STATEMENT LAID ON THE TABLE OF LCK SABHA/
RAJYA SABHA ON 10TH MAY, 1978 BY RAKSHA MANTRI
(SHRI JAGJIVAN RAM) REGARDING THE AIR ACCIDENT
AT JORHAT ON 4TH NOVEMBER, 1977 TO TU-124
AIRCRAFT CARRYING THE PRIME MINISTER.

On November 4, 1977, a TU-124 aircraft (No.V-643) belonging to the VIP flight of Air Headquarters' Communication Squadron was flying the Prime Minister and his party from Delhi to Jorhat, enroute to Arunachal and Mizoram. The aircraft took off from Palam at 1715 hours on the above date, with the late Wing Commander CJ D'Lima in command.

- When passing Bagdogra, the Captain was informed about the prevailing weather conditions at Jorhat which were found to be within the permissible limits for landing. On arrival overhead Jorhat, the aircraft carried out what is called a 'controlled descent through cloud' (QGH), with the help of the Jorhat Air Traffic Control using available navigation aids. After breaking cloud, at an estimated height of 500 ft. above the ground, the aircraft asked for clearance to land and received such clearance. However, the aircraft did not actually land on the first approach; instead it carried out what is called an 'overshoot' action at 19.42 hours and appeared to climb away from a height of about 150 ft.
- 3. The Court of Inquiry think that the aircraft refrained from landing on the first approach as it was slightly high and not fully aligned with the runway.

- For the second approach, the Pilot decided to carry out a timed circuit for landing and informed the Air Traffic Control accordingly. The Control continuously monitored the bearings of the aircraft and passed them on to the Pilot, whenever asked. continued upto 1946 hours after which radio contact with the aircraft was lost. The last bearing given to the aircraft by the Control showed its position at that time to be almost in line with the runway for landing. The Control expected the aircraft to be on its final approach for landing. Since the Control could not see the aircraft, it asked the Pilot to switch on its landing lights to which the Pilot responded by simultaneously, extending and switching on the landing lights. It would thus appear that up to that point of time, the Pilot did not feel any problem about a safe landing. However, within seconds, and even before the lights could be fully extended, the aircraft appears to have hit some trees and crashed.
- impact caused by the crash, leading to its disintegration and destruction. The Prime Minister and other members of the party came out from the aircraft safely, though with varying degrees of injuries to different members of the party. Unfortunately, all the five members of the crew lost their lives. They were the

## following: -

- 1. Late Wg Cdr C.J. D'Lima, Captain
- 2. Late Sqn Ldr M. Cyriac, Co-Pilot
- 3. Late Wg Cdr Joginder Singh, Navigator
- 4. Late Son Ldr V.V.S. Sunkar, Flight Engineer
- 5. Fit Lt O.P. Arora, Flight Signaller
- 6. On 6th November, 1977, a Court of Inquiry was set up to investigate the accident. The Court was presided over by Air Marshal D. Subia, Air Officer Commanding-in-Chief of the Maintenance Command, who is one of the most experienced officers of the Air Force in operational and flight safety matters. The Court comprised representatives of the Air Force, the Civil Aviation Department (Air Safety Branch), the intelligence Bureau, the Defence Research & Development Organisation (Aeronautics Branch), etc. Their names and other particulars are mentioned in Annexure I to this statement, which is being laid on the Table of the House.
- 7. The main findings of the Court of Inquiry are as follows:-
  - (i) The aircraft had been inspected in advance, and was fully serviceable for the flight.

A trial flight was undertaken as per normal practice and the aircraft was found fit for the flight in all respects.

The servicing of the aircraft had been properly supervised.

(ii) The fuel carried in the aircraft was not only sufficient to enable the aircraft to undertake the two approaches to land which the aircraft actually made at Jorhat, but in addition, to provide for a possible need for diversion to Tezpur airfied which had been earmarked for such a contingency as normally done for such important flights, and which was standing by with the necessary aids for landing.

The fuel meters recovered from the wreckage of the aircraft indicated that the fuel in the tanks of the aircraft was adequate to last for 50 minutes of additional flying, as against only 14 minutes flying time that would have been required for diversion to Tezpur.

