

NO.HQCAA/1901/295/SIB



CIVIL AVIATION AUTHORITY – PAKISTAN



SERIOUS INCIDENT TO PIA FLIGHT 786

B-747 REG # AP-BFV, AT ISLAMABAD

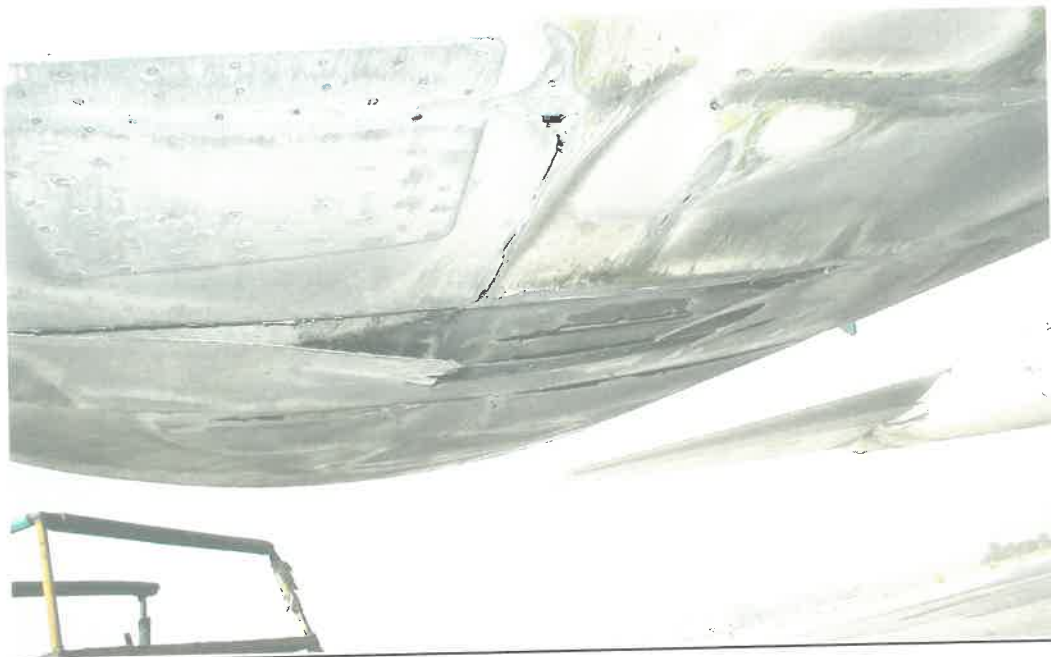
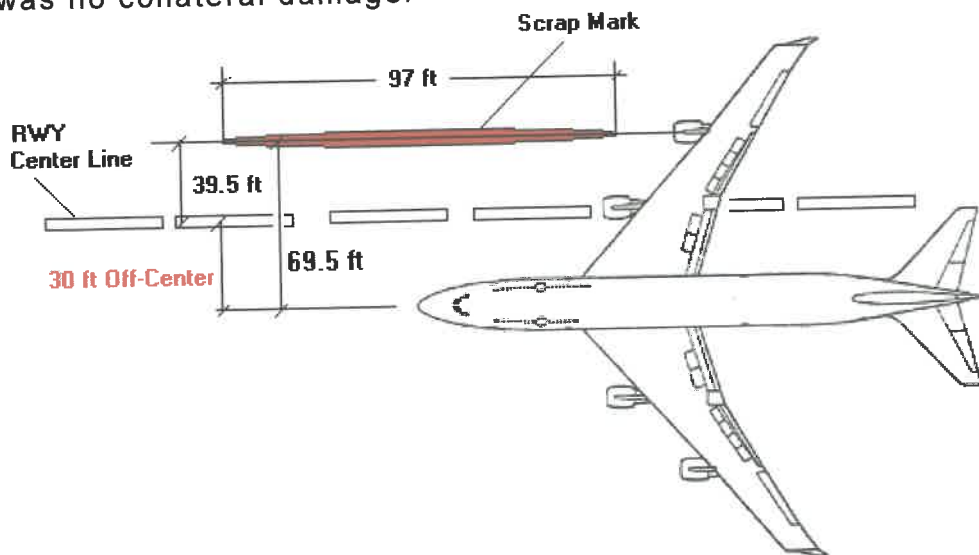
ON 03 JANUARY 2005

FINAL REPORT

PIAC FLIGHT 786, B-747-300, REG # AP-BFV, SERIOUS INCIDENT WHILE LANDING AT ISLAMABAD ON 03 JANUARY 2005

Authority: Director General Civil Aviation Authority
Memorandum No.HQCAA/1901/295/SIB dated 10
January 2005.

