



PAKISTAN CIVIL AVIATION AUTHORITY
(SAFETY INVESTIGATION BOARD)



FINAL REPORT

SERIOUS INCIDENT OF RUNWAY INCURSION BY M/S PIAC
FLIGHT # PK-689 ATR42-500 AIRCRAFT REG # AP-BHP
WHILE VVIP AIRCRAFT FLIGHT # PAKISTAN-2 WAS
ON FINAL APPROACH FOR LANDING AT BBIAP,
ISLAMABAD ON 08TH DECEMBER, 2014

FINAL INVESTIGATION REPORT

INTO SERIOUS INCIDENT OF RUNWAY INCURSION BY M/S PIAC FLIGHT # PK689 ATR42-500 AIRCRAFT REG #AP-BHP WHILE VVIP AIRCRAFT FLIGHT PAKISTAN-2 WAS ON FINAL APPROACH FOR LANDING AT BBIAP, ISLAMABAD ON 08TH DECEMBER, 2014

1. The notification for conduct of a meaningful investigation was issued by the competent authority, in order to avoid recurrence in future. A detailed and thorough investigation was conducted at appropriate level. The details of investigation are appended in succeeding paragraphs.

2. Findings

2.1. The findings of the investigation are appended below:

2.1.1. At 1259:00 hrs VVIP aircraft (Pakistan-2) contacted Islamabad Approach Radar at a distance of around 11 nm short of point "Indek".

2.1.2. Flight Pakistan-2 was cleared for approach ILS runway 30 for landing at BBIAP, Islamabad via Pomar 1F arrival by the Duty Radar Controller. The instructions were acknowledged by the cockpit crew of Flight Pakistan-2.

2.1.3. At 1259:22 hrs M/S PIAC Flight PK-689 contacted ATC Control Tower and requested push back and start for destination Karachi Flight Level 190 and four souls onboard. The ATC Control Tower cleared Flight PK-689 for push back and start.

2.1.4. At 1301:30 hrs Flight Pakistan-2 was descending through FL192 at 171⁰ / 52 nm from BBIAP, Islamabad.

2.1.5. At 1308:13 hrs Flight PK-689 requested ATC Control Tower for taxi instructions. The Control Tower cleared Flight PK-689 to taxi via Alpha to holding point runway 30.

2.1.6. At 1310:09 hrs Flight PK-689 requested ATC Control Tower for ATC clearance. The Duty Air Traffic Controller asked him to standby and would be advised shortly.

2.1.7. At 1310:16 hrs Flight Pakistan-2 was cleared by Duty Radar Controller to descend to 3900 ft for ILS approach runway 30 at BBIAP, Islamabad.

2.1.8. At 1310:18 hrs Flight Pakistan-2 was descending through 6700 ft at 140⁰ / 13.5 nm from BBIAP, Islamabad.

2.1.9. At 1310:50 hrs Duty Air Traffic Controller ATC Tower instructed Flight PK-689 "hold position, behind VVIP aircraft 10 miles finals will give line up clearance behind landing aircraft".

2.1.10. At 1311:01 hrs Flight PK-689 acknowledged the Duty Air Traffic Controller ATC Tower instructions by saying "Copied PK-689".

2.1.11. At 1311:56 hrs Flight Pakistan-2 informed Duty Radar Controller "Radar Pakistan-2 established ILS 30, 9 DME, gear down and lock".

