Attachment 7

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

DCA00MA005

Air Carrier Certificate
#SJ8A536W

Repair Station Certificate
#SJ8R536W

2841 Flightline Avenue
Sanford, FL 32773

SUNJET AVIATION, INC.

(407) 328-8440
Fax (407) 328-8442

Kenneth . Egge
Office Aviation Safety
Operational Factors Director (AS-30)
Fax (202)314-6339

October 29, 1999

For Mr. Egge:

Forward herewith are the check list you requested plus additional pertinent statements.

Sincerely,

[redacted]

Tom Turner
Director of Operations

PRESSURIZATION LOSS AT ALTITUDE

[redacted]

8750' CABIN ALTITUDE

1. CAB ALT Light will illuminate.
2. If cabin altitude stabilizes:
   a. Auto-Man Switch ..... MAN
   b. Up-Dn Manual Control ..... AS REQ'D

9500' CABIN ALTITUDE

1. Emergency pressurization will automatically activate.
2. If cabin altitude stabilizes:
   a. Make normal descent or continue at altitude.
   b. To control cabin temperature at altitude:
      (1) One Bleed Air Switch (L If Possible) ..... OFF
      (2) Reduce power on opposite engine if practical & necessary.

10,100' CABIN ALTITUDE

1. Cabin Altitude Warning will sound.
2. Execute EMERGENCY DESCENT as follows:

   a. **Oxygen Masks** ..... **DON & SELECT 100%**
   b. **Thrust Levers** ..... **IDLE**
   c. **Autopilot** ..... **DISENGAGE**
   d. **Spoilers** ..... **EXTEND**
   e. **Landing Gear (Below M_{MO} Or V_{LE})** ..... **DOWN**
   f. **Descend at M_{MO}/V_{LE}.**

If time and conditions permit:

   g. Transponder 7700
   h. Oxygen Mic Switches (Pilot & Copilot) ..... ON
   i. Notify ATC.
   j. Check and assist passengers.

14,000' CABIN ALTITUDE

1. Passenger Oxygen Masks will deploy.
2. Overhead panel lights will illuminate.
3. Passenger Masks ..... DON
4. Passenger Mask Lanyards ..... PULL

Refer to Supplemental Data, pages S-4, S-5 and S-6 for oxygen duration charts.

PRESSURIZATION LOSS AT ALTITUDE

to 10,000' Cabin Altitude:

1. Oxygen Masks . . . . . DON
2. Engine RPM . . . . . MAINTAIN
3. Defog Knob . . . . . PUSH IN
4. Windshield Heat Switch . . . . . AUTO
5. Cabin Air Switch . . . . . OFF
6. Auto-Man Switch . . . . . MAN
7. Cherry Picker . . . . . AS REQ'D

,000' Cabin Altitude:

1. Cabin Altitude Warning Horn will sound.
2. If pressurization cannot be maintained, execute EMERGENCY DESCENT as follows:

a. Oxygen Masks . . . . . DON
b. Thrust Levers . . . . . IDLE
c. Autopilot . . . . . DISENGAGE
d. Spoilers . . . . . EXTEND
e. Landing Gear (below .83 M| or 265 KIAS) . . . . . DOWN
f. Descend at .83 M| or 265 KIAS.

f time and conditions permit:

g. Transponder 7700
h. Oxygen Mic Switches . . . . . ON
Increase Master Volume
i. Notify ATC.
j. Check and assist passengers.

14,000' Cabin Altitude

1. Passenger Oxygen Masks will deploy.
2. Upper center panel lights will illuminate.
3. Passenger Masks . . . . . DON
4. Passenger Mask Lanyards . . . . . PULL

(Procedure Continued)

EFF: 35-002 thru 35-112 (except 35-107); 36-002 thru 36-031

PRESSURIZATION SYSTEM FAILURE
BLEED AIR WARNING LIGHT

1. Corresponding Bleed Air Switch . . . . . OFF

FAILURE TO DEPRESSURIZE ON THE GROUND

1. Cabin Air Switch . . . . . OFF

INADVERTENT ACTIVATION OF EMER AIRFLOW

1. Thrust Levers . . . . . 90% or BELOW, IF PRACTICAL
2. LH MOD VAL CB (L Main Bus) (If Open) . . . . . RESET
RH MOD VAL CB (R Main Bus) (If Open) . . . . RESET

If Emergency airflow continues:

3. One Bleed Air Switch . . . . . OFF
If emergency airflow stops, leave switch OFF.

If Emergency airflow continues:

4. Bleed Air Switch . . . . . ON
Other Bleed Air Switch . . . . . OFF

OVERPRESSURIZATION

If Differential Pressure exceeds Red Arc:

1. Auto-Man Switch . . . . . MAN
2. Cherry Picker . . . . . UP AS REQ'D

If unable to regulate Overpressurization:

3. One Bleed Air Switch . . . . . OFF
4. Adjust power on opposite engine to control pressurization.

EFF: 35-107, 35-113 thru 35-505 and 36-032 thru 36-053

1604 Hangar Road
Building 333
Sanford, FL 32773

SUNJET AVIATION, INC.

