

INCIDENT INVESTIGATION REPORT - ON THE INCIDENT TO
PIAC A-300 AIRCRAFT REGISTRATION MARKING AP-BBM
WHICH OCCURRED WHILE OPERATING SCHEDULED PASSENGER
FLIGHT NO. PK-725 OF 29TH MAY, 1985 AT 1759 HRS LT

AUTHORITY Director General Civil Aviation Authority

Memorandum No.HQ.CAA?1901/59/AIB dated 4-6-85

1. Aircraft Information:

- | | |
|---|---|
| 1.1. Registration Marking | AP-BBM |
| 1.2. Aircraft type and Markers | A-300-B4-203 |
| Serial Number | Air Bus-054 |
| 1.3. Engine type & Position | CF6-50C2
under wing mounted |
| 1.4. MFR S.No. | 064 |
| 1.5. Certificate of Registration
number and validity | 561
valid |
| 1.6. Certificate of Airworthiness No.
and validity | 514
valid |
| 1.7. Date of construction of aircraft | 1979 |
| 1.8. Name and address of the Owner | M/s.Pakistan Interna-
tional Airlines
Corporation Karachi |
| 1.9. Gross Weights: | |
| 1.9.1. Maximum permitted for
take-off | 165 tonnes |
| 1.9.2. Maximum permitted for landing | 134 tonnes |
| 1.9.3. Maximum take-off gross
(This flight) | 143.8 tonnes |
| 1.10. Landing: | |
| 1.10.1. Centre of Gravity limit | FWD Limit 18%
Rear limit 33% |
| 1.10.2. C.G. position at the time
of incident and commencement
of flight. | take-off 20%
Dry tank 19.8%
(within limits) |

2. Crew Information:

2.1. Pilot in Command

- | | |
|---|-------------------------|
| 2.1.1. Name | Mr.Abdul Qayum Bhurgri |
| 2.1.2. Position in cockpit | Left (Pilot in Command) |
| 2.1.3. Date of Birth | 25.12.1939 |
| 2.1.4. Type of licence held
and Number | ALTP
No.329 |

2.1.5. Medical date with status 22-4-1985
FIT (subject to use
of corrective
glasses)

2.1.6. Ratings:

2.1.6.1. Type(s) held F-27, B-707/720-B
and A-300 (P-1)

2.1.6.2. Type current Airbus - 300 (P-1)

2.1.7. Flying experience

2.1.7.1. Grand total 7547.00 hours

2.1.7.2. Total hours in command 3539.00 hours

2.1.7.3. Total in command 1299.15 hours
on tye type
accident/incident
occurred.

2.1.8. Where trained PIA Training Centre
Karachi

2.2. Co-pilot

2.2.1. Name Mr.Humayun Javaid

2.2.2. Position in cockpit F/O (Co-pilot)

2.2.3. Date of Birth 29-7-1957

2.2.4. Type of licence held & Number CPL
No.701

2.2.5. Medical date with status 7-3-85 FIT

2.2.6. Aircraft Rating

2.2.6.1. Type(s) held C-150 (P-1), F-27,
B-707/720-B & A-300

2.2.6.2. Type current A-300 (Co-pilot)

2.2.7. Flying Experience

2.2.7.1. Grand total 3316.39 hours

2.2.7.2. Total in command 392.15 hours (C-150)

2.2.7.3. Total as co-pilot 865.23 hours
on the type
accident/incident
occurred.

2.2.8. Where trained M/s.PIA Training Centre
Karachi

2.3. Flight Engineer

2.3.1. Name	Mr.Mohammad Ashraf
2.3.2. Position in cockpit	Flight Engineer
2.3.3. Date of Birth	10-12-1949
2.3.4. Type of licence and Number	Flight Engineer's licence No.185
2.3.5. Medical date and status	19-3-1985 Fit
2.3.6. <u>Rating</u>	
2.3.6.1. Type(s) held	B-707/720-B & A-300
2.3.6.2. Type current	Air-bus - 300
2.3.7. <u>Flying Experience</u>	
2.3.7.1. Grand total	3878.03 hours
2.3.7.2. Total in command	N/A
2.3.7.3. Total as Flight Engineer on type accident/incident occurred	212.09 hours
2.3.8. Where trained	PIA Training Centre Karachi