Brief Resume: On 03 January 2005, AP-BFV, a B-747 was en-route to Islamabad from London (Heathrow). On landing at Islamabad, the aircraft's right outer engine pod (# 4 engine pod) grazed the runway and the engine cowling was damaged. There was no collateral damage.



1. Factual Information

1.1 History of the Flight

PIA 786 was an RPT flight from London, Heathrow to Islamabad on 3 January 2005. Flight preparation with regards to obtaining the appropriate briefings was adequate. The flight was uneventful till the aircraft (PIA-786) contacted Islamabad Radar Control and was cleared for an ILS approach RW 30. On failing to capture the ILS Localizer, the aircraft informed the radar. At this time the radar controller cleared the aircraft for a VOR/DME approach RW 30. The radar told PIA-786 that ILS Localizer was off the air due to scheduled maintenance, which was duly NOTAMISED. The VOR/DME landing is a non-precision approach requiring a visibility of 1.4 km as per the prescribed company minima, while the reported visibility at Islamabad was 01 km. As a matter of information, however, radar controller informed PIA-786 that the preceding aircraft reported visibility on finals as 1.2 km. By this time, the pilot was aware of the visibility (1 km) through the ATIS and the radar both and he was 12 NM out of Islamabad. The aircraft continued the approach and executed a missed approach as runway was not acquired visually. Despite having gone around due to poor visibility, the pilot attempted another landing. The poor visibility caused the crew to locate the runway late on their second attempt. The resultant effort to align the aircraft with the runway required vigorous manoeuvring at altitude less than 100' AGL with a very high sink rate. A combination of these factors caused the right most engine pod (# 4 engine pod) to graze the runway surface.

1.2 Injuries to Persons: Nil

1.3 Damage to Aircraft:

1.3.1 No. 4 Engine Cowling (under-side, 6'O clock position) grazed the ground while landing and sustained the following damages:

- (i) Both fan cowls portion found damaged.
- (ii) Translating sleeve lower portion found damaged.
- (iii) No. 4 engine fluid drain mast found damaged.
- (iv) No. 4 engine I.D.G. found damaged.

(v) No. 4 engine fire wall found buckled at the lower portion.

(vi) Plumbings found damaged in lower portion of No. 4 engine.

(vii) No. 4 engine oil quantity indicating 13.5 Qtrs (22 Qtrs when full).

1.4 **Other Damages:** No collateral damages.

1.5 **Personnel Information**

1.5.1 **Captain of the Aircraft**

a.	Name	:	Capt. Anjum Javed
b.	Age/DOB	:	58½years/13May1946
c.	Validity of Licence	:	April 2005
d.	Medical Validation	:	June 2005
e.	Mandatory Checks	:	Completed
f.	Total Flying	:	20,500 hrs
g.	On Type	:	3000 hrs
h.	Duty time	:	9 hrs on this flight
j.	Rest time before Flight	:	30 hrs in London

1.5.2 **Co-Pilot**

a.	Name	:	F/O Aurangzeb Khan
b.	Age/DOB	:	44 years/12Feb1961
c.	Validity of Licence	:	April 2005
d.	Medical Validity	:	June 2005
e.	Mandatory checks	:	Completed
f.	Total Flying	:	7600 hrs
g.	On Type	:	3500 hrs
h.	Duty Time	:	9 hrs
j.	Rest Time before Flight	:	30 hrs in London

1.5.3 **Radar Controller**

a.	Name	:	Mr. Anwar-ul-Haq
b.	Service	:	25 years (approx) as controller
c.	Designation	:	Radar Approach Controller since 24 Dec 2003

1.6 **Meteorological Information:**

a. The visibility reported by Met for Islamabad was 01 km, which was on the ATIS transmission.

