February 11, 2001

Telephone interview with: Mark Schubert, Pilot Aerial Surveys International LL C-401, N1008A

Subject: Aero Vodochody, L-39, N602MC Watkins, CO January 24, 2001

Mark was performing a preflight run up check on the run up pad at the approach end of runway 26. He said the L-39 pulled up next to him, and it appeared that the pilot was following the "full blown checklist." Mark said that the pilot did several high engine run ups (power checks) over a 5 to 7 minute time period. Mark said that during the engine run ups, he didn't remember seeing any excessive engine smoke.

Mark said that everything appeared normal to him, and he does not remember anything remarkable about the takeoff roll. Mark did say that the L-39 did start its takeoff roll when there was a C-172 over the numbers on the departure end. Mark said he got busy with his own airplane and did not see the L-39 turn out of traffic.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk (DD)/DD1-0105 Fax (202)261-0610 email: TO: Jim Struhsaker- NTSB FROM: Jeffrey Thomason- Witness RE: L-39 Crash- 01-24-01 **HLUSS**Page Ale Nationale

ON 01 24 01, AT ABOUT 11:30 HOURS, I DROVE INTO FRONT RANGE AIRPORT. I SAW A FRIEND OF MINE, SEAN MARTIN, OUTSIDE OF THE FLIGHT TRAINING CENTER F.B.O. I PARKED MY TRUCK AND WAS STANDING WITH SEAN. I OBSERVED THE L-39 JET ON TAKEOFF ROLL ON RUNWAY 24. THE ENGINE SOUNDED LIKE IT WAS AT FULL POWER AND THE JET SEEMED TO GET ENOUGH SPEED AS IT TRAVELLED WEST ON THE RUNWAY. AS THE PLANE TOOK OFF I MADE THE COMMENT TO SEAN THAT IT, "SEEMED REAL LOW." I THEN SAW THE PLANE MAKE A SHARP LEFT BANK TURN. I WOULD ESTIMATE THE TURN AT 70 TO 90 DEGREES BANK, AS I COULD SEE THE TOP OF THE PLANE IN THE TURN. THE PLANE THEN WENT IN A SOUTHERLY DIRECTION AND OVER THE HORIZON AT A LOW ALTITUDE. I CONTINUED SPEAKING TO SEAN UNTIL HE NOTICED A LARGE BILLOW OF SMOKE TO THE SOUTHWEST. I THEN SAID THAT I "DIDN'T HEAR ANY JET NOISE EITHER." WE THEN DROVE TO THE CRASH SITE. (IF CRASH SITE OBSERVATION IS NEEDED, PLEASE FEEL FREE TO CONTACT ME FOR FURTHER)

January 27, 2001

Telephone interview with: Shane Martin, Prvt Pilot Standing on the entrance road of the FTG terminal.

Subject: Aero Vodochody, L-39, N602MC Watkins, CO January 24, 2001

Shane said that he heard the L-39 on takeoff roll, so he and Jeff Thompson turned to watch. They could see between the buildings and had a clear view of the departure end of 26. He said that there was a Cessna on upwind about to turn crosswind about the time the L-39 reached the end of the runway. He said that the L-39 immediately made a very steep left hand turn to the south. He said that it looked like the airplane was only 100 feet above the ground when it started its' turn. He said that the bank was so steep that he estimated that it might be 70 degrees of bank; he could see the airplane's whole profile.

About 30 to 45 seconds later they saw a black column of smoke rising from the field approximately 2 miles from their location.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk (555)551-515 Fax (555)551-5519 email: January 25, 2001

Telephone conversation with: Anne Jolley, Airport software consultant In her car driving southbound on Imboden Rd.