3. Summary of Accident/Incident

- 3.1. M/s.PIAC Airbus A-300 bearing Registration, Marking AP-BBM whilst operating scheduled passenger flight No.PK-725 on 29-5-85, took-off from runway 25R from Karachi Airport at 1759 hours (LT) for Riyadh with Dahrn as a designated alternate. The aircraft was piloted by Capt.A.Q.Bhurgari.
- 3.2. The Captain commanded his Co-pilot to execute take-off at Karachi. After rotation when the aircraft unstuck the ground and positive climb established, the non flying pilot called out "Positive Climb". Pilot flying requested landing gear to be selected up. The pilot not flying tried to raise the landing gear lever to up position. The lever failed to move up. Therefore alternate system i.e. No.2 system was selected by moving the source switch to No.2 position. It was aimed at providing alternate source of electrical power for the landing gear lever lock solonoid. It should have released the lock to raised the lever. However this action brought no results.

- 3.3. The aircraft continued to complete the take-off profile. At 1802 hours after completion of the 4th segment of take-off i.e. at 3000 ft AGL, the Captain informed Karachi A.T.C. that he had problem with landing gear lever of the aircraft. He also informed the A.T.C. that even though the landing gear control and relay circuit breaker had been re-cycled and re-checked-in, it brought no results.
 - 3.4. Pilot carried out abnormal check list to see if the gear could be selected up. It brought no results.
 - 3.5. After taking stock of the situation, the pilot decided to make an overweight landing at Karachi. Before landing he made a low pass over the control tower to ensure that the landing gear was down.
 - 3.6. During its landing roll, the aircraft had two tyres burst. The pilot turned on to the taxiway Alfa. On reaching taxiway the aircraft stopped on its own.
 - 3.7. Passengers and the crew disembarked on the taxiway using passenger steps. The aircraft remained on the taxiway for six hours. It was towed to the hanger for inspection and repairs after arrangements for towing were made by the airline.
 - 3.8. No one was injured in this incident. There was no fire during or after the occurrence.
4. Injury to Person(s)
 - 4.1. No one was injured.
 5. Damage to aircraft
 - 5.1. Damage to the aircraft as mentioned in para 3.17.
 6. Other damages
 - 6.1. None
 7. Meteorological Condition
 - 7.1. Weather was not a factor in this incident.
 8. Aids to Navigation
 - 8.1. All the aids were available at Karachi Airport.
 - 8.2. Aids to Navigation were not a factor in this incident.

9. Communication

- 9.1. The aircraft was in radio contact with the control tower before and after landing.
- 9.2. He was also in contact with his company on company channel VHF 131:6.
- 9.3. Radio Communication was not a factor in this incident.

10. Aerodrome and Ground Facilities

- 10.1. There was no obstacle in the take-off flight path and no obstruction on approach.

11. Flight Recorder

- 11.1. The flight data Accusation recorder had been removed from the aircraft. Read out has been provided by M/s.PIAC (App.- R).
- 11.2. The read out provided by the FDAR contained the approach and landing phase of flight of PK-725 of 29-5-85.

12. Wreckage and Impact Information

- 12.1. This aircraft had not sustained any other visible damage besides the tyre burst, breakage of electrical wires and mechanical linkages of the visual indicator of the left landing gear and slight damage to the beam of landing gear bay structure.

13. Fire

- 13.1. No fire occurred during or after the incident.

14. Survival Aspect

- 14.1. This aircraft (A-300) is provided with a total of 10 exits. These are 4 doors on each side of the fuselage (Total eight doors) for emergency evacuation of passengers etc. Two side windows, sliding type, on each side of the cockpit, each provided with 6 (six) emergency escape cables (inertia operated). Emergency slides were not used.
- 14.2. After the aircraft came to a stop on the taxiway "A", the passengers were off loaded through the normal exit doors using passenger steps.

15. Test & Research

Nil

16. Observations

- 16.1. The aircraft after completion of the landing roll taxied on to taxiway 'Alpha' and stopped thus blocked the taxiway for over 6 hours.
- 16.2. The aircraft was removed from this taxiway after midnight.
- 16.3. PIAC was unable to move the aircraft inspite of repeated request made by the ATC.
- 16.4. The Fire tenders were positioned very close to the edge of the runway for fire fighting. Positioning of tenders in such a close proximity of the runway is considered hazardous.

