

INVESTIGATION REPORT ON COLLISION BETWEEN
SAUDIA AND PIA AIRCRAFT ON 5TH DEC., 1984.
AT KARACHI AIRPORT.

PIA Aircraft	Airbus - 300 Reg.MK.AP-BBA
Saudia Aircraft	Boeing 747 Reg.Mk.HZ-AIB
Date & Time of Collision	5-12-1984 at 0700 hrs. P.S.T.
Location	Bay No.13 & 14 at Karachi Airport

1. SUMMARY

- 1.1. On 5.12.1984 M/s. Saudia Schedule Passenger Flight No.SV-352, operated by a Boeing 747, landed Karachi Airport at 0700 LT. The ATC instructed the pilot to park the aircraft on bay No.13. The aircraft followed the follow-me vehicle, which was provided by the ATC for guidance.
- 1.2. An Airbus-300 type of aircraft owned by M/s. PIAC was already parked on bay No.14. During parking right wing tip of Boeing 747 aircraft came in contact with the left hand wing tip of the parked A-300 aircraft due to limited space between these two adjacent parking bays. There was no damage to wing tip of the Boeing aircraft. There was some damage to aileron of Airbus-300. Lens of the Navigation light of this aircraft also broke. There was no injury to any person.

2. INVESTIGATION

- 2.1. Mr.Tariq Kureshi, Flight Safety Officer of M/s P.I.A.C. contacted Capt.Farmanuddin, Pilot Chief Investigator CAA, at his residence at 0730 on the morning of 5th December, 1984. He informed that the right wing tip of a Boeing 747 aircraft bearing Nationality and Registration Marks HZ-AIB, owned and operated by M/s. Saudia Airline, while being parked on bay No.13, had come in contact with the left wing tip of an Airbus-300 owned and operated by M/s. PIAC. The A-300 bearing Nationality and Registration Marks AP-BBA was parked on the adjacent parking bay which was bay No.14.

2.2. On/....

- 2.2. On receipt of the above information the pilot Chief investigator immediately contacted Air Commodore (Retd) Patrick D. Callaghan, President Accident Investigation Board, CAA. All the available details were passed to him. After discussions on telephone, it was decided that both officers would proceed to the scene of accident. Investigators left their residence and arrived the location at 0810 A.M.
- 2.3. Flight Safety Officer, mentioned above, had requested that ATC be informed to issue instructions to the concerned personnel not to permit anybody to disturb these aircraft from their positions. Before departure from residence, control tower was contacted by the Pilot Chief Investigator. The Duty Aerodrome Controller informed that he was not aware of the incident because he had not received any briefing from the out going Aerodrome Controller. He however promised to do the needful. This action was taken before Capt. Farmanuddin left his residence for the Airport.
- 2.4. President, Accident Investigation Board and the Pilot Chief Investigator after arrival at the scene of incident, carried out initial survey of the location. It was noted that the right hand wing tip of the B-747 was stuck in the left hand wing tip at the out board aileron of the A-300 (App. "N"). The wing tip of B-747 had engaged in an opening at outer trailing edge of the wing of A-300 which had been created due to down-ward movement of the aileron of the A-300. It was also noted that No.1 engine of the B-747 had scrape marks on the outer side of its cowling. It was discovered that this engine had come in contact with a baggage container, parked at the edge of the tarmac off the hard standing, whilst the B-747 was manoeuvring for parking.

3. DISCUSSION

- 3.1. Distance between bay No.13 and bay No.14 is not sufficient to park two wide body aircraft. Based on this fact the Airport Management had issued Circular No.KAP/3424/14(4)/ATS dated 28.5.84, instructing that two wide bodied aircraft shall not be parked on these two adjacent bays. (App. M) A copy of the circular was also sent to M/s. P.I.A.C.