- b. The tower observation was also reported to be 01 km.
- c. On landing at Islamabad a preceding aircraft reported visibility on finals as 1.2 km.
- d. The ATIS transmission of 0900 hrs Local Time reported ILS / DME approach runway-30.
- e. The reported surface temperature at 0900 hrs LT was 08°C.

1.7 Aids to Navigation

1.7.1 Islamabad Airport is equipped with ILS, VOR, NDB and DME.

1.7.2 ILS Localizer was to remain off the air due to quarterly maintenance from 0400 UTC to 0830 UTC (0900 hrs to 1330 hrs LT) on 03 Jan 05.

1.7.3 PIA Flight Operations both in London (Heathrow) and Islamabad were unaware of the ILS Localizer status.

1.7.4 VOR / DME was available for a non-precision approach.

1.8 Communications

1.8.1 Radar Transcript

Approach frequency transcript is placed at Appendix 'B' and salient aspects are as follow:

a. The radar controller gave an ILS RW-30 clearance to the aircraft on initial contact without realizing that the Localizer was off the air due to scheduled maintenance. After checking with the coordinator, however, the clearance was changed to VOR / DME (Non-Precision Approach). This change was affected following the pilot's transmission that he was unable to capture the ILS Localiser.

b. NOTAM #176/04 was not available in the radar control room on 03 Jan 05.

c. PIA-786 was informed about the ILS non-availability status 22 minutes before its touch down.

- d. PIA-786 went around on the first approach announcing poor visibility.
- e. When asked by the radar controller, PIA-786 replied that he went around due to poor visibility and added, 'poor vectoring also'. There was no error in the vectoring procedure of the radar controller.
- f. The radar controller also gave the tower observation on visibility as 01 km to PIA-786.
- g. As additional information, the radar controller told PIA-786 that a preceding aircraft had reported visibility on finals as 1.2 km. This transmission is unambiguous on the Radar recording.
- h. It is also clear from the conversation after the first missed approach that the pilot of PIA-786 asked the radar to place the aircraft on runway heading till short finals due to bad visibility.

1.8.2 ATC Transcript

The transcript of the conversation between Control Tower and PIA-786 is placed at Appendix 'C'. Significant Points of the conversation are as below:

- a. The pilot's irritation and expression of helplessness are clearly discernable from his transmission about Localizer not being on air.
- b. It confirms that the aircraft approach was incorrect when it touched down.
- c. After the aircraft landed, ATC asked PIA-786 about his observation on visibility. PIA-786 replied that the visibility on finals was 1.4 km.

1.9 AIP Supplement and NOTAM

- a. AIP Supplement # S-16/2004, which indicated that ILS Localizer was to be shut down for scheduled maintenance on 03 Jan 2005, was issued on 11 December 2004 and received by a PIA representative, in the office of Manager Routes, on 16 December 2004.
- b. AIP Supplement # S-16/2004 was not available in the radar control room on 03 Jan 05.

c. NOTAM # 176/04 on the Localizer remaining off the air on 03 Jan 05 (0400 – 0830 hrs UTC) was issued on 28 Dec 2004.

d. Copy of this NOTAM was not available in the radar control room on 03 Jan 05.

e. Radar control room records indicated that in the past AIP Supplements and NOTAMs reached the radar control room after their effective date was over. Examples of such delays are placed with the statement of Chief Technical Officer, Islamabad (Appendix 'G6').

1.10 Administration

PIAC

1.10.1 AIP supplement was not disseminated down the chain in the PIAC. Since they did not have the information, the Flight Operations at London (Heathrow) did not brief the pilots on it.

1.10.2 Due to lack of communication within PIAC, Islamabad Flight Operations was also unaware of ILS status, when PIA-786 contacted them on Company Channel.

CAA (ATS)

1.10.3 The coordinator in the radar control room did not inform the controller about the NOTAM information which was passed on to him by the ATC regarding ILS non-availability.

1.10.4 A letter of agreement exists between CAA and PAF for the provision of ATC services at Chaklala. According to SATCO, PAF Base Chaklala the condition of a Licensed ATCO is not included in that letter. CAA Pakistan is a signatory of ICAO, Chicago Convention, and there is no difference filed on the issue of non-licensed ATCOs. Although this aspect has no bearing on the incident, it is being highlighted as it may eventually be pointed out in an ICAO audit.