17. Investigation

- 17.1. The investigator visited the aircraft in the hangar at 0830 hrs on 30-5-85.
- 17.2. On arrival at the hangar, initial discussion were held with the Ops-Engineering Manager, Mr. Shahid, the Principal engineer of the shift and the Flight Safety Officer Mr. Tariq Qureshi.
- 17.3. Following damages were observed:-
 - 17.3.1. Tires of wheels No.1 & 6 had burst. No.2 wheel tire had deflated. No.5 wheel tire was found chunking. Such chunking results from heavy braking.
 - 17.3.2. All the brake assemblies of wheel 1, 2, 5, & 6 on the left landing gear were found severely overheated.
 - 17.3.3. No.6 wheel brake assembly was leaking badly.
 - 17.3.4. Two of the three Elect.cable harness had broken at their connectors. The third one was noted to be partially

damaged due to the impact of tread rubber pieces. This was evident from the rubber marks present on landing gear bay structure. This occurred on take-off when tread peeled off from No.6 tire.

17.3.5. The mechanical linkages connecting mechanical indicator was found broken at the link adjuster position. This was also caused by the impact of separated tread rubber pieces. This occurred during take-off & supported by the indications after take-off.

17.3.6. The re-inforced flange of the landing gear bay structure had sustained damages. These damages had been caused by the impact of tread rubber pieces during take-off roll.

17.3.7. The ATC though handled the situation well, should have allowed the in-coming traffic to land prior to this aircraft instead holding them. If any aircraft in holding had run short of fuel it may not have been possible for the aircraft to reach its designated alternate.

18. Witnesses:

18.1. Statements of the following witnesses were recorded. Question/Answers session was also held with the witnesses:-

18.1.1.	Capt.Abdul Qayyum Bhurgri	Pilot of PK-725
18.1.2.	Co-pilot Humayun Jamil	Co-pilot of PK-725
18.1.3.	Flight Engineer Mohammad Ashraf	Flight Engineer of PK-725
18.1.4.	Captain Junaidi	Observer in the cockpit
18.1.5.	Flight Engineer Sabir	
18.1.6.	Mr.Shahid H.Khan	Operation Engineer Manager
18.1.7.	Mr.Saeed-ur-Rehman	Operation Control Manager
18.1.8.	Captain Bashar	Pilot PK-306/290585 (who observed the A/C PK-725 during its fly over)
18.1.9.	Mr.M.F.Awan	Duty Principle Engineer Maintenance Central Control
18.1.10.	Mr.Mukhtar A.Qazi	Quality Inspector Tire bay.

18.2. The following information was collected from the statements of the witnesses mentioned above:-

- 18.2.1. Co-pilot was detailed by the Pilot-in-Command to execute take-off at Karachi. Immediately after airborne when positive climb established, the landing gear lever was selected to the raised position. The lever failed to go up. Standby system was switched on but there was no response. On receipt of no response from standby system, Captain Bhurgri asked his flight engineer for the check list and abnormal procedure as per chapter 8.05.10 Vol-8 of flight crew operating manual - A-300.
- 18.2.2. While the check list and the abnormal procedure were being reviewed certain other failures occurred one after the other. The pilot then commanded his Flight Engineer to re-cycle the circuit breaker (C.B.) of the landing gear control relay, which also did not offer any help.
- 18.2.3. Besides the other failures, the left landing gear unsafe red warning light appeared on the pilot instrument panel. However the secondary indicator on the flight engineer upper panel showed 3 green lights. The Anti-skid failure was indicated on Master Warning panel and also on its control panel, no release (R) were indicated.
- 18.2.4. In order to be sure about the position of the landing gear, the Captain made a low pass over the control tower. The A.T.C. Officer confirmed the pilot that the landing gears were down and seemed locked. The position of landing gear was also confirmed by the Captain of PK-306/290585, who was holding on the taxiway, well clear of runway 25R.
- 18.2.5. The aircraft was flown for nearly an hour with landing gear down. The aircraft was over weight by 6 tonnes.
- 18.2.6. The pilot contacted his company to seek advice in respect of the excess weight. M/s.PIAC advised him that he could make an overweight landing.