3.2. Trainee/....

- 3.2. Trainee ATCO, Mrs. Seema Khan, has stated that when M/s. PIAC representative contacted her for permission for allocation of a parking bay for A-300 for morning departure, she allotted bay No.14. Mr. Suhail Ahmed, on the job Instructor on duty, had later corrected her and had asked her to change it to bay No.15. She has testified that she informed M/s. PIAC that the bay had been changed to No.15. However it could not be determined that follow-up action was taken by the duty personnel positioned in the control tower.
- 3.3. After the landing of Saudia Boeing 747, the pilot of this aircraft was instructed to park the aircraft on bay No.13. He proceeded under the guidance of follow-me vehicle. When he arrived close to bay No.14, it appears that he noticed that he could not manoeuvre the aircraft to be parked on bay No.13 in case he made normal turn. He therefore made a wider turn. This is proved by the fact that cowling of his left outer engine (No.1), scraped against empty cargo containers placed on trollies parked near the edge of the apron off the hard standing. When the pilot made wider turn, he must have disregarded the yellow lead-in line. However the pilot continued to taxi till his Co-pilot advised him to stop. It was done when the later had received signal from the wing marshallers to this effect. By this time the wing tip of the taxiing aircraft had come in contact with the wing tip of the parked aircraft.
- 3.4. Before the arrival of Boeing 747 aircraft at the parking bay, ground staff of M/s. Saudia Airline and M/s. PIAC were present to receive and despatch the aircraft respectively. Engineers of M/s. PIAC should have contacted the ATC or should have taken action to stop the aircraft before it reached the parking bay. These personnel did not display the level of responsibility expected of them.
- 3.5. There were two marshallers on duty. One was deputed as nose marshaller while the other was wing tip marshaller. These marshallers are educated and have replaced the earlier lot of uneducated marshallers. The marshallers performing duty earlier were deployed on such duty in addition to their duty of fire operator at the fire station. The change had been recommended on the grounds that educated persons would understand the problems and thereby provide better service.

3.6. After/.....

- 3.6. After their induction into the Job of marshallers, these newly inducted persons received "on the job training" from the fire operator/marshallers. No formal training was provided to them (App. D). No check out was conducted before they were allowed to undertake the responsibility independantly. Knowledge level and out-put of incumbant cannot be expected to be any better than his on-the -job training instructor (s), especially when they were replaced because their performance was not considered to be satisfactory.
- 3.7. Marshallers responsible for parking of flight SV 352 have stated that Driver Noor Mohammad influenced them to the extent that a B-747 could be parked on bay No.13. This argument does not hold any strength on the ground that a professional can only be influenced if he lacks knowledge and skill. If this is taken to be true, then these marshallers have failed to inform their superiors about their short comings. The driver cannot therefore be held responsible for this incident. The marshallers have therefore failed in their duty to take notice of the situation and take timely action to avoid the occurrence.
- 3.8. Mr. R.A.K. Shirwani, A.T.C.O, was supervisor in this shift. His duties, as circulated by the Chief Operations Officer, included 'Parking of Aircraft vs best utilization of available parking bays' (App. L). His job also included supervision of two other A.T.C. units viz F.I.C. and approach control. He has stated that at the time of this occurrence he was in the F.I.C. (App. K), Chief Operation Officer Karachi Airport has endorsed his statement.
- 3.9. Mr. Suhail Ahmad A.T.C.O, also an O.J.T.I, was present in the control tower. It appears that the Supervisor not anticipating any problem in presence of an experienced A.T.C.O, proceeded to other A.T.S. units to see for himself if any guidance/supervision was required. He did not absent himself from duty. The incident occurred when he was not present in the control tower. His absence from tower at the time of occurrence was per chance.
- 3.10. Mr. R.A.K. Sherwani should have studied the anticipated workload during his period of absence from the Control Tower. Before leaving the tower he should have briefed the qualified senior Air Traffic Controller present there. In addition to other things, the briefing should have included allotment of parking bays.
- 3.11. External circulation of Station Air Traffic Instruction (S.A.T.I) No.2/84 dealing with the subject of allocation of parking bays at Karachi Airport was restricted to M/s PIAC only. Had Saudia Airline known about contents of circular, there were good chances that they may have taken corrective action.

