

INVESTIGATION REPORT ON THE ACCIDENT TO U.S.ARMY
AIRCRAFT OV-ID NO.17020 WHICH OCCURRED IN SIDE
COD KARACHI ON 10TH OCTOBER, 1983 AT 1136 P.S.T.

Aircraft Type & Registration No.	OV-ID No.17020
Engine Type	Turbo - Prop Twin engine
Owner & Operator	U.S.Army
Pilot	Carl H.Spriegal, CW4
Crew	Stephen Harold Green-leaf Sergeant First Class
Passenger	Nil
Place of Accident	Central Ordnance Depot. Karachi
Date & Time	10th October, 1983 at 0636Z.

1. HISTORY OF FLIGHT

On 10th October, 1983 four Mohawk OV-ID type of aircraft on ferry flight from the U.S.A. to South Korea departed Karachi for Bombay. These aircraft had arrived from Bahrain a day before the accident occurred. Aircraft bearing tail No.17020 got airborne at 1134 PST from runway 25R. This aircraft was at No.3 position in a formation of 4 aircraft.

2. After take-off when the aircraft was passing 300 feet, the pilot retracted landing gear. At this juncture the star-board engine failed. After the engine failure, the aircraft failed to even maintain height. Being at low attitude, the Pilot decided to eject. However before ejection the pilot steered the aircraft towards an open area which was on his left, since the area on the right was inhabited.

3. Both the occupants, pilot and a mechanic, ejected safely. During the ejection they received superficial injuries. First aid was provided to them by COD personnel before they were released. The aircraft crashed in an open place. It was destroyed due to impact forces. Fire broke out after the aircraft hit the ground, which was extinguished by the officers and men of the Central Ordnance Depot. C.A.A. rescue vehicles also participated in extinguishing the fire which had arrived after the accident from Karachi Airport.

/4. INJURY

4. INJURY TO PERSONS

4.1. Both the occupants got superficial injuries.

5. DAMAGE TO AIRCRAFT

5.1. The Aircraft was totally destroyed.

6. OTHER DAMAGE

6.1. Nil

7. METEOROLOGICAL CONDITIONS

7.1. Weather was not a factor in this accident.
The prevailing weather at the time of accident was clear skies.

8. AIDS TO NAVIGATION

8.1. Not relevant to this accident.

9. COMMUNICATIONS

9.1. Normal communications were maintained by the aircraft with control tower on VHF/RT.

10. AERODROME AND GROUND FACILITIES

10.1. All facilities at the Airport were properly maintained and were operating normal.

11. FLIGHT RECORDERS

11.1. There was no requirement of Flight Recorders on this aircraft.

12. WRECKAGE

12.1. The aircraft, after hitting the ground, exploded and broke into pieces. The wreckage was located inside the COD walled area. It was duly guarded by the COD staff under instruction from their Commandant.

13. FIRE

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- 13.1. Fire broke out immediately after the impact. Efforts were made by the COD staff to extinguish the fire. CAA fire staff, who had arrived shortly after the accident, also participated. Since water reservoirs were very close to the scene of crash, hoses were also connected for maintaining continuous water supply to check the spread of fire. Due to oil spillage in the nearby ground, having dry grass, the fire spread out. The fire was first attended by the COD crash tender and after approximately 6 minutes of crash, CAA Medium Fire Crash Tenders (2 Nos) also joined. No loss of any nature occurred to life or any property at the scene of accident due to this fire.

14. SURVIVAL ASPECTS

- 14.1. The accident was a survivable one because the aircraft seats (two in No.) were ejectable.

15. INVESTIGATION

- 15.1. The Investigation Team comprising of Captain Farmanuddin and Group Captain Maqsood Amir reached the scene of accident two hours after the occurrence. A general survey of the area was carried out. The wreckage was seen scattered over an area of 400 x 600 Square yards. This area was located within the premises of COD. The parts were examined and were left at the location from where they were picked up.
- 15.2. Statement of the crew who had safely ejected from the aircraft were recorded. Preliminary information was gathered from the eye witnesses. Due to lack of day light, due night approaching, the proceedings were deferred for the next day.
- 15.3. The following day detailed statements of the eye witnesses were recorded and further examination of the wreckage was carried out.

/15.4. On the

- 15.4. On the third day a team of two officers of the U.S. Army arrived from USA to carry out examination/investigations. This team was taken to the scene of the accident. Full assistance was provided to them to facilitate them to conduct their investigations. After a joint inspection of the wreckage was carried out, it was decided to transport both the engines of this aircraft to USA for engine tear down examination.

16. WITNESSES

- 16.1. The statements of the following witnesses were recorded:-

i.	Pilot	APP."C"
ii.	Mechanic	APP."D"
iii.	Mr.Shazad Mir	APP."E"
iv.	Mr.Raja Shahid	APP."F"
v.	Mr.Aman Khan	APP."G"

17. DISCUSSION AND ANALYSIS

- 17.1. The engines were transported to USA for tear down examination. A report on the cause of the failure of the engine has been received. The report is placed at Appendix "A".
- 17.2. The report was scrutinised by the investigators. It indicates that the left engine was serviceable and was operating at full power till the time of the accident. The right engine examination showed that it had probably lost power during take off when its overspeed governor failed. The propeller was probably feathered, with the propeller control lever, while in flight.
- 17.3. There was no maintenance information about the engines and propellers and neither was it provided when the tear down examination was carried out.

18. FINDINGS

- 18.1. This Mohawk aircraft bearing tail no OV-ID No.17020 was a US Army aircraft.
- 18.2. No unserviceability was reported by the crew at

/Its arrival

its arrival at Karachi Airport. It [xxxxxxx]
 can be therefore concluded that this aircraft
 was serviceable prior to this flight.

- 18.3. The Pilot was experienced and he had been flying aircraft of this type before departing on this mission.
- 18.4. No maintenance documents were found in the wreckage nor they were provided to the investigators.
- 18.5. The right engine failed after take off probably due to the failure of the over-speed governor.

19. CAUSE

- 19.1. Right engine failed in flight probably due to failure of its overspeed governor.

20. RECOMMENDATIONS

- 20.1. The procedure in the TM 55-2840-233-24 dated 27th July, 1971, paragraph 5-83 of the U.S. Army dealing with the installation of Fuel Control Unit (T-53-L-701), should always be used.



(CAPT. FARMANUDDIN)
 Pilot Chief investigator
 (Investigator In-Charge)



(MAQSOOD AMIR)
 Group Captain
 General Manager (Plans)
 (Technical Investigator)

Date: 13-2-1985