- 18.2.7. When the pilot received advise to make over weight landing, he had covered half the distance to the fuel dumping area.
- 18.2.8. The Captain informed the duty operations controller that in the event of over weight landing the C.A.A. might object. In response to this the duty operations controller advised him that Operation Engineer Manager Mr.Shahid H.Khan had authorised the over weight landing. On the receipt of this information, the pilot returned back for landing without dumping fuel.
- 18.2.9. The weight at the time of touch down was 135.5 tonnes i.e. 1.5 tonnes in excess of the maximum landing gross weight which was 134 tonnes.
- 18.2.10. The Captain has informed that he made a smooth touch down. Immediately after touch down, the crew in the cockpit heard two big "bangs" coming from the left side. The aircraft swung to the left and while the aircraft was on landing roll, the A.T.C.instructed the pilot to hold position on the runway. These instructions were not followed since it was beyond the control of pilot because of high speed of the aircraft.
- 18.2.11. The aircraft was declarated with the help of both thrust reversers and by manually operated spoilers and brakes. The brake temperature of No.2 wheel shot up to 550°C. Temperature of the remaining brakes was within the normal range i.e. 85°C. The aircraft joined , taxiway 'A', which is a high speed turn off. The aircraft came to a halt on its own on this taxiway.
- 18.2.12. The passengers and crew dis-embarked through the normal exits using the passengers steps.
- 18.2.13. On Inspection of the left landing gear, the crew found that the aircraft had two tires i.e.No.1 & 6 burst and the tire No.2 deflated and the left landing gear had one tire serviceable on which the aircraft was supported on the left side. They found that the tire No.6 had no tread, all the tires except No.5 had flat spots.

- 18.2.14. The pilot has made observation that he saw fire tenders parked very close to the edge of the runway. He considered it as hazzard to the aircraft operation.

19. Discussion of Evidence

19.1. Analysis

- 19.1.1. On 29th May, 1985 Captain Bhurgri holder of ALTP Licence No.329 was commander of schedule passenger flight number PK-725. The flight was operated by an Airbus-300 aircraft bearing Registration Marks AP-BBM operating on Karachi - Riyadh Sector.
- 19.1.2. The Captain has stated that all the problems started when the landing gear control lever failed to go up even after providing the alternate electric source of power i.e. switching over to No.2 system. Some other malfunctions occurred simulteneously and, some, one after the other. The configuration red warning light and the horn actuated when the slats were retracted.
- 19.1.3. All the failures were of an abnormal nature. Actions were taken to restore the failed system with the help of check list for abnormal condition/procedure as per VOL-8 of flight crew operating Manual. It did not restore any system except silencing the horn which was achieved with the help of Emergency Audio cancel switch, located on the pilot's overhead panel.
- 19.1.4. The aircraft was maintaining Flight level 50' with the permission of ATC. Indicated Air speed of 250 Knots was maintained with the landing gear in the extended position.
- 19.1.5. Captain Bhurgri informed Mr.Saeed-ur-Rehman, Duty Operation Control Manager of M/s.PIAC on VHF/RT 131.6 about the malfunctions including the landing gear retraction problems which the aircraft had faced soon after take-off. He sought

the technical advice from the Flight Operation Directorate.

- 19.1.6. On receipt of the information mentioned in the preceding para, the Duty Operation Control Manager contacted the operation Engineer Manager Mr.Shahid Khan at his residence on telephone. He was briefed regarding the failure of various systems including the unsafe indication of the left landing gear, antiskid failure and the excess weight (App - H).
- 19.1.7. Mr.Shahid Khan Operation Engineering Manager advised the Duty Ops. Control Manager that the Airbus - Industry authorises the over weight landing on this aircraft. Mr.Shahid further suggested that if maintenance would agree to carry out the heavy landing checks then the Captain be asked to make over weight landing at Karachi Airport. This is in contravention of Rule 275(6) of the Civil Aviation Rule , 1978.
- 19.1.8. Duty Operations Control Manager asked his counter-part in the Maintenance Central Control (MCC). Mr.M.F.Awan if the maintenance would carry out the heavy landing checks after the aircraft had made a over weight landing (App- M).
- 19.1.9. After the assurance given by Mr.M.F.Awan, Principal Engineer (MCC), Mr.Saeed again contacted Mr.Shahid Khan at his residence. He informed the later about the M/s.PIAC maintenance would be able to carry out the over weight landing checks.
- 19.1.10. Mr.Shahid requested Mr.Saeed to advise the Captain to land at Karachi Airport without dumping the fuel. This decision was based on the capabilities of this aircraft to make over weight landing as stated at chapter 8-05-10 page 3 VOL-8 of F.C.O.M. Airbus-300 (App - S).
- 19.1.11. On receipt of information in the preceding para Mr.Saeed contacted Captain of PK-725. He was informed that he could land with the

