

TO INVESTIGATE INTO THE ACCIDENT IN WHICH
CESSNA F 337 H, REGISTRATION NO. AP-BBT
CRASHED AFTER TAKE OFF FROM KOHAT AIRPORT
ON 20TH NOVEMBER, 1985 AT 1650 L.T.

1. AIRCRAFT INFORMATION

- | | |
|---|--|
| 1.1 Aircraft type and Manufacturer's Serial No. | : Cessna FA-337 H
Serial No. 0085 |
| 1.2 Registration Marking | : AP-BBT |
| 1.3 Engine type, installation & Manufacturer's Serial No. | : Continental IO-360G
Rear No. 352769
Front No. 50R465
Fuselage mounted |
| 1.4 Certificate of Registration | : No. 562 |
| 1.5 Certificate of Airworthiness | : No. 521 |
| 1.6 Certificate of Maintenance | : Issued on 20.11.1985 -
valid for 50:00 hours |
| 1.7 Date of construction of Airframe | : 1978 |
| 1.8 Owner | : Falcon Aviation Services Limited. |
| 1.9 Weight permitted by C of A | : 4630 Lbs. |
| 1.10 Weight at the time of accident | : 4356 Lbs. |
| 1.11 C of G | : Within limits. |
| 1.12 <u>Airframe History</u> | |
| 1.12.1 Hours since new | : 1582:42 Hours |
| 1.12.2 Hours since C of A Inspection | : 303:42 hours |
| 1.12.3 Modifications | : Nil |
| 1.13 <u>Engine History</u> | |
| 1.13.1 Hours since new | : Front = 1583:44 Hours
Rear = 1459:07 Hours |
| 1.13.2 Hours since C of A Inspection | : Front = 304:44 hours
Rear = 459:59 hours |
| 1.13.3 Modifications | : Nil |
| 1.14 <u>Propeller History</u> | |
| 1.14.1 Hours since New | : Front = 1477:17 Hours
Rear = 1583:44 " |
| 1.14.2 Hours since C of A Inspection | : Front = 304:44 Hours
Rear = 304:44 " |
| 1.14.3 Modifications | : Nil |
| 1.15 Accessory History | : Nil |
| 1.16 Defects | : Nil |

/Crew Information

2. CREW INFORMATION.

2-1 PILOT-IN-COMMAND (A. .I)

2-1-1 Name : Mazhar Ali
2-1-2 Date of birth : 9.10.1939
2-1-3 Where trained : Peshawar Flying Club
2-1-4 Type of Licence and No. : CPL NO.953
2-1-5 Aircraft type rating : Cessna 150/152,180,337
2-1-6 Aircraft type rating : Same.
current.
2-1-7 Medical date with status. : Valid upto 07.12.1985
2-1-8 Total in command. : 1146-25 Hours .
2-1-9 Total Flying experience 1253-30 Hours.
2-1-10 Total in Command on the 48-25 Hours.
the type incident
occured.
2-1-11 Date of joining the : January,1983
Falcon Aviation
Services.

2.2 CO-PILOT

2-2-1 Name. : Raja Abdul Rauf.
2-2-2 Date of birth. : 5.8.1945
2-2-3 Where trained. : Rawalpindi Flying Club.
2-2-4 Type of Licence No : CPL No.301
2-2-5 Aircraft type rating : Cessna 150/152 Cessna 180
Piper colt PA-22-168
Piper Tripacer,Piper Supercub
Cessna 337
2-2-6 Aircraft type rating : Cessna 150/152 Cessna 180
current. Cessna 337
2-2-7 Medical date with Status. : Valid upto 15th March,1986.
2-2-8 Total Flying experience 5547 Hours- 15 minutes.
2-2-9 Total in Command. : 5371 Hours.
2-2-10 Total in Command in : 9-5 Hours.
the type incident
occured.
2-2-11 Date of joining the : N/A.
Falcon Aviation
Services.