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 01/24/01

Anne saw the airplane flying south at an estimated height of 10 to 12 stories. She saw a cloud of debris depart aft of the airplane and flutter to the ground. She said the debris left the airplane from its left and right side. She said that it looked like the airplane was discharging trash. Anne said that it appeared that the airplane was the source. She said that the cloud dispersed outward making a cloud bigger than the airplane. She said the airplane suddenly nosed down and headed for the ground; straight down.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk Fax (505/501 001) email: January 27, 2001

Telephone interview with: Roy Stricklin, Pilot Retired Continental Airlines mechanic

Subject: Aero Vodochody, L-39, N602MC Watkins, CO January 24, 2001

Roy was in his car with his two sons; they were driving north on Imboden road. He saw the L-39 flying south (almost straight at him), parallel to the road. Roy estimated that the airplane was about 400 feet above the ground. He said the airplane was moving up and down "very quickly, in a real quick jerky manner." He said the up and down movements were so fast that there was no apparent altitude change.

Roy said that the airplane started to make a steep left turn. He lost sight of it (the car roof was in the way), but his son said the nose dropped, the left bank steepened (45 to 60 degrees), and the airplane went straight into the ground.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk (Fax (emai January 27, 2001

Telephone conversation with: Terry Butler, Pilot In his car driving north on Imboden Rd.

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 01/24/01

Terry said he saw the airplane flying towards him at approximately 300 feet. He said the exhaust appeared clean. Terry airplane rolled left, and went straight down.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk Fax emai February 11, 2001

Telephone conversation with: John Morgan, L-39 pilot

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 01/24/01

John said the following about L-39 performance:

- 1. The airplane gives very little feedback to the stick----Neutral Pitch stability.
- 2. The airplane is very easy to over control, particularly if the pilot is startled.
- 3. You've got to be well trained and current to fly the airplane.
- 4. A steep back turn maneuver below 200 knots would use a lot of energy.

John said that he flew an L-39 out of Lamar, Colorado (southeast corner of the state), and he had to fly straight ahead for 2.5 nm to accelerate to 220 knots before he began to maneuver. He said that this airplane accelerates rather slowly.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 802	39
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To: N.TS. B (Jun NTSB. DEN 31, 0/ Saw a white Tet (2-39) deport aled of me while 2 was about 34-12 mile on find to Rwy - 26 at 376 - 2 was leping my Comanede 250 in for Lunch with some about the ground. His speed looked on the Unicon the looked normal to me for take - of and hit of the remand - a planer came on the cueled South of I-Jo. 2 Looked 4p On Jan 24, 01 - qp px -1427-28 A.m. 2 When & cleared the active letole of about 5 make thatlered all estimated its me about 4. Eu-bed Ft RECEIVED - trends -Returned 2 4 A (Den Center) 4 Crep duster pilot. in my stomach "a knot". In my stomach "a knot". 270 & Sees due to it going like a 5 mall A-beinb explosion. Brownish- Black Smoke plumethis is a metalell version Longmont, CU 80501 Mr. Richard Roonev () 7 n o Linerely of whet 2 saw that Am. minni Page 2

Struhsaker Jim

From: Sent: To: Subject:

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Gerald C Schroeder (semic Cjanescom) Wednesday, January 24, 2001 10:33 PM

Airplane Crash

Wednesday, Jan.24, 2001 at about 11:30 A.M. a jet trainer passed by the east side of my house, just east of Imboden Rd. flying south. Approximately one half mile south of the house the aircrafts right wing suddenly dropped. The aircraft nosed down at approximately a fourtyfive degree angle. There was never any discernible change in engine noise. The aircraft appeared to be flattening its dive and may have slightly turned clockwise before disappearing from sight.

Gerald C. Schroeder

Watkins, Co. 80137

168267E

Stephen Raymond Taylor

NTSB - DÉ.N

Issaquah, WA 98027

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February 20, 2001

Jim Stuhsaker National Transportation Safety Board

Denver, CO 80239

Dear Mr. Stuhsaker,

This letter is in follow up to our conversation today. I was hired by Atlas Air in March of 2000 by Michael Chowdry and Chase Loupee to be a First Office/Director of Maintenance on their Boeing Business Jet, N737MC. I worked for Mr. Chowdry in this capacity until the departure of Chase Loupee in June of 2000, when I assumed the responsibilities of Acting Chief Pilot (in reality, I was the *only* pilot). For the remainder of my time with Atlas, I hired various contract pilots to fly with us on a per trip basis. In all, I worked for Mr. Chowdry for six months, leaving in September of 2000 to pursue other opportunities that were not so demanding of my time.