PAF (ATC)

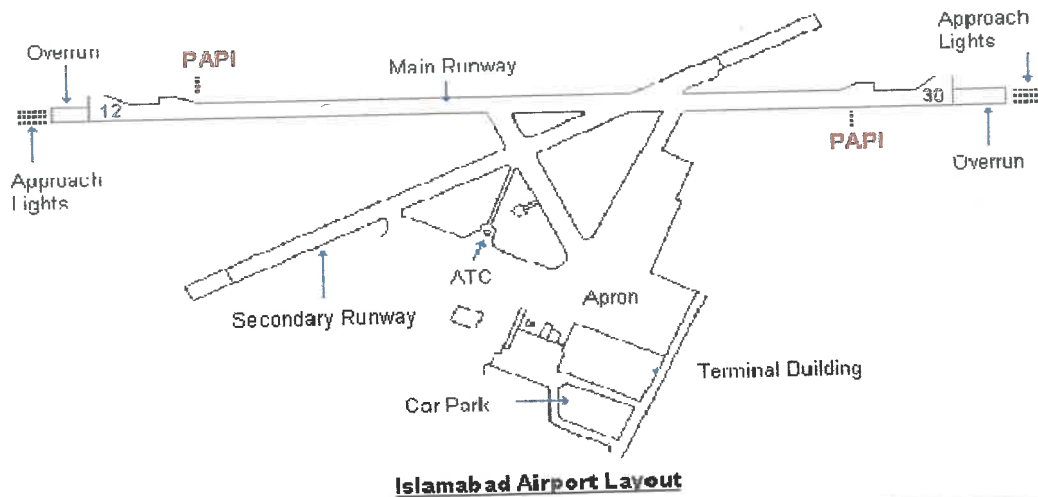
1.10.5 ATC is responsible for recording the ATIS and giving the latest update on an aerodrome. ILS Localizer being off the air for scheduled maintenance was an important aspect that was over-looked in ATIS recorded transmissions of 0300 and 0400 hrs UTC on 03 Jan 05.

1.10.6 The visibility at Islamabad on 03 Jan 05 during the period of the mishap landing was very poor. Precedence exists that under such circumstances scheduled maintenance could have been postponed as was done on previous occasions.

1.11 Aerodrome Information:

1.11.1 The aerodrome elevation of Islamabad International Airport is 1660 ft above mean sea level. This airport has two runways – secondary runway 09 / 27 (Not in use for take-off and landing) and main runway 30/12 (see figure below). Runway 30 is 11,000 ft long (excluding overrun area of both sides) and 150 ft wide. The overrun area on the 30 end is 900 ft. The main runway is made of bitumen surface and has a slope of 0.15 % from runway 12 end up to 5943 ft and has a slope of 0.5 % from the runway 30 end up to 2286 ft.

1.11.2 The runway is equipped with ILS (Cat I and II), DVOR, TDME and NDB facilities.



1.12 Flight Recorders

1.12.1 DFDR

a. The flight recorder indicates the following:

i) During the first approach the aircraft went around from 415.9 feet AGL, at a speed of 136.9 kts.

ii) During the second approach the aircraft was right of the runway, off course by 38° at 2200 feet AGL when the radar

controller handed over PIA-786 to the ATC.

iii) In 3 minutes and 18 seconds the aircraft turned from 338° to 292° and descended to 388 feet AGL.

iv) The aircraft banked right to correct overshoot of the runway.

v) At 300 feet AGL the aircraft was in a bank with a speed of 137.5 kts

vi) At 200 feet it was flying 137.5 kts and was in a right roll with a heading of 285°.

vii) At 100 feet the aircraft speed was 137 kts it was turning through 286° and was still in a bank, while the sink rate was increasing.

viii) From Obstacle Clearance Altitude (OCA) till touch down the glide slope was in excess of 4° as against a maximum glide slope of 3° in normal approaches.

ix) The sink rate of the aircraft was 1080 feet per minute during the last 10 seconds of the approach and it touched down with the same sink rate.

x) The aircraft had turned from 286° to 300° in 15 seconds with a calculated bank angle in excess of 14° close to touchdown.

xi) The aircraft touched down in bank of over 6°, with a high nose attitude and a very high sink rate.

xii) The DFDR clearly points to a destabilized approach, where the aircraft was turning below OCA with an exceptionally high sink rate and a very steep glide path.

