

ORIGINAL

NO.HQCAA/1901/205/SIB



CIVIL AVIATION AUTHORITY

**AIRCRAFT INCIDENT INVESTIGATION
M/S AIRCRAFT SALES & SERVICES (PVT) LTD.
PIPER SENECA-III REG.NO.AP-BCK**

WHICH OCCURRED ON 9TH MAY, 1995

AT

KARACHI AIRPORT

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INVESTIGATION REPORT

INCIDENT TO M/S AIRCRAFT SALES & SERVICES
PIPER SENECA-III AIRCRAFT REG NO. AP-BCK
AT QIAP KARACHI ON 9TH MAY, 1996

Authority:- Director General Civil Aviation Authority
Memorandum No. HQ CAA/1901/205/SIB dated 19th
May, 1996.

COMPOSITION OF INVESTIGATION TEAM

- | | | | |
|-----|---|---|--------------------------|
| (a) | Air Cdre (Retd) Rashid A. Bhatti
Pilot Investigator, SIB CAA | : | Investigator
Incharge |
| | | | |
| (b) | Wg. Cdr (Retd) Sajjad Ahmed
Technical Investigator SIB | : | Investigator |

1. AIRCRAFT INFORMATION

- | | | | |
|------|--|---|-------------------------------------|
| 1.1. | Registration Marks | : | AP-BCK |
| | | | |
| 1.2. | Aircraft type and
maker's Sl. No. | : | Piper Seneca-III |
| | | | |
| 1.3. | Engine types, airframe
positions and maker's S
No. | : | Cotinental LTSIO-360-KB
268468-R |
| | | | |
| 1.4 | Certificate of Reg No and
validity. | : | 585 No time limit |
| | | | |
| 1.5. | Certificate of
Airworthiness No and
date of expiry, and flight
manual No. | : | 538 valid upto 16-8-96 |

- 1.6. Certificate of Safety date : 8-5-96 valid for 50 hrs or 30
and time (GMT) of issue days
and period of validity. which ever occurs earlier.
- 1.7. Date of construction of : 1985
airframe.
- 1.8 Name and address of : Aircraft Sales & Services (Pvt)
Owner Ltd
Qasim Building, 1/29 Randal
Road, Karachi.
- 1.9 Gross Weights. Maximum : 4750 lbs
permitted by C of A for
this flight, at the time of
incident
- 1.1 Loading. Centre of gravity : Load sheet copy attached
0 limits in C of A and centre
of gravity position at the
time of incident and
commence- ment of flight.
- 1.1 Airframe history. (Give : 6150.25 Hrs
1 flying times since 718.15 Hrs
manufacture, last 03.00 Hrs
overhaul and last periodic
check. -
- 1.1 Engine history. (Give : Rebuild engine by Teledyne
2 flying time since Continental Company.
manufacture, last
overhaul and last periodic
check.
- 1.1 Accessory history. : Not applicable
3 (Operate- ing life and
operating time since
manufacture and
overhaul.

- 1.1 Defects. (List & remarks : Not applicable
 4 upon any technical
 defects in airframe
 engines or accessories,
 discovered during
 investigation).

2. CREW INFORMATION

2.1 Pilot-in-Command

- 2.1.1. Name : NADEEM ASHRAF
 CHOUDHRY
- 2.1.2. Position in the : CAPTAIN
 cockpit
- 2.1.3. Date of Birth : 7-6-1950
- 2.1.4. Type of Lic and No : ATPL NO. 884
- 2.1.5. Medical dt with : 21-5-96 Fit for renewal of
 status ATPL subject to use of
 corrective glasses.

2.1.6. Rating

- 2.1.6.1. Type(s) held : C-13-, L-100, B-737 and Piper
 Seneca-III, C-172, PA-34.
- 2.1.6.2. Type current : Piper Seneca PA-34.
- 2.1.6.3. : N/A
 Flt.Instructor

2.1.7. Flying Experience

- 2.1.7.1. Grand total : 8579:57 Hrs
- 2.1.7.2. Total -in - : 6509:00
 Command

/2.1.7.3.

2.1.7.3. Total in 96:30.
 command on the type
 2.1.8. Where trained : Pakistan Air Force

3. SUMMARY OF THE INCIDENT

3.1 On 9th May, 1996 M/s Aircraft Sales & Services (Pvt) Ltd Piper Seneca-III aircraft Reg No. AP-BCK while operating a chartered flight from Kadanwari to Karachi had an incident at Karachi Airport. The weather at Karachi was fair and the aircraft was cleared to make an ILS approach. while landing at Karachi the pilot failed to make a positive contact with the runway due to floating of the aircraft and a go round manoeuver was executed. However, a safe landing was made in the second attempt. During post flight inspection right engine propeller blades tip were found bend inward about 2 inches. However, no personal injury was caused.