I rode in the L-39 as a passenger one time. This flight occurred at the Oshkosh airshow in the summer of 1999. The pilot was a gentleman named Dan McCue (spelling unknown). During the six months that I worked for Mr. Chowdry, I had several more opportunities to fly the L-39 and in fact he encouraged me to get my LOA in the airplane. However, due to the demanding schedule of the BBJ operation, I was never able to make the time to have anything to do with the L-39. To the best of my knowledge, the only time the Mr. Chowdry flew the L-39 during the six months that I worked for him was in July 2000 when he flew with an instructor to renew his LOA.

I knew Michael Chowdry for approximately two years prior to going to work for him and I would characterize our relationship as quite friendly, even after I left his employment. He was an enthusiastic aviator and always kept me appraised of his aviation related activities. This is why I am very confident about my knowledge about his flights in the L-39 during that time period.

During my association with Mr. Chowdry, I never saw him keep any sort of pilot logbook, nor did I ever hear him mention recording his flight hours. This was a perennial problem with our insurance carrier, because they could never get firm hours for their records.

It is my sincere hope that the above will fill in some of the blanks in your investigation. I considered Michael Chowdry to be a friend and I hope that some knowledge can come from your investigation to prevent other tragedies.

Sincerely,

February 2, 2001

Telephone conversation with: Ken Turano, pilot employed by Atlas Until December 2000

Subject: Aero Vodochody L-39CT, N602CT Watkins, CO; 01/24/01

Ken said that he was asked to fly N602CT by Michael Chowdry on November 18, 2000. Ken said that he would, provided Michael went along; Ken said that he did not have an LOA that authorized him to fly the airplane. Michael agreed to fly with him in the back seat. Ken flew as PIC from the front seat. Ken said that on taxing out for takeoff, the "canopy open" light flashed several times. Ken said that they cycled their canopy locking handles before takeoff.

Ken said that shortly after takeoff, the "canopy open" light came on again, and the back seat canopy began to "rattle" when 2,5 to 3 G's was put on the airplane. The "canopy open" light came on several more times, and Ken decided to return to the airport. Ken performed the landing; total flight time was approximately 40 minutes. Michael flew on aerobatic maneuver, but did not perform any landings.

Ken said that his primary job was to fly the BBJ for Michael. He said that he had15 years of flight experience in 737, and when he flew with Michael in his aircraft he observed the following: Michael had weak crew communication skills, he poor utilization of check list, and he had weak procedural skills.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk (Fax) emai

Mr. James Struhsaker,	RECEIVED
NTSB, Field Inspector, Denver Colorado FSDO.	100 2
	NTSB - DEM

Dear Jim about mid November Mr. Chowdry called myself and Mr. Dewey our mechanic on a conference call, He asked if Mr. Dewey and I would test fly the L-39C N602MC, on the next day, and evaluate the aircraft as it had just had it's annual inspection.

I informed Mr. Chowdry that I held LOA's on other jet fighter aircraft, that I needed one in a L-39C and could not fly the aircraft as PIC, my position with the company was captain on their Boeing 737/700 BBJ.

I was familiar with the L-39C as my company in Miami had one for about one year, but I never completed the LOA for that aircraft, Mr. Chowdry arrived the next morning, to test fly the L-39C with myself, early in the day Mr. Dewey and I ground checked the aircraft for about 15, minutes, the only discrepancy was a intermittent canopy ajar light for the aft canopy, Mr. Dewey checked this discrepancy and agreed that it was an out of alignment microswitch and he would repair it later.

Mr. Chowdry wanted to see my flying ability so he let me fly the front seat that morning, I flew the aircraft for the entire flight, except for about 3 minutes while airborne, during a few 3 to 4 G, maneuvers I observed the rear canopy to make a loud chattering noise both audible and tangible in nature accompanied by an intermittent canopy ajar light.

We both agreed to return to Front Range airport and landed without incident, informed Mr. Dewey of the problem and departed for the day.