excess weight as authorised by the operation Engineering Manager. The Captain enquired the name of the operation engineering manager, which was provided to him.

- 19.1.12. The pilot decided to return for landing. He has stated that by this time he had covered half way to the dumping area. He did not dump the fuel.
- 19.1.13. Captain Bhurgri, in order to determine position of the left landing gear, he passed low over the ATC. The ATC confirmed that landing gear appeared to be down and seemed locked. This was also confirmed by Captain Bashar, pilot of PK-306. Capt. Bashar was holding on taxiway well clear of runway; awaiting permission from ATC to enter the runway for departure.
- 19.1.14. After confirmations mentioned above, the pilot decided to land over-weight. This landing resulted in bursting of two tires and deflating tire No.2. All these failure occurred on the tires of left landing gear.
- 19.1.15. During the question answer session, the Captain when asked that with landing gear unsafe indication and no antiskid protection available, was it not safer to land with minimum fuel. The Captain informed that the company wanted me to land with that excess weight. To another question as to why he did not overrule the company's instruction by using his command discretions, the Captain answered that after all he has to obey his company's directive.
- 19.1.16. By executing an over weight landing the aircraft had two tires burst deflating another on the same landing gear. He taxied on one tire to proceed on to the taxiway. By his this action, the pilot jeopardised the safety of aircraft and persons on board.

19.1.17. Mr. Shahid Khan, operation engineering manager of M/s. PIAC during question answer session maintained that he issues such instructions/advices on behalf of Director Flight Operations. He further said that the DFO had authorised two O.E. Managers of operation Engineering. However no authority to this effect in writing could be produced. Mr. Shahid Khan was of the opinion, that the F.C.O.M. of any aircraft, when approved by CAA Pakistan, the airline automatically becomes eligible to issue technical advices like these should emergency or an abnormal conditions exist.

19.1.18. Duty Ops. Control Manager has informed that it is an old practice that when ever there is a request or a need arises, operation engineers are consulted for technical advices/instructions. He has also informed that he had not seen any instruction in writing. Mr. Saeed has been in service with M/s. PIAC for over 23 years.

19.1.19. Condition prevailing did not warrant over weight landing since there was no emergency. Since down locking of landing gear was in doubt, pilot's decision to make over weight landing reflects adversely on air-manship qualities displayed by Capt. Bhurgri. The Pilot has violated provisions of Rule 275 (6) of the Civil Aviation Rules, 1978.

19.2. As provided in Rule 331 of Civil Aviation Rules 1978, a show cause notice was issued to Capt. Abdul Qayyum Bhurgri, (App-P). His reply has been received (App - 'Q'). There is nothing in the reply to change the outcome of the report.

20.. Findings

20.1. The aircraft was operating scheduled passenger flight PK-725 on Karachi - Riyadh route.

20.2. The crew were properly licenced. They were holding valid rating on the type. Captain Bhurgri was the pilot in command.

✓ 20.3. The aircraft held valid Certificate of Registration, Certificate of Airworthiness and Certificate of Maintenance.

✓ 20.4. There was no unserviceability reported or recorded by the pilot or his crew before departure of this flight.

✓ 20.5. The aircraft took-off from runway 25R of Karachi Airport. The weight of the aircraft at the brake release was 143.8 tonnes which was a second segment limited as per ambient temperature.

✓ 20.6. Landing gear control lever failed to go up when selected up after positive climb had established. Alternate electric power source i.e. switching over to No.2 system to remove the lock to enable the lever to be raised, did not help.

✓ 20.7. When slat lever was moved to retract position various malfunctions including the aircraft configuration red warning light appeared.

✓ 20.8. The failures experienced by the aircraft were abnormal conditions. These abnormal failures were caused due to the breakage of multi electrical cable harnesses.