1.12.2 CVR

a. The CVR indicates that:

i) The aircraft rate of descend was high enough to activate the Aural Warning of 'Sink Rate', which sounded six times before the aircraft touched down. The pilot took no notice of this warning as confirmed by DFDR, which shows no increase in power to check this sink rate.

ii) A hard landing was suspected, as indicated by the cockpit conversation, but no entry was made in the technical log of such a suspicion.

iii) The first officer announced 'wings level' just before touch down.

1.12.3 Facts From Witness Statements

a. The cockpit crew unanimously claimed having heard the Radar transmission about visibility to be 2km, when the recording unambiguously showed a very clear transmission by radar saying, "Preceding aircraft reported visibility on finals as 1.2 km".

b. The PIC (and PF) has accepted that he had made a mistake.

c. The Chief Technical Officer at Islamabad has pointed out the late receipt of AIP Supplements and a modification in scheduled maintenance announced previously according to prevailing circumstances.

1.13 Medical Report

1.13.1 Captain Sheikh Anjum Javed, the PIC and pilot flying for the mishap landing, tested positive to Benzodiazepines, which was in violation of Rule 127 of CARs 94 and para 1.9.5 of ANO 91.0101.

1.14 Organisation & Management Information

1.14.1 The following were observed with regard to various organizations:

a. PIAC Operations

i) PIAC Operations did not disseminate the information, which they had received through AIP Supplement # S16/2004.

ii) PIA-786 continued its flight to Islamabad despite the knowledge that the visibility was 01 km and ILS Localizer was not available.

iii) PIA 786 attempted a landing when the reported visibility was below the company prescribed minima for a non-precision approach.

iv) A very experienced pilot was found indulging in self-medication and using medicines not to be used before embarking on a flight.

1.14.2 Role of Corporate Safety – PIAC

a. On being informed about the serious incident the SIB asked Corporate Safety to carry out an investigation and forward a report for the information of Acting President SIB. Chief Pilot (CP) Corporate Safety PIAC sent a report (Appendix 'G') to Chairman PIAC with a copy to SIB. The report consistently highlighted the flaws with CAA Radar Controller and PAF ATCO, while high-lighting the difficulties of the cockpit crew. It was based only on the inputs from the pilots, with no inputs from the radar voice transcript or ATC transcript, which would have been more revealing. It was a less than professional report that was sent out with less than adequate confirmation of facts from sources other than the cockpit crew inputs. Facts like visibility below Non-precision approach minima and pilot flying being under the influence of a prohibited drug were omitted for reasons best known to Corporate Safety. Furthermore, it was wrongly stated that NOTAM was not issued for the scheduled maintenance. The investigation did not even try to find out from the Operations or the Manager Routes, which would have revealed a more factual picture. The report also did not highlight the vigorous manoeuvring of aircraft

close to ground (less than 150 feet AGL), contrary to laid down procedures (FOM Chapter 8, Para 11).

b. On receipt of the letter from SIB asking PIAC to carry out their investigation for the perusal of Acting President SIB, CP Corporate Safety issued a self-approved memorandum giving himself the powers vested in the DG CAA alone. This was not only a gross violation of CARs 94 but also a clear indication of poor knowledge and ignorance of Aircraft Accident Investigation Regulations, Annex 13 and PIAC procedures.

1.14.3 PAF ATC

a. Since the issue of NOTAMS at joint user airfields is the responsibility of the PAF Senior Air Traffic Controllers (SATCO), these should have been available with the Radar as a matter of procedure worked out between the Radar Chief Facilitation Officers and the SATCO (PAF). The availability of a current NOTAM about a major navigation facility being off the air, especially in the prevailing poor visibility conditions at Islamabad was not ensured.

b. ATIS recording of 0300 and 0400 hrs UTC did not contain the latest up date on the ILS Localizer being off the air at Islamabad between 0400 and 0830 hrs UTC.

c. PAF ATCO at Islamabad was not a licensed controller as per ANO # 90.0014 (issue 2) of CAA Pakistan. A number of PAF ATCOs are qualified on the Basic ATC Course from CATI (Civil Aviation Training Institute).

d. Tower Controller was found giving landing clearance to PK-786 one minute 9 seconds short of touch down, which is not a normal practice in ATC procedures.