3. SUMMARY

- 3.1. Rawalpindi Flying Club Cessna - 337, Registration No. AP-BBT was on a chartered flight carrying a TV film team to prepare a documentary film-three years of CAA, for anniversary celebration to peshawar and Kohat. Captain Mazhar Ali was the Commander of the aircraft.
- 3.2 The aircraft left for peshawar at 1307/201185. There were five occupants including Captain Mazhar Ali, Commander of Cessna 337, Registration No. AP-BBT. The aircraft landed at Peshawar at 1357 L.T., where Mr. Salim But and his crew made their film.
- 3.3 The aircraft took off from Peshawar with Captain Mazhar Ali (Appendix 'A') as Commander of the aircraft, while Raja Rauf, C.F.I. (Appendix 'B') occupied the right seat as a passenger at 1553/201185 L.T. and landed at Kohat Airport at 1605 L.T. on runway 32. The camera crew carried out their task at Kohat.
- 3.4 The aircraft departed Kohat at 1646 L.T. with Captain Mazhar Ali (Appendix 'A') on left hand seat and Raja Rauf, C.F.I. on right hand seat. The aircraft was lined up on the runway and Raja Rauf, C.F.I. who was a passenger was allowed to do the take off, by Captain Mazhar Ali, while Captain Mazhar Ali carried out necessary checks and opened power. The aircraft did not use the full length of the runway. It only used last 1500 feet of the runway. The aircraft was rotated at 65 knots by Raja Rauf, C.F.I. Rawalpindi Flying Club. All instruments were reading normal. After the lift off at a height of 50 feet Captain Mazhar Ali noticed that the fuel flow had dropped from 85 pounds to 60 pounds on both engines and the aircraft was mushing. Furthermore Raja Rauf (who was a passenger at this aircraft) observed a concrete pole in the path of the aircraft and pulled the control column to avoid it. The stall warning horn started blowing/and the aircraft got into a stall configuration. There was a bang and the aircraft crashed, ahead of the runway after crossing the electric cables and railway track. Captain Mazhar Ali switched off the ignition of both the engines

Proof

/and

/ and brought

and brought the fuel cocks to off position. The aircraft sustained major damage.

- 3.5. All occupants were evacuated safely from the aircraft.
- 3.6. On receipt of the above information Manager Flight Safety (North) and Sr. Airworthiness Surveyor reached the scene of the accident on 21.11.1985 at 1400 hours.
- 3.7. Position of various controls and instruments readings were taken. Fuel and oil samples were taken on the same date while both engine driven fuel pumps were removed from the aircraft for investigation on the next date due night on 21.11.1985.
- 3.8. M/s Falcon Aviation, was allowed to retrieve the aircraft from the place of accident.

4. INJURY TO PERSONS

- 4.1. There was no injury to the occupants.

5. DAMAGE TO AIRCRAFT

- 5.1. The following damage was noted:-

- 5.1.1. Left wing alongwith aileron bent upward at 3ft from tip with skin buckled.
- 5.1.2. Pitot tube broken from its mounting at left wing tip.
- 5.1.3. Left hand vertical stablizer lower section bent inwards.
- 5.1.4. Right hand vertical stablizer lower section broken.
- 5.1.5. Right hand rudder lower end bent/twisted.
- 5.1.6. Right wing alongwith aileron bent upward at 2½ ft from tip with skin buckled.
- 5.1.7. Front propeller blades bent rear ward.
- 5.1.8. Rear propeller blades bent rear ward.
- 5.1.9. Left hand main landing gear broken from its attachment.
- 5.1.10 Right hand main landing gear broken from its attachment.

/Node

5.1.11. Nose landing gear sheared off from attachment and its oleo completely broken.

5.1.12. Cargo pot under the fuselage sheared off.

5.1.13. Fuselage bottom area badly damaged.

5.1.14. Both engines lower cowlings badly deshaped.

6. OTHER DAMAGES

6.1. No other damage reported.

7. METEOROLOGICAL CONDITIONS

7.1. Weather was fair.

7.2. Weather was not a factor.

8. AIDS TO NAVIGATION

8.1. Aids to Navigation were operating normal.

8.2. Aids to Navigation were not a factor.

9. COMMUNICATION

9.1. The aircraft was in contact on VHF/R/T even after landing in the field.

9.2. Communication was not a factor.

10. AERODROME AND GROUND FACILITIES

10.1. Normal facilities were available at the airport.

10.2. Aerodrome and ground facilities were not a factor.

11. FLIGHT RECORDERS

11.1. Not fitted nor required to be fitted.

12. WRECKAGE

12.1. Damaged aircraft has been retrieved back to Rawalpindi from the place of accident.

13. FIRE

13.1. No fire occurred.

14. SURVIVAL ASPECT

14.1. All the occupants escaped through the normal exits and have not complained of experiencing any difficulty during the evacuation.

