Attachment 8

to Operational Factors / Human Performance Group Chairman's Factual Report

DCA00MA005

28 Oct 99

MEMORANDUM FOR NATIONAL TRANSPORTATION SAFETY BOARD

FROM: 40TH FLIGHT TEST SQUADRON/DOB
601 W. Choctawhatchee Rd.
Eglin AFB, FL 32542

SUBJECT: Report on Learjet Intercept by Captain Chris Hamilton

1. This memorandum provides details of the intercept mission I flew on Learjet N47BA on 25 Oct 99. I am currently an F-16 Test Pilot assigned to the 40TH Flight Test Squadron at Eglin AFB. I have approximately 1900 hours total flight time, including 1000 hours of F-16 time.

2. On 25 Oct 99, I departed Eglin AFB at 1330Z flying F-16A 81-0761on a local training mission as the leader of Bullet flight. My wingman was flying an A-10 aircraft. After completing our training maneuvers in the W151B airspace south of Eglin, we were preparing to RTB at approximately 1350Z. After checking in the flight with Eglin Mission Control, the controller (SSGT James Hicks) asked how much fuel I had on board, what my playtime was, and if I was available to help an aircraft potentially in distress. I replied that I had about 4000 lbs of gas on board for approximately one hour of playtime and was available to help out. While coordinating with Jacksonville Center, SSGT Hicks asked if I wished to join up with a KC-135 tanker in the adjacent area and refuel prior to starting the intercept. After clearing my wingman to RTB, I proceeded to join up with the tanker (Okie 41) and refuel. I received 5200 lbs of gas, disconnected from the tanker, and then recontacted Eglin Mission Control for clearance. I was cleared to climb to FL440 and fly heading 030. The controller also reported that my target was approximately 030 for 105 nautical miles. I selected max AB and climbed to FL440. After reaching FL 440, I cancelled AB and cruised in MIL power at 0.9 Mach.

3. After checking in with Jacksonville Center at approximately 1413Z, I was told to fly heading 015. At 1417Z, the controller gave another update on the target, placing him at 003 for 111 NM. For the next 25 minutes, I flew the headings given by the controllers, as they slowly adjusted my heading further to the left. I maintained FL440 and 0.9 Mach. At 1433Z, the controller told me to turn further left to heading 310 to establish cutoff for an expected left turn by the target aircraft. Two minutes later, the controller said that the aircraft had not changed course and to resume a 330 degree heading. I continued to close with the target for the next ten minutes. At 1443Z, I made radar contact with the target at a range of approximately 30 NM. At 1450Z, I had closed to 10 NM. Center passed the target aircraft's callsign (N47BA) as well as the last frequency on which ATC had contacted the aircraft (126.82). At 1452Z, at a range of 8 NM, I picked the aircraft up visually, aided by the contrails which trailed behind both engines of the aircraft for 4000 to 6000 ft. At 1453Z and a range of 2.5 NM, I began a climb to FL450. At 1454Z and a range of 2000 ft, I made two radio calls to N47BA on 126.82 and did not receive any response. I initially had approximately 180 knots of closure with the target. As I closed

from 2000 ft to 400 ft, I put out the speedbrakes and reduced power to join on the left side of the Learjet. At 1455Z, I was 400 ft from the Learjet at 170 KCAS, 0.65 Mach at 45,800 ft. With MIL power selected, I was unable to maintain level flight next to the Learjet and began a descent. I requested and was granted a block altitude of FL400 to FL450 so I could descend in order to increase my airspeed and light the afterburner. After selecting AB, I was able to climb back up to the Learjet's altitude and began a visual inspection of the aircraft at 1500Z. The aircraft was flying at 46,400 ft at 160 KCAS, 0.64 Mach. I rejoined from below on the aircraft's right side. Initially, I was abeam the passenger section of the aircraft, just forward of the wing. I did not notice any damage to the exterior of the right side of the aircraft. Both engines were running and the rotating beacon was on. I do not recall if any of the other exterior lights were functioning. I could not see inside the passenger section of the aircraft. The windows simply seemed to be dark and I did not see any windows that were opaque. As I moved forward on the aircraft and attempted to look into the cockpit, I noticed that the entire right cockpit windscreen was opaque, as if condensation or ice covered the inside. The exterior of the window still appeared smooth. I noticed no ice accumulations on the exterior of the aircraft. I then crossed underneath and behind the aircraft to inspect the left side. Again, I noticed no exterior damage to the underside or left side of the aircraft. The left cockpit windscreen was opaque, although several sections in the center of the window seemed to be only thinly covered and a small rectangular section was clear. This clear area was located on the bottom of the windscreen and extended approximately 24 inches aft from the center windscreen pillar and was about 6 – 8 inches high. Only a small section of black glareshield was visible through this area. After looking at the cockpit area, I climbed slightly to check the top of the aircraft and did not see any damage. During the close visual inspection of the aircraft, I remained within 50 feet of the Learjet and never saw any flight control movement.

4. At approximately 1505Z, I dropped down below and behind the aircraft so I would not need the afterburner. I flew a weaving flight path at approximately 200 KCAS until the controllers cleared me to proceed to Scott AFB to refuel at 1512Z. I flew directly to Scott AFB and landed at 1540Z.

5. If there are any questions I can answer, please contact me at [redacted] or [redacted] (home).

[redacted]

CHRISTOPHER E. HAMILTON, Captain, USAF
F-16 Test Pilot