Sincerely Yours Captain Kenneth E. Turano

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(1) FAX copy. proof
(1) fed ex copy

February 22, 2001

Telephone conversation with: Chase Loupee, Atlas pilot

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 01/24/01

Chase said that he flew with Michael in his BBJ. He made the following observations of Michael while flying together:

- 1. He didn't like to follow the rules.
- 2. He had weak situational awareness skills.
- 3. He had aviation oriented attention deficiencies.
- 4. He panicked easily and had spontaneous incapacitations.

Chase left Atlas in May 2000.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk Fax ema March 21, 2001

Telephone conversation with: Dan McCue, L-39 pilot

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 01/24/01

Dan said that he flew the accident airplane to Oshkosh, Wisconsin, on two occasions, 1998 and 1999. He said the airplane felt normal, but needed nose down trim. He said that L-39s are very pitch sensitive, and the trim works very fast. Dan said that L-39s don't fly off the runway; you must rotate in a positive manner. He said that L-39s have a tendency to oscillate a bit right after takeoff.

James F. Struhsaker, ASI National Transportation Safety Board

Den	ver. CO	80239	
Wk			
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ema			

April 18, 2002

Telephone conversation with: Skip Holm, L-39 pilot Retired military test pilot Calabasas, CA

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 01/24/01

Skip said if an L-39 (or other fighters with long forward noses) airplane begins to oscillate [divergent oscillations] because of aft CG, at a given oscillation amplitude, the airstream will get under airplane's nose to produce a violent pitch up; as if the airplane was performing a loop. If the pilot did not intentionally initiate the maneuver, the airplane has the tendency to roll aggressively off to one side.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk (Fax (emai April 18, 2002

Telephone conversation with: John Morgan, Pilot/instructor of L-39s Rockford, Illinois

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 01/24/01

John said that he had a client (owner and pilot of an L-39) who, approximately 1.5 years ago, lost his rear canopy while on initial climb out. The pilot said that he did not have a passenger in the seat. He said that he was trimming the airplane nose down, when suddenly the rear canopy separated from the airplane. He said the airplane immediately nosed up in a dramatic fashion; he said that aggressive nose down trim and forward stick movements were required to restabilize the airplane's flight regime.

John said the airplane is limited to maximum airspeed of 190 knots, with either or both canopy's missing.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239
Wk (
Fax (
email

April 18, 2002

Telephone conversation with: Bruce Guberman, L-39 pilot Civilian test pilot, introduced one Of the first L-39 to North America

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 01/24/01

Bruce said that he has flown the L-39 under many different and varied situations. He said the flight controls become very sensitive in the aft, out of CG, flight situations.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk Fax emai January 31, 2001

Telephone conversation with: Tom Kerstine, L-39 instructor, OKC TK Aero, Inc. Box 59127 Will Rogers Airport Oklahoma City, OK 73159

Subject: Aero Vodochody L-39CT, N602MC Watkins, CO; 1/24/01

Tom said that he did the original L-39 training with Michael on March 21, 1998. He gave Michael 13 hours of ground training and 12 hours of flight training. He said that Michael had good "flight skills", but his "procedural and multitasking skills" needed work.

Tom said that he again flew with Michael on July 15, 2000. He said that he gave Michael approximately 2 hours of ground school reviewing systems and procedures. He said that they flew twice, for a total of 2.5 hours of flight. Tom estimated that Michael had 40 to 50 hours of flight time in the L-39 at the time of the accident.

Tom last flew N602MC when he flew the airplane to and from its last Condition Inspection at Turbo Jet, Inc., Yukon, Oklahoma, in October 2000, at Michaels request. He estimated that he put 4.1 hours of flight time on the airplane.

James F. Struhsaker NTSB, ASI February 7, 2001

Telephone interview with: Steve Nevin, Atlas Air CFO (Currently working in Cleveland, OH)

Subject: Aero Vodochody, L-39, N602MC Watkins, CO January 24, 2001

March 99

Michael Chowdry was giving Steve (a non-pilot) a ride in the L-39 during the summer of 1999. Steve said that he didn't remember seeing Michael using a checklist during his preflight. He said that starting engines, taxiing, and takeoff roll seemed "normal." He said that once they got in the air, the airplane didn't want to climb. Steve said that they flew around the airport at approximately 100 feet, and the airplane seemed to be wallowing around. They landed safely, taxied to the hangar, and shut the engines down. When Michael opened his (front) canopy, it swung all the way over and on to the ground.