/Test

15. TEST AND RESEARCH

15.1. See Appendix 'O', 'S' and 'T'.

16. OBSERVATIONS

- 16.1. It was observed that there were 30' high WAPDA electric poles at 150 feet from the end of runway 14. This constituted a safety hazard and may result in accidents.
- 16.2. Cessna 337-H aircraft used the last 1500 feet of runway 14 with full passenger load. Had it used the full length of the runway, this accident could have been avoided.
- 16.3. General attitude of the cockpit crew and C.F.I. Rawalpindi Flying Club was callous and irresponsible. The cockpit discipline was lacking. Furthermore C.F.I. Rawalpindi Flying Club did not have even type knowledge about Cessna 337, although he possessed a rating on this aircraft. Such situation is fraught with danger and can lead to aircraft accidents.

I N V E S T I G A T I O N

17. SCENE OF ACCIDENT

- 17.1. The Investigator Incharge alongwith Investigator arrived at Kohat on 20.11.1985 at 1400 hours by road.
- 17.2. Initial discussions were held with Mr. Taj Muhammad, Sr. Airworthiness Surveyor, who is an Investigator on this inquiry.
- 17.3. After initial discussion Investigator Incharge and Investigator proceeded to the scene of accident.
- 17.4. The party arrived at the site of accident in half an hour. A detailed survey of the site was carried out. It was also noted that the aircraft

/was

was being guarded by M.O.D.C. guards provided by PAF Base Kohat.

17.5. Position of various controls and instruments readings were taken. Fuel and oil samples were taken on the same date while both engine driven fuel pumps were removed from the aircraft for investigation on the next date due fall of night on 21.11.1985.

17.6. Necessary photographs were taken of the aircraft and the surroundings area particularly the points on the ground where the aircraft had hit, before it came to a stop.

17.7. No other evidence being available the team returned to Kohat airfield the same evening.

18. EXAMINATION OF THE WRECKAGE

18.1. The aircraft was fully examined by Investigator Incharge and Investigator (Sr. Airworthiness Surveyor Islamabad Airport) and found that the aircraft had sustained major damage which was considered beyond economical repair.

18.2. M/s Falcon Aviation was allowed to retrieve the aircraft from the place of the accident.

19. WITNESSESS

19.1. The following information was obtained from the witnesses:-

19.1.1. Captain Mazhar Ali was on a chartered flight on 20.11.1985 from Islamabad-Peshawar-Kohat and back (Appendix 'A') carrying a team of photographers detailed by Civil Aviation Authority to take necessary photographs in connection with 3rd Anniversary of Civil Aviation Authority. The flight plan (Appendix 'K') was submitted to ATC Chaklala.

19.1.2. According to the statement of Captain Mazhar Ali (Appendix 'A') the weather enroute was

/fine

fine and he experienced no difficulty during the flight till the time aircraft had landed at Kohat Airport.

19.1.3. Captain Mazhar Ali (Appendix 'A') stated that he took off in Cessna, Registration No. AP-BBT from Islamabad at 1307/201185, reached Peshawar at 1357/201185. He further stated that he left for Kohat and landed at Kohat Airport at 1605 L.T. The flight was uneventful. The aircraft was carrying a total number of 5 persons including the crew. The right hand seat was occupied by Raja Rauf, C.F.I. Rawalpindi Flying Club as a passenger.

19.1.4. Captain Mazhar Ali (Appendix 'A') Commander of the aircraft further stated that Raja Rauf, C.F.I. Rawalpindi Flying Club, was occupying the co-pilot seat as a passenger, requested him to do the take-off which he allowed. He further said that he did not use the full length of the runway and only used last 1500 feet out of 7717 feet - total length of runway at Kohat Airport. The aircraft was lined up on the runway by him and he did all the checks and opened power, while Raja Rauf, C.F.I. Rawalpindi Flying Club performed the take off. The aircraft was rotated at 65 knots and all the instruments were reading normal. He further informed that immediately after he lift off at the height of 50 feet he noticed fuel flow dropping from 85 pounds to 60 pounds on both the engines and the aircraft was mushing and losing height. Raja Rauf, C.F.I. Rawalpindi Flying Club observed a concrete pole in the path of the aircraft and pulled the control column to avoid it. The stall warning horn came in and the aircraft went into a stall configuration. Furthermore in order to avoid nose over Raja Rauf, C.F.I. pulled the control column fully back to further stall the aircraft deliberately which was an unsafe act. There was a big bang and the aircraft came into a halt. Captain Mazhar Ali stated that he switched off the ignition of both the master switch engines and brought the fuel cocks to off position.