- (iii) The plan for the Flight had been correctly made out and the planning and execution of the flight was properly supervised at all levels.
  - (iv) The members of the crew consisting of
    Wg Cdr CJ D'Lima, Captain; Sqn Ldr M.
    Cyriac, Co-Pilot; Wg Cdr Joginder Singh,
    Navigator; Sqn Ldr VVS Sunkar, Flight
    Engineer; and Flt Lt OP Arora, Flight
    Signaller; were fully qualified and

competent to carry VIPs as passengers and to undertake this flight.

In fact, Captain D'Lima and his other colleagues are among the most experienced and qualified fliers of the VVIP flight of the Indian Air Force.

The Captain had been posted at

Jorhat for over two years and had done

considerable flying off Jorhat, including

night flying. He was fully familiar with

the place. He had the highest grading Cat.

'A' in the Transport category, and

Master-Green Instrument Rating. All other

members of the crew held Cat 'A' except for

the Co-Pilot who also held Cat 'B'.

The crew had had proper rest prior to the flight and were medically fit for duty.

(v) The weather at Jorhat was cloudy with 'five eighth sky' covered with clouds, with the cloud base at 600 ft. above the ground.

Thus, the weather conditions prevailing at Jorhat, as forecast and actually reported at the time of landing, were well within the limitations laid down for the operation of this flight. There was no rain at the time of the accident.

- (vi) The runway length and available navigational aids at Jorhat were adequate for the planned landing at night. Jorhat has a standard electrical flare path, and there is no restriction on night flying off Jorhat.
- (vii) Prior to the flight on 4th November 1977, the aircraft had carried out a sortic as required by the rules to ensure air worthiness of the aircraft,
- the security watch of IAF Police and guards of the Defence Security Corps. One hour prior to the departure of the flight, the aircraft had been subjected to a security/ anti-sabotage check by the specialist police authorities. In addition, an officer deputed by Air Headquarters as a special security officer also carried out similar security/ anti-sabotage checks of the Air Force personnel and the aircraft. During these checks nothing unusual was found and the aircraft was cleared for the flight from the security angle. Thus, there is no evidence to indicate any form of sabotage.
- 8. The Senior Air Staff Officer of Eastern Command, Air Vice Marshal Bhasin, was present in his Command Operations Centre, at Shillong, throughout the flight. He was monitoring the progress of the flight and also the weather at various airfields in the Assam area.

9. The major constraint faced by the Court of Inquiry in establishing why and how the aircraft lost height during the final turn before landing was the death of all five crew members in the accident. The TU-124 is not fitted with a Cockpit Voice Recorder which if it had been there, might have thrown some light. The Court of Inquiry took into account the tape-record of the conversation between the Pilot and the Control Tower. Since no member of the crew is alive to testify to the sequence of events leading to the loss of height on the final turn, and the subsequent crash, the Court of Inquiry had to rely upon (i) the analysis of available evidence; (ii) simulated flights carried out subsequently; and (iii) technical examination of the wreckage.

On the basis of this examination, the Court is of the opinion that the following factors - individually or in combination - could have caused the unfortunate accident:-

- (a) Illusions produced because of the lack of visual cues, combined with the possible malfunction (over-reading) of the Captain's altimeter, might have resulted in the Captain being unaware of his continued descent to a dangerously low height.
- (b) Absence of any warning from the radio altimeter.

(c) Possible misreading of the altimeter by the Captain, due to his frequent looking in and out in an anxiety to sight the runway properly.

The aircraft had a set of five Pressure Altimeters, out of which four were found to be in tact and serviceable even after the crash. The fifth one located in front of the Captain which was found with one screw loose, might have had a malfunction resulting in possible over-reading. The aircraft also had a Radio-Altimeter, the switch of which was found to be in the off-position. It would appear that in this case, the loss of height by the aircraft on the final turn to dangerously low levels somehow escaped detection, with the result that the aircraft hit trees as it was approaching the runway and crashed.

- 10. The accident was extremely unfortunate. Government deeply regret that valuable lives of some of our best officers were lost in the accident.
- 11. Families of all the five members of the crew who were killed in the aircrash, were paid Rs. one lac in each case, as against the standard Rs. 42,000. In addition, they were given the normal pensionary benefits like death-cumretirement gratuity, family gratuity, children's education allowances, special family pension and ad-hoc relief.
- 12. The Court of Inquiry has assessed the cost of damage to the aircraft to be at Rs.73.57 lacs.