Postevent examination of the airplane revealed that one of the engine air intake covers was in place, but some distance inside the engine air intake duct.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239	
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To: National Transportation Safety Board Subject: Czechoslovakian L39 jet accident near the FTG airport on 24 January 2001 From: William F. Hines

At approximately 1000 local, I had gone to Mr. Bud Lewis' hangar where King Air 410MC is hangared for the purpose of doing an engine runup. The L39, N602MC, was also hangared there. I made the following observations prior to the accident of the L39 jet airplane:

- 1. Both airplanes had been moved out of the hangar. The L39 was facing eastbound on the ramp and the King Air was facing northbound facing the L39, which was approximately 50 yards to the north.
- 2. Mr. Bud Lewis was standing outside and in front of the L39 where I spoke to him briefly. Someone I did not recognize was in the L39. The L39 engine was then started, and Mr. Lewis and I proceeded to the cockpit of the King Air where I was going to do an engine runup.
- 3. At approximately 1015 local, while sitting in the cockpit of the King Air, and looking at the L39, Mr. Lewis and I both commented on the excessive amount of very light-colored blue/gray exhaust plume that was being emitted from the jet. Mr. Lewis wondered aloud if a smoke generator (the type seen in aerobatic air shows) might have accidentally been activated. I commented that I didn't think so. The plume of smoke lasted for approximately 2-4 minutes. Shortly thereafter, the L39 taxied to the terminal.
- 4. At approximately 1100 local, I had gone to the terminal and was standing at the weather computer desk looking at the L39 parked on the ramp facing the terminal. Both pilot seats were occupied, and the engine was in the process of being started. Again, I observed an excessive plume of blue/gray smoke, which persisted for maybe a minute. The L39 then taxied to runway 26 for departure.
- 5. The next time I saw the L39 was when it flew past the terminal building going westbound. I would estimate its altitude to be between 50 and 100 feet AGL. I did not observe any smoke. However, the aircraft appeared to be slow. I did not observe whether the flaps were retracted or extended.
- 6. My next observation was brief as the L39 appeared through the west windows of the terminal building. I would estimate its altitude to be approximately 300 feet AGL in a left medium-banked turn.
- 7. Approximately 7 to 15 seconds later, someone announced on the UNICOM /CTAF frequency that the jet that had just departed had crashed.

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William F. Hines, Corporate Pilot/Flight Instructor

January 27, 2001

Telephone interview with: Bill Hines, Pilot (King Air)

Subject: Aero Vodochody, L-39, N602MC Watkins, CO January 24, 2001

On the day of the accident, Bill was sitting in a King Air facing east, and the L-39 was approximately 50 meters in front of him facing north. A mechanic was starting the engine [Don (Atlas Air Maintenance Coordinator) had never started it before]. Bill said the "enormous amount of smoke came from the tail pipe for 3 to 5 minutes." Don taxied the airplane away from its hangar, and parked it in front of the terminal. Later, Bill saw the pilot start the airplane, and again a large amount of smoke came out. When the pilot began to taxi and takeoff, the smoke subsided.

Bill said that he watched the airplane takeoff. He said that the airplane was approximately 50 to 100 feet in the air at taxiway A-6 (approximately 3,800 feet down the runway), but "it looked very slow." He said when the airplane reach the departure end of runway 26 or just beyond that point, the airplane made a steep(?) bank left hand turn (maybe 30 degrees of bank).

Bill said that from the beginning of the takeoff roll until the turn began was maybe 20 to 30 seconds.