Incorrect, see App A.

/Captain

- 19.1.5. Captain Mazhar Ali (Appendix 'A') stated that this accident could have been avoided, had he used full length of the runway and furthermore that it was wrong on his part to have allowed Raja Rauf, C.F.I. to do the take off. He further stated that the aircraft could not lose height due fuel flow dropping from 85 pounds to 60 pounds and furthermore that he failed to activate the auxillary fuel pump.
- 19.1.6. Captain Mazhar Ali (Appendix 'A') stated that Raja Rauf, C.F.I. Rawalpindi Flying Club used obscene language against Civil Aviation Authority. / was He/ advised by me not to use foul language.
- 19.1.7. Raja Rauf, C.F.I. Rawalpindi Flying Club (Appendix 'B') stated that he was on board Cessna 337, Registration no. AP-BBT as a passenger on the request of Captain Mazhar Ali in order to keep his company.
- 19.1.8. Raja Rauf, C.F.I. (Appendix 'B') stated that Captain Mazhar Ali, started the aircraft and taxied out on runway 14. The aircraft was positioned 500 feet ahead of ATC building (Appendix 'W'). Mr. Mazhar Ali carried out necessary checks before take off and asked me to take off. Raja Rauf, C.F.I. (Appendix 'B') informed that he unstuck the aircraft 65 knots and climbed approximately 45' to 50', when all of sudden he felt loss of power and the aircraft started sinking. He slightly pulled back the control columns to avoid hitting the electric poles while the aircraft was already in a stall configuration and it further stalled and hit the ground.
- 19.1.10. According to the statement of Raja Rauf, C.F.I. (Appendix 'B') that stalling of the aircraft intentionally by him was considered a safe act. Furthermore he stated that he had no knowledge whether engine driven fuel pumps were in 'series' on Cessna 337. He stated that auxillary fuel pumps were not switched on as they were out of his reach and simultaneously

/He

he failed to ask the Captain Mazhar Ali to do the needful as there was no time. He further stated that dual control of the aircraft at the time of take off depended on the decision of the Captain of the aircraft.

19.1.11. Mr. Tariq Mehmood, CPL No. 1080 (Appendix 'C') who was a passenger on Cessna on the chartered flight stated that the aircraft took off from Islamabad at 1305 L.T. and landed Peshawar at 1356 L.T. approximately and again took off from Peshawar at 1556 L.T. and landed at Kohat at 1608 L.T. on 20.11.85. The flight was uneventful. The aircraft was lined up on runway 14 by Captain Mazhar Ali (Appendix 'A'), Raja Rauf, C.F.I. was occupying the seat as a passenger. He further stated that the levers were being operated by Captain Mazhar Ali (Appendix 'A') while the actual take off was done by Raja Rauf, C.F.I.

19.1.12. He further stated that PAF crash tender and ambulance reached the scene of accident in shortest possible time and give them all the facilities and help.

19.1.13. Mr. Tariq Mehmood, C.PL. No. 1080 (Appendix 'C') stated that he noticed that the nose of the aircraft was too high when the aircraft was being rotated by Raja Rauf, C.F.I. Raja Rauf, C.F.I. Shouted that there was an electric pole and wires ahead. After that he heard stall warning horn and the aircraft immediatly stalled and left wing went down. Mr. Tariq Mehmood stated that Mr. Mazhar Ali said to Raja Rauf 'Mr. Raja now the game is over'. Captain Mazhar Ali tried to pick up the dropped wing but failed to do so because there was no time. The aircraft hit the ground, rolled for a short distance before it came to a stop.

19.1.14. Mr. Tariq Mehmood (Appendix 'C') stated that he did not feel any loss of power during take off and it was wrong not to use full length of the runway. He further stated that the accident was due to premature take off and was further aggravated by Raja Rauf, C.F.I. by pulling the nose of aircraft too high and thus stalled the aircraft. He stated that he had 1700

hours of flying

/hours

hours of flying approximately.