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- 2.1.12. At 1312:00 hrs Flight Pakistan-2 was descending through 4500 ft 121° / 9 nm from BBIAP, Islamabad and Duty Radar Controller acknowledged by saying "Roger Pakistan-2 position is correct continue approach contact tower 123.7, ALLAH HAFIZ". The clearance was acknowledged by cockpit crew of Flight Pakistan-2.
- 2.1.13. At 1312:20 hrs Flight Pakistan-2 told Duty Air Traffic Controller ATC Tower Controller "Tower Assalam o Alaikum Pakistan-2 established 8 DME, gears down and lock".
- 2.1.14. At 1312:24 hrs Flight Pakistan-2 was descending through 4200 ft 118° / 8 nm from BBIAP, Islamabad.
- 2.1.15. At 1312:24 hrs Duty Air Traffic Controller ATC Tower told Flight Pakistan-2 "Pakistan-2 recheck gears down and lock, wind 290° / 5 kts runway 30 clear land" and the clearance was acknowledged by the cockpit crew of Flight Pakistan-2 at 1312:39 hrs.
- 2.1.16. At 1312:54 hrs Flight Pakistan-2 was descending through 3800 ft 119° / 7 nm from BBIAP, Islamabad.
- 2.1.17. At 1313:30 hrs Flight Pakistan-2 was descending through 3400 ft 118° / 5.5 nm from BBIAP, Islamabad.
- 2.1.18. At 1314:00 hrs Flight Pakistan-2 was descending through 3000 ft 119° / 4 nm from BBIAP, Islamabad.
- 2.1.19. At 1314:24 hrs Flight Pakistan-2 was descending through 2700 ft 119° / 3.3 nm from BBIAP, Islamabad.
- 2.1.20. At 1314:24 hrs Duty Air Traffic Controller at ATC Tower told Flight PK-689 "PK-689 enter line up "A" intersection and copy ATC".
- 2.1.21. At 1314:30 hrs Flight PK-689 acknowledged the clearance and asked for ATC clearance.
- 2.1.22. At 1314:30 hrs Flight Pakistan-2 was descending through 2600 ft 119° / 3 nm from BBIAP, Islamabad.
- 2.1.23. At 1314:39 hrs Duty Air Traffic Controller ATC Tower told Flight PK-689 "runway heading 3500 ft, turn left on heading 240° climb maintain 8500 ft, squawk 2013" and cockpit crew acknowledged the ATC clearance at 1314:46 hrs.
- 2.1.24. At 1314:42 hrs Flight Pakistan-2 was descending through 2500 ft 119° / 2.7 nm from BBIAP, Islamabad.
- 2.1.25. At 1314:56 hrs Flight Pakistan-2 was descending through 2300 ft 121° / 2 nm from BBIAP, Islamabad.
- 2.1.26. At 1315:06 hrs Flight Pakistan-2 was descending through 2200 ft 121° / 1.5 nm from BBIAP, Islamabad.
- 2.1.27. At 1315:07 hrs Flight PK-689 told ATC Tower "Sir, there is an aircraft coming on finals".
- 2.1.28. At 1315:12 hrs Duty Air Traffic Controller ATC Tower transmitted "Aircraft on final say your call sign." At 1315:12 Flight Pakistan-2 was descending through 2100 ft 119° / 1 nm from BBIAP, Islamabad.

- 2.1.29. At 1315:22 hrs Flight Pakistan-2 replied "Pakistan-2 on finals."
- 2.1.30. At 1315:26 hrs Flight PK-689 asked ATC Tower "Confirm you want me to vacate" and the Duty Air Traffic Controller ATC Tower replied "affirm vacate via taxiway "C" expedite."
- 2.1.31. At 1315:34 hrs cockpit crew of Flight Pakistan-2 discontinued the approach and executed missed approach procedure.
- 2.1.32. At 1315:41 Flight PK-689 confirmed to the Duty Air Traffic Controller ATC Tower that runway had been vacated and it was acknowledged by the Duty Air Traffic Controller ATC Tower.
- 2.1.33. At 1316:00 hrs Flight Pakistan-2 told ATC Tower "Pakistan-2 will turn right and again will call you on finals." The control Tower acknowledged and cleared Flight Pakistan-2 to turn right and report finals runway 30.
- 2.1.34. At 1316:22 hrs Flight PK-689 called ATC Tower "we are back on taxiway "A", why have you given line up clearance."
- 2.1.35. At 1316:25 hrs the Duty Air Traffic Controller at ATC Tower replied "PK-689 **we gave you line up clearance actually keeping in view behind the aircraft so but we have not given the call behind the landing aircraft that's mistake on our part**". The Duty Air Traffic Controller had actually lost track of Flight Pakistan-2 which was evident by his call "Aircraft on finals say your call sign".
- 2.1.36. At 1316:44 hrs Duty Air Traffic Controller ATC Tower instructed Flight PK-689 to hold on taxiway "Alpha". The Flight PK-689 informed ATC Tower that he would have to make a 180° turn at taxiway Alpha to enter runway again for line up. The Duty Air Traffic Controller ATC Tower permitted him to make 180° turn on Alpha taxiway.
- 2.1.37. At 1319:06 hrs Flight Pakistan-2 told ATC Tower "Tower, Pakistan-2 approaching finals runway 30".
- 2.1.38. At 1319:17 hrs ATC Tower told Pakistan-2 "Pakistan-2 surface wind 290° / 8 kts runway 30 clear land" and cockpit crew acknowledged the clearance and landed safely.
- 2.1.39. At 1320:28 hrs ATC Tower told PK-689 "689 now you can enter line up runway 30. Flight PK-689 acknowledged and entered runway for line up.
- 2.1.40. At 1323:10 Flight PK-689 was cleared for takeoff by the Duty Air Traffic Controller at ATC Tower and take off clearance was acknowledged by the cockpit crew.
- 2.1.41. At 1324:56 hrs Flight PK-689 took off for destination from BBIAP, Islamabad.
- 2.1.42. The Duty Air Traffic Controller at ATC Tower (PAF Officer) was a Civil Aviation Training Institute (CATI), Hyderabad qualified Air Traffic Controller who underwent his "Aerodrome / Area Control (Non Radar) Course No. 2" from 09th August, 2010 to 18th February, 2011 at Civil Aviation Training Institute (CATI), Hyderabad.