James F. Struhsaker, ASI National Transportation Safety Board

Denver, CO 80239 Wk Fax emai

Scott Houze

Narrative of 1-24-01 incident involving 602MC

At approx, 10:30 I met Michael Chowdry and Don Dewey in the terminal, this was immediately after Don had taxied the aircraft from its hangar to the ramp at the terminal. Don stated that they would be needing fuel. I asked Don how much they would need and he replied that only the fuselage tank needed fuel. Michael then stated that they needed to sheek the tip tanks because he did not know how much was in them and that the tanks needed to be filled equally or both tanks be empty or the plane would be out of balance.

I then want to get the fuel truck and when I arrived at the aircraft Michael and Don appeared to be doing a preflight. I asked Don if he wanted to fuel the plane or if I should do it. He replied that I was the fueler go shead and do it. As I was fueling Michael was at the near of the aircraft with a flashlight looking in the exhaust stack and mentioned that there was excess fuel that should be burned off before flying. I topped the fuselage tank and secured the fuel cap. Before I got down off the wing Michael asked if I had gotten the cap back on and I replied "yes I uphtened it up as tight as I could".

Don Dewey then asked if I could do nitrogen service and I replied no but Sundance could probably help, Don stated that he had already called them but they had not been by yet. Don then asked if I could ask Sundance when they could come out. I did and Eldon Holtz told me that it would be awhile before he could do the nivogen service. I passed that information on to Don and Michael, I was thanked for the information and I returned to the terminal.

It appeared that Michael took the front seat and started the aircraft. Upon starting light blue smoke was visible coming from the orhaust stack. Michael then shut down and his passenger was assisted into the aircraft. The engine was restarted and again light blue smoke was visible. The plane then texted out to runway 26 and departed in what appeared to be a normal takeoff.

A short time later we received a call via the Unicom that a plane had crashed south of the airport.

Time of fueling 10:45 Gallons 135

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Greenwood Village, CO 80121 January 30, 2001 30

RECEIVED THE Millis Drive

NTSB Jim Stuhsaker

Denver, CO 80239

Dear Mr. Stuhsaker,

Thank-you for your call this morning, I'd been expecting one from the NTSB and hope that my recount of what I observed on Wednesday, January 24, 2001 at 1128 MST would be of some benefit.

As you know, my name is Clarinda Spees, I'm 48 years old, married and mother of three children ages 13, 15 and 17. I've been flying since January 1989; I have a little over 1000 hours, and my ratings include ASEL, IFR, and Commercial. I consider myself to be a very cautious pilot and pretty much fly by the book. I own Skylane 2413X in partnership with 4 other people.

On Wednesday, Jan. 24, I was at FTG doing a practice approach on ILS 26 before heading back to APA where I am based. I had stopped to fuel up the plane and get a cup of coffee. While in the lounge area. Michael Chowdrey (I didn't know his name at the time) came in for a cup of coffee (or water?? I really didn't notice). I noticed him because he was in what appeared to be a military blue jump suit with his name plate on left breast pocket. I paid for my fuel, and went out to my plane which was sitting on the ramp directly in front of the terminal. Michael's plane was now sitting next to mine on my west side. I noticed that the jet had United States Air Force written on the tail and figured it was a military plane. My inquisitive nature was piqued by the fact that Michael Chowdry's name didn't have a Cpt. in front of it. There were four people total around the jet; a lady with a briefcase and a gentleman were talking to Michael, and another gentleman with a dark blue baseball type jacket was on the wing inspecting the cockpit area. I assumed this was a co-pilot doing a preflight. My passenger, Roger, and Lexchanged hello's, "great day for a flight" pilot type how-do-you-do's before L inspected my plane, checked the fuel and oil and got into the cockpit. Michael was very friendly and had a very calm pleasant demeanor about him. He appeared to be in NO hurry. Because of our airplane's close proximity, I made sure to have Roger open the passenger window to announce 'clear prop'. The four people around the Czech jet all looked my way, acknowledged the announcement, and nodded as I pulled forward. I turned east to taxi to the end of 26. I took off, and headed out to Skippi for one last hold and ILS 26 approach. The hold and ILS were uneventful until I reached DH, I was on about a 1 mile final, had been announcing my position all along so was surprised to see a jet on the end of the runway when I looked up. I have to admit, that my first thought was not a kind one, "you jet- jockeys are all alike" as this has happened to me before. I was able to slow my speed and do a couple of shallow 'S' turns to allow for a fairly comfortable spacing. I was now about 1/2 mile out and the jet started to roll, he rotated and lifted off, I touched down, braked lightly, cleaned up the airplane, rolled for a short distance, asked Roger if he was comfortable with my executing a 'go' as the jet was on upwind and didn't appear to be at full throttle. I was watching him intensely and noticed another Cessna on left crosswind at Imboden Rd about to turn left downwind. It was at this point that the jet turned left crosswind and my first thought was that this was a strange procedure for a jet, however, when he continued to stay fairly low and slow in my mind for a jet (my only knowledge of jets