19.1.15. Mr. Muhammad Akram Tariq, Crew Chief of Falcon Aviation Services Limited stated that he carried out daily inspection of Cessna 337 on 20.11.1985 and the aircraft was fully serviceable in all respects. On 21.11.1985 he was informed by Senior Airworthiness Surveyor to immediately leave for Kohat alongwith the tool kit. He stated that he left at 0900 hours alongwith Captain Mazhar Ali who told me اپنی جگہ پر رہ کر اسے اطلاع دینا اور جہاز کا سٹروپ کرنا. He reached the scene of the accident at 1400 hours. Necessar checks of the aircraft were carried out by Mr. Taj Muhammad, Sr. Airworthiness Surveyor. He further stated that he removed fuel pumps No. 1 and 2 on instructions of Sr. Airworthiness Surveyor and handed those to him. After the aircraft had been cleared by the Investigator Incharge, I dismantled the aircraft and retrieved the aircraft back to Rawalpindi and went to the Bungalow of Mr. Khalid Khan, Director of Falcon Aviation Services Limited. Mr. Khalid Khan did not allow the aircraft to be left in his house and asked him to take it to the Bungalow of Mr. Mazhar Ali, which was done accordingly. On 27.11.1985 I found that there was no aircraft in the Bungalow of Mr. Mazhar Ali. He was informed that the aircraft has been taken to the Bungalow of Raja M. Qasim, Managing Director of Falcon Aviation Services Limited.

19.1.16. Mr. Sikander Shah, Airport Manager Kohat Airport (Appendix 'E') stated that the Captain of Cessna 337, Registration no. AP-BBT neither informed ATC Kohat two hours prior to take off nor obtained any permission for such operation from Director Operations Facilities Air Headquarters Chaklala as desired vide telex no. HQCAA/1115/ATS dated 21st May, 1985. He further stated that the Captain of Cessna did not use the full length of runway and instead he took off in front of Civil apron just short of Marker board no. 1. Thus he only availed twelve feet of runway only.

This witness only reached the place of accident at 1800 hrs and was away during period of accident.

/Flying Officer

19.1.17. Flying Officer Mian Muhammad Afzal (Appendix 'F') of PAF stated that Cessna 337, Registration no. AP-BBT landed at Kohat on runway 32 without obtaining prior permission, being an unscheduled flight at about 1662 L.T. He further stated that the Captain of the aircraft took off in front of Parking bay of Civil Aviation Authority and did not use full length of the runway. Furthermore Mian Muhammad Afzal stated that the aircraft took off without making any contact with ATC. At about 1657 L.T. he heard a noise and was also informed by ATC that the said aircraft had been crashed. We rushed to the scene of the accident and provided all possible assistance under the instructions of Base Commander PAF Base Kohat who was also present at the scene of accident. M.O.D.C. and Civil Police were detailed to guard the aircraft. Flying Officer Mian Muhammad Afzal informed that Base Commander PAF Base Kohat offered the facility to cockpit crew to stay in PAF Mess for the night but the Captain Mazhar Ali and Raja Rauf, C.F.I. insisted on leaving for Rawalpindi. They left at 1900 hours against the advise of Base Commander Kohat.

19.1.18. Cpl Tech Muhammad Nawaz, Met Assistant (Appendix 'G') stated that the weather was fair and wind was calm (2 to 3 knots).

19.1.19. Sr. Tech Abdul Ghaffar Awan, (Appendix 'H') stated that he was performing ATC duties since 18.11.84. On 20.11.1985 at 1610 hours he saw a light aircraft flying over ahead and landed on runway 32. The ATC has no information about this aircraft. The aircraft was parked on Civil apron (C.A.A.). He further stated that the aircraft took off at 1653 L.T. in front of Civil apron without obtaining prior permission of ATC. The aircraft did not use full length of the runway. He further observed that the aircraft was at a very low height after take off and hit the ground and crashed. He further stated that he took full

Wrong Statement. See APP H

/crash

crash action as per proforma. (Appendix 'H')

19.1.20. Mr. Afzal Imaduddin, Airworthiness Surveyor (Appendix 'U') stated that fuel pumps serial no. 4107402B and 2-D2178223 which were removed from the Cessna 337, Registration no. AP-BBT were checked functionally by him. Both the pumps were installed on rear engine of Cessna 337, Registration no. AP-BBX for comparison check with the serviceable pump of front engine. During ground run at full RPM the pressure reading of fuel pumps removed from Cessna 337 was found excessively beyond the limit. He further noted that the adjustment of both the pumps tested for functional check had been tempered with, which was communicated to S.E. Airworthiness Surveyor.