✓ 20.9. Rubber tread separated from the tyre No.6 during take-off roll. The rubber tread after getting separated from tire flunged upward due to the centrifugal force and struck the beam and the harnesses. It caused damage to the flange and broke the two harnesses completely and partially damaging the third one.

✓ 20.10. The rotation of No.6 wheel of the left landing gear is such that when its tread may separate, it would strike the landing gear bay structure. Two similar cases have been reported earlier on Airbus-300.

✓ 20.11. Since the landing gear lever could not be raised to its up detent, the down locks of all the landing gear did not get unlocked. They were found to be in the down locked condition. The landing gear unsafe warning light therefore appeared on pilot centre instrument panel, which was a false warning.

- 20.12. The aircraft configuration warnings, the low speed aileron disconnect warning light, the disengagement of No.2 yaw damper, the tripping of both pitch trim-1 and pitch trim-2 and no airflow to the Avionic compartment warning light was caused by the serious electric interruption due to the breakage of these cable harnesses.
- 20.13. After the failures occurred, the aircraft was flown manually by the Pilot and Co-pilot.
- 20.14. The aircraft was carrying a total of 32.7 tonnes "required fuel" for this flight including the alternate and the stored fuel.
- 20.15. The total weight indicated by the zero fuel indicator (ZFI) was 1.5 tonnes in excess, when the aircraft executed landing.
- 20.16. The Captain did not dump the excess fuel though he went half way to the dumping area. He returned for landing on company's instructions.
- 20.17. In order to be positive about the landing gear position the pilot made a low pass over ATC. The ATC informed the Captain that the landing gears appeared to be down and they seemed locked.
- 20.18. The weight at touch down was in excess by 1.5 tonnes than the structural limited landing gross weight of 134 tonnes. The aircraft landed without burning off or jettisoning the excess fuel down to the minimum possible impact weight.
- 20.19. All the brake assemblies of wheel No.1, 2, 5 & 6 on the left landing gear were found to be over heated and in locked conditions in the applied brake condition.
- 20.20. Due to locked wheel condition the wheels failed to rotate or gain a datum velocity on touch down which resulted in heavy flat spots on tires. It caused two tires of wheels 1 & 6 burst on touch down and tires of wheel No.2 deflated due to blown out fuses caused due to brake temperature of No.2 wheel which shot up to 566°C (FDAR refers). The rubber of tire bead was found burnt and melted. Temperature of the remaining brakes stayed in safe range.

- 20.21. Tire of wheel No.6 was found to be without its tread. The pieces of its tread rubber were collected from the middle of runway 25R.
- 20.22. All the tires except No.5 had big flat spots. No.5 wheel tire found chunked which was caused by its friction with the runway surface.
- 20.23. No emergency condition existed which could warrant for over weight landing.
- 20.24. It was not expected out of an experienced Captain to make an over-weight landing when no emergency existed and locked down condition of landing gear was in doubt. Thus he violated Rule No.275 sub rule 6 of Civil Aviation Rules 1978.
- 20.25. The permission for over weight landing was given by Operation Engineer of Directorate of Flight Operations PIAC who is not considered competent to issue such authority.
- 20.26. The authority quoted by Operation Engineering Manager vide Flight Crew operating manual chapter 8-05-10 para-3 Vol-8, which suggests the over-weight landing following an operational turn-back, does not deal with aircraft landing with the landing gear abnormal condition including the anti-skid failure.
- 20.27. The performance and weight and balance computation chart shows that the aircraft take-off gross weight was "BOX - B" limited.(landing limited Gross weight).
- 20.28. The fact that the Captain proceeded to execute a heavy weight landing when he had a landing gear problem, shows lack of airman-ship.
- 20.29. Captain failed to exercise his command responsibility when he did not dump the fuel in order to reduce weight to a bare minimum but obeyed and acted on the instructions of Operation Engineering Manager to make over weight landing. This is considered detrimental to the safety of aircraft, Thus he violated rule No.155 sub rule 2 of Civil Aviation Rules 1978.

20.30. The operation Engineers of PIAC are not approved by the Civil Aviation Authority. They neither hold A.M.E. Licences nor aircraft approval. They work under in-house arrangement.