3. Conclusion

- 3.1. The summary of factors which led to the serious incident is appended below:



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- 3.1.1. The Duty Air Traffic Controller at ATC Tower BBIAP, Islamabad informed Flight PK-689 during taxi clearance that there is VVIP aircraft on finals for landing and you would be cleared for line up / takeoff behind landing VVIP aircraft.
- 3.1.2. The Duty Air Traffic Controller at ATC Tower BBIAP, Islamabad despite initially holding Flight PK-689 at holding point runway 30 lost track (Lack of situational awareness) of the VVIP aircraft (Pakistan-2) who had been cleared to land at runway 30 and cleared Flight PK-689 to enter runway for line up abeam "Alpha" intersection.
- 3.1.3. The cockpit crew of Flight PK-689 did not pick visual with the landing VVIP aircraft at a reasonably closer range on final approach and entered the runway on ATC Tower Controller clearance.
- 3.1.4. The Captain of Flight PK-689 did not challenge the ATC Tower controller clearance for entering runway despite the fact that they did not monitor the VVIP aircraft landing as they were stopped / held before entering the runway for line up clearance behind VVIP aircraft landing.
- 3.1.5. Both the cockpit crew failed to challenge each other and the controller for the latest position of landing VVIP aircraft before entering runway, after whose landing they were supposed to be given line up clearance.

4. Finalization

- 4.1. The serious incident took place due to the lack of situational awareness of the Civil Aviation Training Institute (CATI), Hyderabad qualified Duty Air Traffic Controller at ATC Tower BBIAP, Islamabad and failure of the cockpit crew to visually spot / pick the landing VVIP aircraft at a reasonably closer range on final approach along with their failure to challenge the runway entry clearance while not fully aware of the position / location of landing VVIP aircraft as they were stopped / held before entering the runway for line up clearance behind VVIP aircraft landing.

5. Safety Recommendations

- 5.1. The safety recommendations are appended below in order to avoid recurrence in future:
 - 5.1.1. The involved Duty Air Traffic Controller be given refresher ground schooling related to the VVIP aircraft arrival / departure handling and controlling procedures and be evaluated for said ground schooling activity.
 - 5.1.2. After satisfactory completion of the refresher ground schooling the involved Duty Air Traffic Controller be given appropriate number of under supervision watches / duties .
 - 5.1.3. After satisfactory completion of under supervision watches / duties, the involved Duty Air Traffic Controller be evaluated before clearing to undertake the duties independently.
 - 5.1.4. The involved Captain and First Officer of Flight PK-689 are to undergo comprehensive refresher ground schooling for one day.
 - 5.1.5. The involved Captain and First Officer of Flight PK-689 are to undergo refresher Crew Resource Management (CRM) training.
 - 5.1.6. The Captain and First Officer of the said flight (as a pair) are to undergo a four hour refresher simulator session monitored by Flight Inspector CAA Pakistan.

- 5.1.7. The Captain and First officer (as a pair) are to undertake a under supervision flight at operator level and their evaluation reports are to be forwarded to Flight Standards Directorate CAA Pakistan with a copy to this office.
- 5.1.8. After the receipt of refresher training conformance reports regarding ground schooling and under supervision flight at operator level, Flight Standards Directorate is to detail a Flight Inspector for monitoring the Route Check of involved cockpit crew (as a pair) and post route check evaluation reports in respect of both cockpit crew are to be forwarded to this office.
- 5.1.9. The Air Traffic Controllers be detailed for refresher / recurrent training and courses at regular intervals during their service career.
- 5.1.10. CAA Pakistan is to study and implement the psychosomatic testing and personality profiling of Air Traffic Controllers at the time of their medical evaluation at induction stage and at regular intervals (as deemed appropriate) during their service career, for the purpose of issuance and renewal of Air Traffic Controller Licence (ATCL).
6. After the receipt of operators' compliance in respect of all above mentioned safety recommendations along with post refresher training evaluation reports in respect of involved Duty Air Traffic Controller, Captain and First Officer at this office, they would formally be released for routine duties / flight operations.