19.1.21. Mr. S.G. Rabbani (Appendix 'V') AME-345 stated that both fuel pumps were installed on Cessna 337. The engine was given ground run at full RPM and pressure reading was for beyond the limit (100 PPH). He further stated that before the installation the pumps were checked in the presence of Airworthiness Surveyor, Mr. Afzal Imaduddin, who pointed out that the adjustment screw had been tempered with.

20. DOCUMENTS

20.1. The following information was obtained from the documents:-

20.1.1. The aircraft was properly registered bearing Nationality and Registration Mark AP-BBT.

20.1.2. Aircraft was properly maintained having valid C of A, C of M and D.I.

20.1.3. Flight was properly authorised.

20.1.4. C.PL. No. 953 was valid.

/Discussion

21. DISCUSSION

21.1. ANALYSIS

21.1.1. Captain Mazhar Ali, CPL No. 953 (Appendix 'A') was on chartered flight on 20.11.1985 from Islamabad-Peshawar-Kohat and back.

21.1.2. Captain Mazhar Ali (Appendix 'A') after starting up the aircraft and lining it on runway 14, allowed Raja Rauf, C.F.I. Rawalpindi Flying Club, (Appendix 'B') a passenger, to do the take off while he operated various controls of the aircraft. Captain Mazhar Ali did not use full length of the runway. Raja Rauf, C.F.I. rotated the aircraft prematurely and the nose of the aircraft was very high, which resulted in the stall warning horn coming on, which was followed by stalling of the aircraft. This was further aggravated when Raja Rauf, C.F.I. pulled back the control column further, thereby stalling the aircraft completely and it was out of his control. This happened when the aircraft was at a height of 50 feet.

21.1.3. Captain Mazhar Ali (Appendix 'A') stated that when the aircraft reached the height of 50 feet the fuel flow dropped from 85 pounds to 60 pounds on both the engines, which was incorrect as one of the fuel pump after being ground tested (Appendix 'U') was found serviceable. While the other had a small perforation in the diaphragm. The aircraft would have sustained flight, even on one engine, in normal circumstances. Furthermore Captain Mazhar Ali (Appendix 'A') did not know his emergencies nor did Raja Rauf, C.F.I. (Appendix 'B') and hence failed to use electric auxillary fuel pump, which could have avoided this accident.

21.1.4. Had Captain Mazhar Ali (Appendix 'A') used

/the full

7
Incorrect
① unsupported statement
② - " -

the full length of the runway, this accident could have been avoided, as admitted by Captain Mazhar Ali in his statement (Appendix 'A') that the aircraft would have landed safely on the remaining part of the runway as established by various agencies including ATC Kohat.

- 21.1.5. Captain Mazhar Ali (Appendix 'A') failed to inform Kohat Airport about the arrival of Cessna 337, Registration no. AP-BBT from Peshawar, as borne out by the recorded evidence of ATC Kohat. Captain Mazhar Ali displayed poor airmanship and gross negligence in handling the aircraft in that he allowed Raja Rauf, C.F.I. a passenger to do the take off, thereby endangering the safety of aircraft and its occupants.
- 21.1.6. The attitude of Raja Rauf, C.F.I. was callous and irresponsible through out the investigation and his handling of aircraft in such a situation was non professional.
- 21.1.7. Raja Rauf, C.F.I. (Appendix 'B') who is a Chief Flying Instructor in Rawalpindi Flying Club should have not done the take off as he was not authorised to do so, being a passenger, his knowledge about the aircraft was marginal. He did not know his emergencies. He displayed lack of responsibility and poor airmanship. Surprisingly he had rating on Cessna 337 and 17 hours of experience on this type.
- 21.1.8. Raja Rauf, C.F.I. Rawalpindi Flying Club (Appendix 'B') used obscene language against Civil Aviation Authority in presence of Investigator and Captain Mazhar Ali. He was advised by Captain Mazhar Ali not to use foul language (Appendix 'A'). He obstructed smooth conduct of the investigation.
- 21.1.9. Both the fuel pumps were ^{later} tested on the aircraft and they were found to be beyond the limits. However it was stated by Mr. Afzaal Imaduddin (Appendix 'U') that the adjustment screws of both pumps had been tempered with. This was brought to the notice of Mr. Afzaal Imaduddin (Appendix 'U') by Mr. S.G. Rabbani (Appendix 'V') before installation of fuel pumps on the Cessna aircraft. This indicated that

/the

the evidence had been tempered with.