is watching the Citations, and other small private jets land and take off at APA which in my mind's eye take off a lot faster). I realized that he must be trying to stay behind the Cessna and below him so as not to disturb the Cessna's pattern and have the Cessna deal with the jet's wake turbulence. This Cessna was probably a 182 by his climb rate; he appeared to be almost at TPA by the time he was 1/2 - 1 mile in his downwind leg. It was at this point that the jet passed behind the Cessna and below him by maybe 300 feet. I was still on my upwind, about to turn left crosswind at this point. I was still pretty uncomfortable with my close proximity to the jet (approx 2 miles) concerned about his wake turbulence, so I was trying to get above what I thought was his climb pattern, and about the fact that his departure pattern was different than I expected, so I was watching him intently to make sure we all would be safe. We stayed in this configuration probably another 10 seconds I was probably 1 mile south of the runway at this point, I had lost visual sight as well as mental thought of the other Cessna as he was well established on his left downwind leg to 26 and had announced so. I never heard any transmissions from the jet as to his turning crosswind or departing the pattern as I am accustomed to doing when I flying in and out of FTG since FTG is at times fairly high traffic and quite a few novice pilots. At this point I still have the jet in my sight ahead of me and slightly to my right, he about 100 hundred feet below my altitude which I would guess to be about 5 or 6 hundred feet AGL. He is still about 2 miles ahead of me. The sun was bright, I don't remember any clouds. I'm guessing that the sun's position was approximately 160°. The sun was not a factor in my line of vision, however, the jet, from my position, appeared to be heading in a 160° direction. I was probably heading 180°. The jet is still in a very slight SE bank, nose still slightly climbing, although not climbing as I would have thought at this point in his departure, and well clear of the Cessna he was behind. All of a sudden I see the jet's nose go straight vertical. My first thought was this is a very strange place to be doing aerobatics... we are still in a class B airspace with the floor at 7000 feet. It wasn't but a split second from this pitch upward that he nosed-over to the right (west) and impacted the ground in a nanosecond absolutely straight down from my angle. As he nosed-over, I remember screaming, "that jet is going to crash, oh my God, he just crashed!!" Roger had lost track of the jet and so it took him a second to turn and visualize the black cloud of smoke. He asked me if that was the jet we took off behind and I said yes. He made a verbal comment that it was 11:28 a.m. He guickly turned to 121.5 but there was no answer so he tuned 123.0 (FTG unicom), the gal who answered wasn't quite sure what we were talking about so Roger tuned in Denver Approach 132.75 (I think) and talked with the controller stating that I had just witnessed a jet, who had just departed from FTG, crash just north of I-70 and a little west of FTG. The controller asked if I could circle over the crash site so they could get a fix and relay the information to the emergency vehicles. He cleared us into class B airspace with a squawk code. There were a couple of vehicles on Imboden Road who stopped and the drivers ran across the field towards the crash. The explosion fire had just about gone out, it burned a large area with the west edge still in flames. The impact was so complete that I had no doubt there weren't any survivors. There wasn't a piece of the plane visible, except the tail section which broke loose on impact and appeared to catapult NE-ward from the impact site. I circled for about 15 minutes, at which time an ambulance had arrived and was making way across the field. The controller thanked us and said we could continue on our way to APA. After we had tucked the plane back into the hanger, I called TRACON to give them my name and number as a witness to the crash.

