01MA034

Medical and Pathological Information

Postmortem toxicology testing of specimens from the captain detected no carbon monoxide, no cyanide, no ethanol, and no drugs.¹ Four percent hemoglobin A1C was detected in blood specimens taken from the captain.² Postmortem toxicology testing of specimens from the first officer detected no carbon monoxide, no ethanol, and no drugs. Copies of the final forensic toxicology fatal accident reports for the captain and first officer can be found in Attachment 19.

¹ Post-accident toxicology analysis uses immunoassay and chromatography techniques to screen for legal and illegal drugs including: amphetamine, opiates, marijuana, cocaine, phencyclidine, benzodiazepines, barbiturates, antidepressants, antihistamines, meprobamate, methaqualone, and nicotine.

² Hemoglobin A1C blood levels above 6 percent are considered abnormal and are reported as positive.



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, May 04, 2001

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

ACCIDENT # 0076 INDIVIDUAL#: 001 NAME: FRISBIE, ROBERT K. MODE: AVIATION
DATE OF ACCIDENT 03/29/2001 DATE RECEIVED 04/05/2001 PUTREFACTION: No
N # N303GA NTSB # DCA01MA034 CAMI REF # 200100076001
LOCATION OF ACCIDENT ASPEN, CO
SPECIMENS Bile, Blood, Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, Spleen, 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. Where possible, positive ethanols were confirmed by Radiative Energy Attenuation.

>> NO ETHANOL detected in Blood

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.

>> NO DRUGS DETECTED in Blood

 MAY 4 2001

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



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Friday, May 04, 2001

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

ACCIDENT # 0076 INDIVIDUAL#: 001 NAME: FRISBIE, ROBERT K. MODE: AVIATION
DATE OF ACCIDENT 03/29/2001 DATE RECEIVED 04/05/2001 PUTREFACTION: No
N # N303GA NTSB # DCA01MA034 CAMI REF # 200100076001
LOCATION OF ACCIDENT ASPEN, CO
SPECIMENS Bile, Blood, Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, Spleen, Vitreous

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. Glucose levels considered abnormal are reported as positive. Hemoglobin A1C is analyzed using a latex immunoagglutination inhibition methodology. Hemoglobin A1C blood levels above 6% are considered abnormal and are reported as positive.

>> 4 (%) HEMOGLOBIN A1C detected in Blood



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Oklahoma City, Oklahoma 73125

Friday, May 04, 2001

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

ACCIDENT # 0076	INDIVIDUAL#: 002	NAME: KOWALCZYK, PETER R.	MODE: AVIATION
DATE OF ACCIDENT 03/29/2001		DATE RECEIVED 04/05/2001	PUTREFACTION: No
	N # N303GA	NTSB # DCA01MA034	CAMI REF # 200100076002
LOCATION OF ACCIDENT ASPEN, CO			
SPECIMENS	Blood, Brain, Gastric, Kidney, Liver, Lung, Muscle, Urine		

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.

>> 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 Urine

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.

>> NO DRUGS DETECTED in Urine



MAY 10 2001

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