- 21.1.10. The test report of fuel and oil was satisfactory and no other discrepancy was found in the aircraft.
- 21.1.11. Captain Mazhar Ali has violated Rules 155(1),(2); Rule 264(1),(2); Rule 326 and Rule 351 2-(C),(3) of Civil Aviation Rules 1978.
- 21.1.12. Raja Rauf, C.F.I. has violated Rules 155(1),(2); Rule 332(4)(a),(b) and Rule 341(10)-(a),(b),(c) of Civil Aviation Rules 1978.
- 21.1.13. Civil Aviation Authority Rules 331 was read out to Captain Mazhar Ali CPL No. 953 and Raja Rauf, C.F.I. Rawalpindi Flying Club, CPL No. 301 separately, who were informed of all the privileges as indicated in the rule 331 of Civil Aviation Rules 1978. However they did not want to utilize any of the privileges, they have signed to that effect (Appendix 'X' and 'Y') respectively.

22. CAUSE

- 22.1. Due to premature take off the aircraft stalled at a low attitude, where recovery was not possible.
- 22.2. The electric auxillary fuel pumps were not used, otherwise this accident could have been avoided.
- 22.3. Full length of the runway 7717 feet was not used instead last 1500 feet of runway 14 was used.
- 22.4. The take off was being performed by a passenger who was not authorised to do the take off.
- 22.5. Indifferent, callous, indiscipline and non professional attitude both inside and outside the cockpit was a major factor.

23. FINDINGS

- 23.1. The aircraft was properly registered.
- 23.2. The certificate of airworthiness was valid.
- 23.3. The certificate of airworthiness was valid.

/The

- 23.4. The daily inspection was carried out which was valid.
- 23.5. Flight was properly authorised.
- 23.6. Mr. Mazhar Ali was holding a valid CPL no. 953 with valid AFI rating.
- 23.7. There were no defects reported on this aircraft.
- 23.8. No modification was found pending.
- 23.9. Based on the discussion on para 21 of this report it is established that Captain Mazhar Ali holder of CPL no. 953 violated Rules 155(1),(2);Rule 264 (1),(2);Rule 326 and Rule 351 2-(C),(3) of Civil Aviation Rules 1978.
- 23.10. Based on the discussion at para 21 of this report it is established that Raja Rauf, C.F.I. Rawalpindi Flying Club holder of CPL no. 301 violated Rules 155(1),(2);Rule 332(4),(a),(b) and Rule 341(10)-(a),(b) & (c) of Civil Aviation Rules 1978.

24. RECOMMENDATIONS

- 24.1. Disciplinary action should be taken against Captain Mazhar Ali, holder of CPL no. 953 for violating Rules 155(1),(2);Rule 264(1),(2);Rule 326 and Rule 351 2-(c),(3) of Civil Aviation Rules 1978.
- 24.2. Disciplinary action should be taken against Raja Rauf, CF.I. Rawalpindi Flying Club, holder of CPL no. 301, for violating Rules 155(1),(2);Rule 332 (4),(a),(b)and Rule 341(10)-(a),(b)&(c) of Civil Aviation Rules 1978.
- 24.3. Arrangements be made to overcome the poor flying discipline and non professional approach towards flying which if remained unchecked could result in an aircraft accident.

DATED: 3rd JUNE, 1986

GA

DATED: 3rd JUNE, 1986

R.I.P.

FINAL PLACE WHERE
THE AIRCRAFT CAME
TO REST.



IV POINT

LAST STAGE OF GROUND
MARKS.



III POINT

LANDING GEAR GROUND
NEAR THE RIDGE, LEAVING
BEHIND PARTS OF AIRCRAFT

ANOTHER VIEW



VARIOUS VIEWS OF CESSNA 337
AFTER THE ACCIDENT.

①



②



③



VARIOUS VIEWS

④



⑤



⑥



-8-

VARIOUS VIEWS OF DAMAGE OF
PROPPULER AND LANDING GEAR.