Hope this is of help in your investigation.

Sincerely,

Clarinda P. Spees

Feb. 5, 2001

Roger Stout

Denver Co. 80202

NTSB <u>MR. Jim Stuhsak</u>er

Denver Co. 80239

Dear Mr. Stuhsaker:

This is the narrative that you asked me to send regarding the accident of January 24, 2001, at 1028 hrs. local time, involving Michael Chowdrey's L-39, Czechoslovakian built aircraft.

My back ground briefly is, I hold a <u>Commercial pilot certificate with ASEL-MEL ratings with</u> instrument privileges in both, and <u>CFII-MEII ratings</u>. I have approximately 8,900 hrs. of PIC logged time in small aircraft with approximately 8,000 hrs. logged as dual given.

On the above date I was riding as a passenger with a friend in a C-182. N 2413X. We had departed Centennial Airport at approximately 0930 local on the morning of Jan. 24, 2001 for a pleasure flight to Front Range airport where she was going to refuel the airplane. She wanted to demonstrate a practice holding pattern and an instrument approach to runway 26 at Front Range. After the practice approach, we did a full stop landing and refueled the airplane. While the line crew was refueling the airplane, we had a cup of coffee and while we were visiting in the terminal building, we observed a gentleman whom we later learned was Michael Chowdrey. He was having a cup of coffee in the terminal bldg. also. After paying for the gas, we walked back to our C-182. As my friend did a walk around on the C-182 and checked her gas and oil, she quarried me as to weather I knew what type jet trainer it was setting next to us on the ramp. I told her I thought it might be a T-33 jet trainer. We noted the name of Michael Chowdrey under the left side canopy, however the name didn't mean anything to either of us at the time. We observed several rather well dressed people around the L-39 and assumed that the owner was showing someone his airplane. We then started up and taxied out to runway 26 for a westerly takeoff. This was approximately 1110 hrs. local time. After takeoff we went back east to the NDB, Skippi, and my friend demonstrated another ILS approach. My friend said that at the end of the demonstration approach, she would like to do a touch and go on runway 26. While on approach and about one mile from the approach end of runway 26 we observed the L-39 taking the runway. I don't believe he announced his intentions of taking off. If he did we didn't hear him. We also wondered if he would be off the ground before we arrived over the threshold of the runway. As we approached the threshold it became evident that he would be off the runway well before our planned touchdown for the touch and go. At this time we also observed another Cessna in the

pattern in front of the L-39. In my experience as a flight instructor watching the climb rate of the other Cessna, I am led to believe that the other Cessna was either a C-172-but more likely a C-182. Our first concern at this time was if the L-39 saw the other Cessna in front of him as we knew he would rapidly catch up to him. I saw the L-39 make his crosswind turn just short of Imboden Rd., (a north south road running along the Eastern edge of Denver's Class B airspace where that airspace extends downward to the surface), by approximately 1/4 mile. After his turn it was apparent that he would pass below and behind the Cessna. I watched as he went well below the Cessna and at this point I took my eyes off both airplanes to help my friend watch for other aircraft. We were just turning crosswind, when I herd my friend say "Oh my I think they're going to crash. Oh my god they crashed". I looked over and immediately saw a huge orange fireball and black smoke billow up. I immediately dialed in frequency 121.5 and tried to make contact with someone, but to no avail. I then switched over to frequency 123.00 and informed the person at the unicom that the jet that just took off on 26 had crashed. Not receiving what I perceived as a good response I then dialed in 132.75 and talked to Denver Approach. I reported the accident and the approximate location and asked for a transponder code so that they could clear us into Class B airspace and to also get a fix on our location. This was approximately 1128 hrs local time. Denver approach asked if we could circle the accident until the rescue squad arrived, and we told them we would do this. We circled the crash site for approximately 15 minutes until the rescue squad arrived at the site. During this time we observed the crash site to be completely consumed by the fire. Denver approach thanked us for our help and said if we wanted to leave to go ahead. At this time we turned south and went back to Centennial.

I affirm that the above statements are true and correct to the best of my knowledge.

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