4. INJURY TO PERSONS

4.1. There was no injury to any passenger or the crew members.

5. DAMAGE TO AIRCRAFT

5.1. Right engine propellers tip were bend 2 inches rearward.

6. OTHER DAMAGES

6.1. None

7. **METEOROLOGICAL CONDITION**

7.1. The weather was fair and visibility was good.

8. **NAVIGATIONAL & LANDING AIDS**

8.1. Not relevant.

9. **COMMUNICATIONS**

9.1. Not relevant.

10. **AERODROME AND GROUND FACILITIES**

10.1. Not relevant.

11. **FLIGHT RECORDERS**

11.1. Not relevant.

12. **WRECKAGE & IMPACT INFORMATION**

12.1. Not relevant.

13. **FIRE**

13.1. No smoke or fire was caused due to the incident.

14. **SURVIVAL ASPECTS**

14.1. All passengers and crews disembarked using the normal exits

15. **TEST & RESEARCH**

15.1. None

16. **OBSERVATIONS**

16.1. NIL

17. **WITNESSES**

17.1. Statement of witness is given in Appendices 'E' to this report.

18. **INVESTIGATION**

18.1. On 9th May, 1996 M/S Aircraft Sales & Service (Pvt) Limited Piper Seneca-III aircraft Reg No. AP-BCK while operating a chartered flight from kadanwari to Karachi had an incident at Karachi Airport. The aircraft departed kadanwari at about 1630 PST. The aircraft was cleared for ILS approach on runway 25R and after breaking was cleared to land on runway 25L . The weather at Karachi was fair with surface winds 10 knots/240 degrees and visibility 8000 meters. The aircraft was on short finals at about 1740 hours and a normal flare out was executed. However, after touch down the aircraft lifted off the runway. Subsequently, it touched down in a nose low attitude and again went up. A go around was initiated to prevent any damage to the aircraft. On the instructions of the ATCO the aircraft climbed to 3000 ft and a
/ safe

safe landing was carried out. During post flight inspection the Right Engine propeller blades tip were found bend rearward by about 2 inches.

- 18.2. The pilot of the aircraft Captain Nadeem Ashraf Choudhary joined the company on 15th February, 1996 and had flown about 80 hours on the type. Prior to joining the company Captain Nadeem had operated C-130/L-100 and B-737 aircraft and had logged a total of about 8500 hours. As per the Company's policy pilots inducted in M/s Aircraft Sales and Services (Ltd) are required to undergo a training schedule under the supervision of Captain Mazhar Chief Pilot of the company. Captain Mazhar informed the Board that landing of Piper Seneca-III aircraft requires precision handling as the aircraft has a tendency to float because of ground effects which is an inherent design feature due to low wings and this fact was validated by other pilots also. In subject incident the pilot reported that the aircraft became unstable as it came close to ground due to sudden gust of wind and situation became worse due to ground effects. The pilot tried to control the situation and eventually had to execute a go round to avoid damage to the aircraft. However, in this process the propeller blades tip touched the ground and were substantially damaged. The Board is of the view that under the circumstances Captain Nadeem tried to handle the aircraft as best as he could to avert the situation and a correct decision to execute a go round was taken in time.
- 18.3. While going through the training schedule the Board found that adequate training is imparted to the incoming pilots during conversion on Piper Seneca-III aircraft. At present there are Ex Airforce pilots rendering satisfactory service to the company. At the time of the incident Captain Nadeem had logged about 80 hours on Piper Seneca aircraft and on the day of incident Captain Nadeem had operated same aircraft to Kadanwari. His performance in the company has been satisfactory. In view of the evidence brought out during the course of the investigation the Board is of the view that during landing the aircraft became unstable due to sudden gust of wind and ballooned due to ground effects which is an inherent design feature in Piper Seneca-III aircraft. The pilot who was quite experienced tried to control the aircraft and eventually executed a go round and subsequently, landed /safely

safely. However, in this process right engine propeller contacted the ground and the tips of the propeller were bend rearward by about two inches.

18.4. CONCLUSION

18.4.1. Piper Seneca-III aircraft requires precision handling during landing as it has a floating tendency due to ground effects due to it low wings. Captain Nadeem during landing experienced gust of wind due to which the aircraft became unstable and ballooned due to ground effects. The pilot tried to control the aircraft and eventually executed a go round. However, in this process the right engine propeller blades tip contacted the runway.

19. FINDINGS.

- 19.1. The documents of the aircraft were in order.
- 19.2. Licence of the Captain was appropriate and valid.
- 19.3. The weather was fair and there was no rain or wet runway conditions at the time of occurrence.
- 19.4. Captain Nadeem Ashraf Choudhary was on the controls at the time incident occurred.
- 19.5. While landing at Karachi the aircraft became unstable due to gust of wind and the aircraft displayed floating tendency due to ground effects. Captain Nadeem tried to control the aircraft as it ballooned but eventually executed a go round. However, in this process the right engine propeller contacted the ground and was substantially damaged.
- 19.6. Captain Nadeem had joined the company on 15th February, 1996 and at the time of incident had logged about 80 hours on the type during which his performance has been satisfactory.
- 19.7. Captain Nadeem is an experienced pilot having a total of about 8500 hours mostly on C-130/L100 and B-737 aircraft

/and

and his performance in the company has been satisfactory.
19.7. The Company's conversion training policy for newly inducted pilots is satisfactory.

20. **Causes**

20.1 The incident was caused due to sudden gust of wind which rendered the aircraft unstable and the aircraft ballooned because of ground effects which is an inherent design feature in Piper Seneca-III aircraft due to low wings.

21. **Recommendations**

21.1. Chief Pilot should brief all pilots in the company especially those with less experience to exercise precise handling while landing Piper Seneca-III aircraft because of its floating tendency due to ground effects.



RIGHT ENGINE PROPELLER BLADE DAMAGE ANOTHER VIEW



RIGHT ENGINE PROPELLER BLADES DAMAGE ANOTHER VIEW

APP.



BLADE DAMAGE ANOTHER VIEW

APP. I



RIGHT ENGINE PROPELLER BLADES DAMAGED