⑦



⑧



⑨



⑩



⑪



⑫



13



14



15



16



17



18



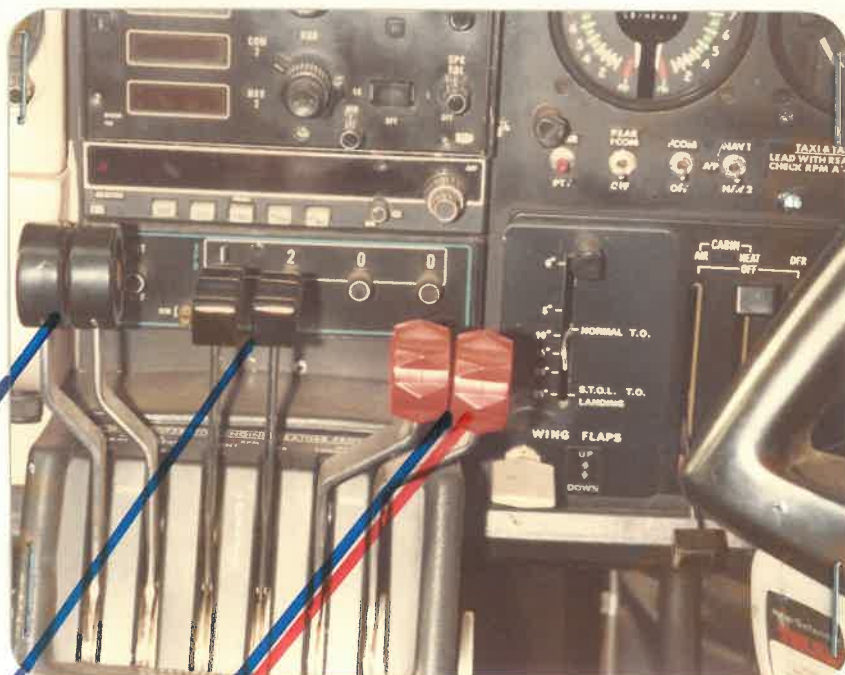
BROKEN PARTS OF CRASHED AIRCRAFT

BROKEN PARTS ←
OF CRASHED AIRCRAFT



BROKEN PARTS OF ←
CRASHED AIRCRAFT.

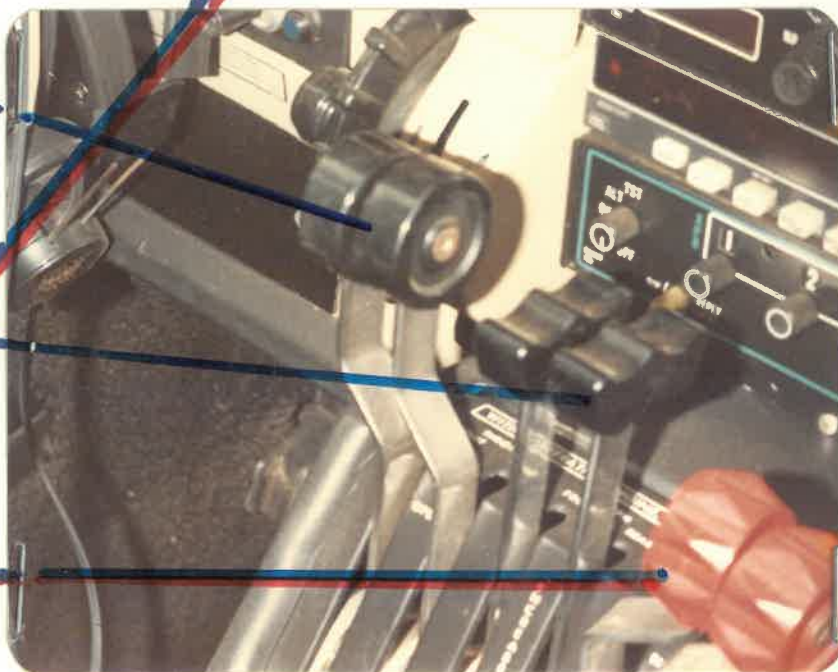




THROTTLE
LEVER IN
FULLY FORWARD
POSITION

R.P.M. LEVER IN
MAX. POSITION

MIXTURE LEVER
3/4 RICH



LEFT HAND INSTRUMENT
PANEL