20.31. The tire was fitted as No.6 wheel on AP-BBM after it had been retreaded 4 times (4R) by M/s.Good-years. This tire had done 9 (nine) landings before its tread separated from the cord body during a take-off roll. The tire on wheel No.2 was new and manufactured by M/s.Dunlop which burst on landing.

20.32. The fire tenders/vehicles were parked close to the edge of the runway. In case of loss of directional control during the landing roll it may have posed a threat to the safety of aircraft.

21. Cause

21.1. Landing gear retraction mechanism and anti-skid systems failed after separated tread from tire No.6 damaged the electrical harnesses which was the source of power supply to these systems.

22. Recommendations

22.1. The flight crew be given an indepth technical refresher focused on normal, abnormal, conditional/emergency procedures. The refresher be conducted by flight instructor(s) to ensure that the flight crew has full grasp.

22.2. The flight crew be checked out on the emergency/abnormal procedure after they are retrained in type flight simulator. The flight crew be exclusively rostered for the refresher. No other duties be assigned to them during this period.

22.3. Captain Abdul Qayyum Bhurgri, Co-pilot Humayun Jamil and Flight Engineer Mohammad Ashraf be checked out by a CAA approved check Pilot and Instructor Flight Engineer after necessary under supervision flying has been provided to them following completion of refresher mentioned in the preceding para.

- 22.4. ✓ The Directorate of Flight Operations of M/s.PIAC to evolve a procedure to provide guidance by an experienced pilot holding current rating on the type to the pilot in-need of any advices. Decision may however be left to the good judgement of the pilot.
- 22.5. M/s.PIAC to carry out a study on retreading of tires with a view to make recommendations to arrest the trend of tire failures.
- 22.6. ✓ Considering that it was second occurrence of same type, M/s.PIAC be advised to consider modification to protect the area of landing gear bay structure where these damages occurred by the impact of the tread rubber after peeling off from the tires of No.6 & 7 wheels respectively.
- 22.7. — The Operation Engineering Manager be warned for issuing incorrect advise to the pilot.
- 22.8. Action be taken against the pilot for taking an incorrect decision to make an over weight landing when there was no emergency.

Dated: 12th August, 1985

APP 'C1'

TYRE - WHEEL NO.6 A/C AP-BBM A-300
(PK-725/290585)



Shows naked chord body with missing tyre tread (crown), flat Spots and bursting of tyre.

APP. 'c2'

TYRE - WHEEL NO.6 A/C AP-BBM A-300
(PK-725/290585)

2



Another view of tire, of wheel No.6.

APP. 'C3'

TYRE TREAD-WHEEL NO.6 A/C AP-BBM A-300
(PK-725/290585)



Showing pieces of tyre tread of No. 6 wheel

APP. C4

TYRE - WHEEL NO.1 A/C AP-BBM A-300
(PK-725/290585)



Picture Shows - flat spots and bursting of tyre.

APP. 'C5'

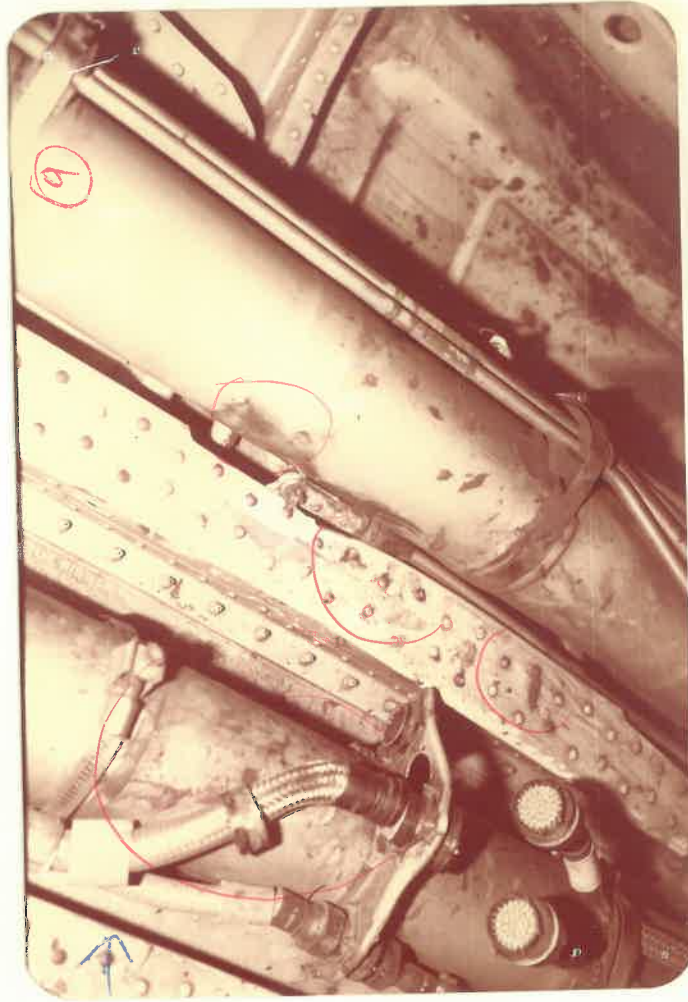
TYRE WHEEL NO.2 & BRAKE ASSEMBLY A/C
AP-BBM - A-300 (PK-725/290585)