1.14.4 Area Control Centre

a. The area control centre did not have the latest applicable AIP Supplement # S16/2004 in the requisite files, which are consulted by controllers before resuming their shift duty.

b. NOTAM #176/04 was not available in the Area Control Ops Room file.

2. Analysis

2.1 PIA-786 continued its flight to Islamabad despite knowing that the visibility at Islamabad was below the minimum visibility prescribed for non-precision approach as per company policy / CAA regulation. This was a display of less than adequate discipline by a senior pilot.

2.2 Not diverting to the alternate even after making a missed approach once, due to poor visibility, was a display of less than adequate decision making.

2.3 Landing from an approach that was instable even below 100 feet AGL showed that the PIC of PIA-786 was unconcerned / lethargic due to the influence of drug.

2.4 Not monitoring a very important piece of information on visibility correctly, points towards less than sufficient division of attention by the cockpit crew.

2.5 Failing to monitor the aural warning about high 'sink rate' leads one to believe that the pilot displayed an inattentive behaviour.

2.6 The entire cockpit crew denies having heard the 'sink rate' aural warning, which sounded six times before the aircraft touched down. It is inferred from this that the crew may have been focussed on the landing alone or simply lacked the ability of dividing their attention between various events appearing nearly simultaneously.

2.7 Alternately (to 2.6 above), the Captain may have ignored the high 'sink rate' warning for the fear that he may end up landing long if he chose to add power to arrest the sink rate.

2.8 The graze marks were witnessed about 900 feet down the runway. Ordinarily a B-747 would touch down ahead of 900 feet. This fact also confirms that pilot was unsure of the aircraft placement vis-à-vis the runway length as suggested in 2.7 above.

2.9 The graze mark also indicates that the engine pod touched the ground while the wheels were still in the air, and the aircraft was in a right bank with a very high nose attitude.

2.10 It emerges from the analysis above that the approach was destabilized.

2.11 The high sink rate caused the aural warning on the aircraft ('Sink Rate') to activate. Since it sounded six times before the aircraft touched down, it shows that the pilot paid no heed to it.

2.12 The angle of bank indicated by the DFDR three seconds before touch down was 8.09° (Right Bank) and 6° at touch down. Landing an aircraft under such conditions needs review of the pilot's decision-making ability.

2.13 # 4 engine pod grazed the ground probably when the aircraft touched down on its right wheel as per the Captain's statement. It can be proved through calculations that if the wheels are on ground the inner pod (# 3 engine pod) will touch the ground before the outer pod (# 4 engine pod). Calculations (Appendix 'R') based on aircraft's principal dimensions alone, therefore, indicate that the outer engine pod (# 4 Engine Pod) grazed the runway surface while the aircraft wheels were still in the air and the nose attitude on touch down was exceptionally high. The graze marks on the engine pod also indicate an exceptionally high nose attitude of the aircraft besides a bank angle in excess of 6° on landing.

2.14 a. # 4 engine pod grazing the ground, as per the Captain's statement, due to wing flexing is not supported by the graze marks on the pod, which are well to the rear and on that part of the pod, which is lesser in diameter than the front portion of the pod.

b. An aircraft, whose speed on landing is normal (133.5 kts in this case) and its 'aural warning' of (high) 'sink rate' activates the cause would either be a very high nose altitude, a high bank angle or a combination of both.

c. From the discussion above it is inferred that the engine pod (# 4) grazed the ground when the aircraft was in a bank, its wheels were still in the air and its nose attitude was very high just before the aircraft touched down.

2.15 Considering the meteorological information available to the pilots on ATIS (Visibility 1 km) and getting to know that ILS Localizer was not available (off the air due to scheduled maintenance) at Islamabad, a decision to divert to the alternate was possible. The insistence for landing at Islamabad in less than required visibility speaks of the decision – paralysis in an experienced captain under the influence of drug.