4. **FINDINGS**

- 4.1. The Duty Aerodrome Controller had failed to inform his reliever that the incident had occurred.
- 4.2. The Duty Aerodrome Controller, an O.J.T.I., failed to supervise the trainee ATCO.
- 4.3. The ATC failed to take follow-up action when the parking bay was changed.
- 4.4. When the pilot realised that he had to deviate from yellow lead-in line for parking on No.13, the pilot did not notify the A.T.C.
- 4.5. The shift supervisor did not acquaint himself with the anticipated workload before he left control tower. He therefore did not provide any briefing to on-the-job Training Instructor for the period of his absence.
- 4.6. External circulation of S.A.T.I. No.2/14 was restricted to M/s P.I.A.C. only.
- 4.7. M/s PIAC personnel failed to take notice of the situation.
- 4.8. Proper training to the Marshallers was not provided by the Airport Management. They therefore displayed a poor standard of marshalling.
- 4.9. Driver has not been found at fault in this occurrence.

5. **RECOMMENDATION**

- 5.1. Immediate action.
 - 5.1.1. Airport Manager Karachi Airport to re-ensure that all personnel of CAA. including fire station and the airlines or their handling agents fully understand the parking limitations for wide body aircraft.
 - 5.1.2. The Airport manager to ensure that all marshallers are properly instructed in their duties before they are deployed on such important job.

Director/.....

- 5.1.3. Director Operations should issue orders that before the end of February, 1985 an order book is available at each A.T.C. unit of CAA Pakistan containing all current instructions. This book is to be signed by all concerned staff every month prior to a date fixed by Airport Manager.
- 5.1.4. Director Operation to instruct all operators/handling agents that they must confirm to the control tower the bay No. on which the arriving/departing aircraft has been parked immediately after it has occupied a parking bay.
- 5.1.5. Director Operations to issue instructions that a magnetic board, to scale, be displayed in control tower with metal silhouettes placed on it, indicating bays currently occupied by aircraft.
- 5.1.6. Director Operations to issue instructions that shift supervisor is not to leave his place of duty till he has properly handed over watch to the next senior qualified controller available.
- 5.1.7. Director Operations to issue letter of warning to Mr.R.A.K.Sherwani and Mr.Sohail Ahmed.
- 5.1.8. Director Technical to arrange that all communication i.e. telephone, tele-talk, walkie-talkie, interphone, radio telephone etc. to and from all C.A.A. A.T.C. units are recorded on tape.
- 5.1.9. Copies of all circulars issued in respect of aircraft operation be circulated to all the airlines operating through Karachi Airport.
- ✓ 5.1.10. Whenever a pilot feels that he is to deviate from the laid down procedure, in this case following the yellow lead-in line, he must not continue taxiing. Instead he must notify the appropriate A.T.S. unit and obtain guidance. Suitable instructions be issued to all airlines operating through Karachi Airport.

5.1.11. Letter/.....

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- 5.1.11. Letter of Caution be issued to both the marshallers,
and they be retrained before being employed on
independent duties.
- 5.1.12. M/s P.I.A.C. to investigate and take appropriate
action against their personnel for not taking
notice of S.A.T.I. No. 2/84.

APP. N1



RIGHT WING TIP OF SAUDI AIRLINES 747 ENGAGED WITH
LEFT WING TIP OF M/s P.I.A.C., A-300.

APP. N2



WING TIP SEEN AFTER DISENGAGEMENT.

APP N3



SCRAPE MARKS SEEN ON THE COWLING OF # 1 ENGINE
OF SAUDI AIRLINE's 747

APP N4



NOSE WHEEL AND LEFT BODY GEAR CAN BE SEEN WELL
LEFT OF YELLOW LINE. NOTE AIRCRAFT PARKS SHORT
OF ITS NORMAL POSITION.