Picture shows deflated tire, rubber melted
at the rim and ~~overheated~~ ^{overheated} wheel and brake assembly.

APP. CG

LEFT LANDING GEAR BAY STRUCTURE A/C AP-BBM
A-300 (PK-725/290585)



Picture showing, tire tread pieces rubber marks and breakage of cable harness at their connectors.

In the above picture, the flange shown damaged and cracked.

APP. 'C 7

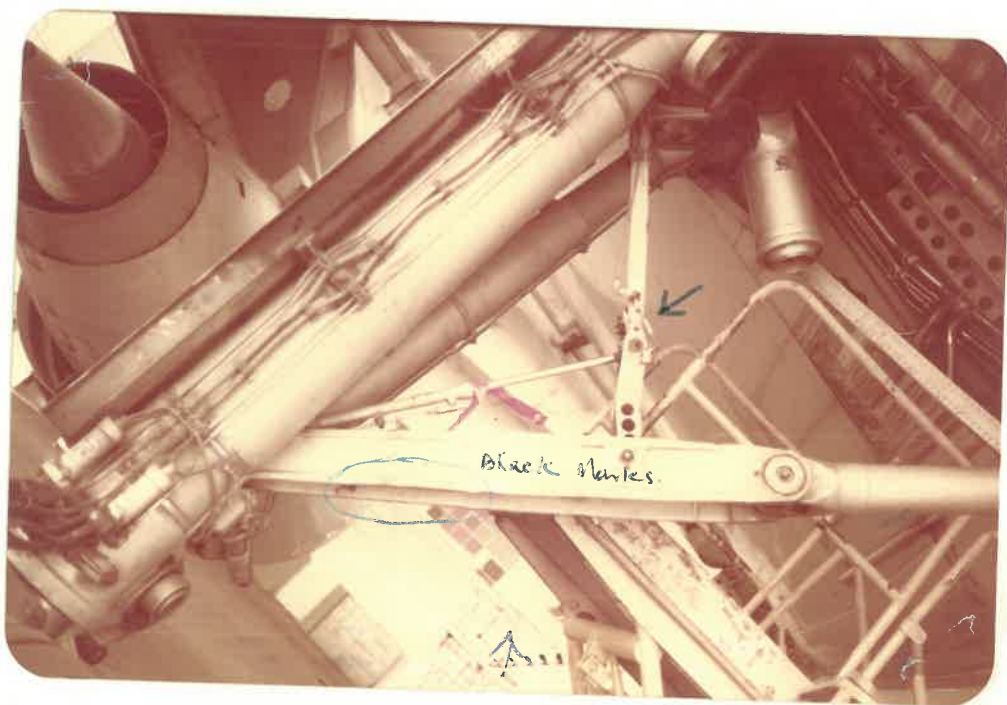
WHEEL NO.5 A/C AP-BBM - A-300 PK-725/290585



Picture shows:- Brake assembly ^{overheated.} ~~burnt~~ due to excessive braking and tire burn marks.

APP. 'C8'

LEFT LANDING GEAR LOCK STRUT AND MECHANICAL LINKAGE
CONNECTING THE VISUAL SAFE INDICATOR OF LANDING GEAR



The link was broken at the link adjuster.(Pointed arrow).