2.16 Having gone around once at Islamabad due to poor visibility and still insisting on making a landing using a non-precision approach, with visibility below the prescribed

Company/PCAA minima, is a case of less than adequate responsible behaviour on the part of such an experienced Captain due to drugs intake. In normal circumstances a missed approach should have been initiated when the aircraft was found to the right of the runway and the height was too low to manoeuvre the aircraft on the second approach.

2.17 a. The cockpit crew have stated that they heard the radar controller giving the visibility as 2 km whereas tape extract of the 'Radar - PIA-786' conversation is unambiguous and clearly transmits, "Preceding aircraft reported visibility on finals 1.2 km".

b. Non of the cockpit crew noticed the 'aural warning' of 'sink rate' that sounded six times before the aircraft touched down. CVR has clearly recorded this transmission.

c. A hard landing was suspected but no mention of this suspicion is recorded in the aircraft technical log.

d. The pilot reported visibility on finals as 1.4 km, which was equal to the prescribed minima for a non-precision approach.

e. Cockpit crew were denying unambiguous facts.

2.18 PIA Corporate Safety issued a memorandum on behalf of DG CAA, displaying ignorance of existing rules / regulations. Directing and managerial staff of PIAC's Corporate Safety do not seem to keep themselves abreast with the regulations related to safety procedures.

2.19 ANO 91.0020 dated 16 August 2000 lays down the qualifications of Safety / Investigation Officers in Para 5.2 (a) & (b). A separate audit needs to establish if PIAC Corporate Safety is in compliance with the ANO requirement of all its employees.

2.20 ATC's transmission about the approach being incorrect meant a dangerous approach as it appeared to a person who continually watches aircraft landing. The effect of drug intake had veiled this factor from the pilot.

2.21 The irritation of the pilot is discernable in his transmission to the ATC. Effect of Benzodiazepines or fatigue or a combination of both may have been responsible for this.

3. Conclusion

3.1 Findings

3.1.1 PIA-786 was a regular public transport flight from London to Islamabad on 03 January 2005.

3.1.2 The PIC, Captain Anjum Javed, was the pilot flying during the last two approaches at Islamabad.

3.1.3 Localizer at Islamabad was off the air for maintenance on 03 January 2005 from 0400 UTC to 0830 UTC.

3.1.4 AIP Supplement # S-16/2004 and NOTAM # 176/04, which gave the information about Islamabad ILS Localizer remaining off the air for routine maintenance, were issued on 11 December 2004 and 28 December 2004 respectively.

3.1.5 AIP Supplement # S-16/2004 dated 11 December 2004 on ILS Localizer was duly received by PIAC on 16 December 2004.

3.1.6 The office of Manager Routes, PIAC, did not disseminate the information they had received on 16 December 2004.

3.1.7 The ATIS recorded messages of 0300 and 0400 hrs UTC by Islamabad ATC did not contain the information regarding the non availability of ILS Localizer at Islamabad. The reported visibility recorded in the ATIS was 800 meter and 1 km at 0300 & 0400 hrs UTC respectively.

3.1.8 The Pilot-in-Command (PIC) of PIA-786 was not aware of the Localizer being off the air till he was 12 miles out of Islamabad.

3.1.9 During his conversation with the tower, the Captain of PIA-786 was quite expressive of his irritation and frustration at the situation he was confronted with.

3.1.10 The irritation was caused due to drug intake by the pilot flying, who was also the PIC.

3.1.11 The reported visibility at Islamabad during the approach of PIA-786 was 01 km. The tower observation was also 1 km.

3.1.12 The aircraft executed a missed approach on first attempt due to non acquisition of runway in poor visibility and was re-vectorred for a landing at Islamabad for a second approach.

3.1.13 Since a go around had already been made, the PIC (and PF) was fully cognizant of the visibility, which was reported below the Company's prescribed minima for a non-precision approach.

3.1.14 When PIA 786 had the runway in sight, at or below Obstacle Clearance Altitude (OCA), the aircraft was to the right of the runway, therefore, initially aircraft turned left and then reversed for alignment at 154 feet AGL. It touched down with a right bank of over 6 degrees and a very high sink rate of over 1050' per minute.

3.1.15 The sink rate of the aircraft was very high (calculated as 1080 feet / min), which caused the aural warning ('sink rate') to activate.