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MEMO

October 29, 1999

To Whom It May Concern:

Reference the interview by James C. Watkins with Mr. Kenneth L. Egge, And other members of the NTSB Investigating Team.

During his interview, Mr. Watkins, pointed out the differences in the Abnormal Procedures checklist for "Pressurization Loss at Altitude" contained in the latest Flight Manual for N47BA, page A-14, dated September 1996, and a Flight Safety checklist for Learjet 35 series dated 6/89. Mr. Watkins made reference that both checklists may have been in the aircraft at the time of the accident.

I have since researched this and have determined that the only checklist in the aircraft the morning of October 25, 1999 was the one dated September 1996, which agrees with the flight manual.

[redacted]
Thomas H. Turner
Director of Operations

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To: National Transportation Safety Board

From: Daniel Cox Jr.
Maintenance Supervisor

This letter is in regard to maintenance performed on Learjet model 35 serial # 60 Registration N47BA before the date of October 25, 1999.

On October 22, 1999 N47BA returned to Sunjet Aviation and the decision to resolve an engine performance problem was addressed. After performing an engine performance survey the results led the maintenance department to suspect a faulty Bleed Air and Pressure Regulator valve or (Mod Valve) on the left engine. This conclusion was established from reference to our current Lear 35 Maintenance Manual. The decision was made by myself to acquire the (Mod Valve) and the associated hardware (gaskets) for a Saturday delivery from an authorized Learjet parts distributor. After arriving Saturday morning the valve and gaskets were changed in accordance with Learjet maintenance manual Chapter 36-10-01. The inspector was present during and after the installation. With the valve installed and inspected the aircraft was ready for operational test and check. The aircraft was operated on the ground by a Learjet pilot and myself. Engine performance and pressurization checks performed in accordance with the Learjet 35 maintenance manual concluded the valve replacement had corrected the engine problem and the pressurization system was within limits as per Learjet Maintenance Manual Chapter 21-30-00 pages 201 and 202. The valve was again inspected for security before the engine cowling was secured and the aircraft was returned to service.

If I can be of any assistance please call the number below.

Sincerely,

[redacted] 10-29-99

Dan Cox
Maintenance Supervisor
(407)328-8440 [redacted]

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To Whom it May Concern:

This letter is in reference to Learjet 35 N47BA serial number 60

1. Pilot reported that N47BA had power lever split at different altitudes.

2. Performed engine ground run on left and right engines to performance power. Found left engine not making charted power for the day. Troubleshot left engine for bleed air leaks. Found no leaks. Checked left engine pressure regulator valve at idle RPM. Found valve not to be working properly. Turned left engine bleed air switch off. Found left engine would make charted power with matched power levers. Ordered overhauled pressure regulator valve. Removed and replaced valve. Ran left and right engines for operational check out. Found both engines operated within serviceable limits. Leak checked mod valve for air leaks. Found no leaks – system functional tested O.K. All work was performed in accordance with Learjet maintenance manual, 21-30-00, page 201 and 202 and 36-10-01, page 201.

   N47BA was flown the same day, 10/23/99. All systems were normal at or below 16,000 feet.

Sincerely.

Ed Berkley [redacted] 10/29/99
Inspector, Sunjet Aviation

STEPHANIE BELCGARRIGUE

KNOWN FLIGHT TIMES FOR COMMERCIAL FLIGHTS
DOES NOT INCLUDE NON COMMERCIAL FLIGHTS

4/9	- 5.4	350DS	LR31
4/14	- 5.4	47BA	LR35
5/1	1.6	47BA	LR35
5/17	1.3	47BA	LR35
5/20	5.7	710SS	LR35
6/2	2.3	710SS	LR35
6/9	5.1	56EM	LR35
6/11	6.2	350DS	LR31
6/14	4.5	56EM	LR35
7/16	1.5	56EM	LR35
7/12	5.0	72LL	LR35A
7/30	2.8	47BA	LR35
8/1	.3	47BA	LR35
8/2	2.4	47BA	LR35
8/10	3.0	47BA	LR35
8/11	2.6	47BA	LR35
9/5	14.0	56EM	LR35A
9/13	5.5	47BA	LR35
9/21	6.9	72LL	LR35A
10/12	9.0	350DS	LR31
10/20	3.9	47BA	LR35

Total 99.40 LR 30'SERIES

N47BA 30.8

[redacted]
Dir. of Opns.