3.1.16 The aircraft turned through 16 degrees (i.e from 285 to 301°) in 10 seconds. The calculated bank angle was, therefore, about 15°, only one second before touch down.

3.1.17 The aircraft was seen being manoeuvred vigorously very close to the ground before its final touch down, DFDR also confirms this fact.

3.1.18 The combination of a bank and high nose altitude caused a high sink rate at touch down.

3.1.19 The PIC did not react in any way to the aural warning of 'Sink rate', which sounded six times in succession before touch down (CVR).

3.1.20 The right engine pod (# 4 engine) grazed the ground 900' down the runway.

3.1.21 The pilot was unsure of his aircraft placement vis-à-vis the runway length at touch down due to poor visibility, therefore, the landing was made from a destabilized approach.

3.1.22 He did not add power to check the sink rate because of his latent apprehension that he would land long and end up with a runway excursion.

3.1.23 As a result of the role and high nose attitude of the aircraft, # 4 Engine pod grazed the runway surface while the wheels were still in the air.

3.1.24 The First Officer, who was the PNF, called out 'wings level' seconds before touch down but did not call out a 'go around' earlier when he clearly witnessed a destabilized approach.

3.1.25 The aircraft made a 'suspected' hard landing on the right wheels. A suspected hard landing was discussed in the cockpit after landing but no entry of this suspicion was made in the tech log.

3.1.26 The report by Corporate Safety on this serious incident was based only on crew statements. It did not include facts collected from ATC transcript or radar voice transcripts to confirm or negate these statements.

3.1.27 The report said that no NOTAM on ILS Localizer was published, which was not a factual information.

3.1.28 The report did not mention that the visibility minima for a non-precision was violated by the PIC.

3.1.29 In its report, Corporate Safety did not mention how the outer engine pod scrapped the runway on landing.

3.1.30 The report by Corporate Safety defended the cockpit crew, while highlighting the flaws of the CAA radar controller and PAF ATCO.

3.1.31 No mention was made of the vigorous manoeuvring of the aircraft through out the approach and up to the touch down, in their report.

3.1.32 The Chief Pilot Corporate Safety issued a self approved memorandum giving himself the powers vested only in the DG CAA. It displayed not only a gross violation of CAA Rules but also brought in focus their poor knowledge and ignorance of Aircraft Accident Investigation Regulations XIII and PIAC procedures.

3.1.33 The Captain of the aircraft had indulged in self-medication and was in violation of Rule 127 of CAR94 and ANO 91.0101 as per the medical report.

3.2 Cause

3.2.1 Landing from a destabilized non-precision approach while under the influence of drugs and in a visibility below the prescribed company minima.

3.3 Human Factor – Aircrew: Avoidable.

4. Recommendations

4.1 PIA to investigate its system of dissemination of information to the concerned personnel especially on issues concerning safety of flight.

(Administration – DFO, PIAC).

4.2 PIA to remind pilots routinely and repeatedly on the hazards of self-medication through the Flight Surgeon PIAC.

(Administration – DFO, PIAC).

4.3 Existing regulations on weather minimas must be strictly adhered to by all pilots.

(Training – DFO, PIAC).

4.4 It must be re-emphasized on the pilots NOT to make a landing from a destabilized approach.

(Training – DFO, PIAC).

4.5 The co-pilot's training in carrying out his assigned tasks when he is the PNF needs to be re-emphasized.

(Training – DFO, PIAC).

4.6 Training syllabi may be evaluated for regular practice of non-precision approach.

(Training – DFO, PIAC).

4.7 Corporate Safety PIAC to develop comprehensive Investigation Report and place only authentic information on preliminary investigation reports with supported evidence, avoiding conclusive remarks about facts that have not been established.

(Corporate Safety – PIAC).

4.8 Certified / Licensed Controllers at joint user airfields in accordance with ANO 90.0014 (Issue Two), is to be implemented.

(Director Operations – CAA).

4.9 ATS, CAA to ensure timely dissemination of AIP Supplements and NOTAMs to all work stations

(Director Operations – CAA).

4.10 PAF may be asked to carryout a system check to identify the flaw in their ATIS recording and take corrective measures so that any existing weakness is removed.

(Director Operations – CAA)