FINAL INVESTIGATION REPORT ON ACCIDENT TO M/S ANDHRA PRADESH AVIATION ACADEMY CESSNA-FA152 AIRCRAFT VT-EMR NEAR BEGUMPET AIRPORT, HYDERABAD ON 08.09.2008.

	Aircraft		
		Type	Cessna-FA152
		Nationality	Indian
		Registration	VT-EMR
2	Owner		Aero Club of India, New Delhi-03.
3	Operator		M/s Andhra Pradesh Aviation Academy, Hyderabad.
3	Pilot – in –Command		
		CPL No.	5699
		Extent of injuries	Fatal
4	Trainee Pilot		
		SPL No.	APAA/690
		Extent of injuries	Fatal
5	No. of Passengers on board		Nil
	Extent of Injuries		N/A
6	Last point of Departure		Begumpet Airport, Hyderabad
7	Intended landing place		Begumpet Airport, Hyderabad
8	Place of Incident		Near Begumpet Airport, Hyderabad Lat: N17°27'071?, Long: E78°26'866?.
9	Date & Time of Accident		08.09.2008 at 11:08 Hrs IST approx.

SUMMARY

Cessna FA152 aircraft VT-EMR owned by M/s Aero Club of India, New Delhi and operated by M/s Andhra Pradesh Aviation Academy (APAA), Hyderabad was authorized for a circuit and landing exercise of 20 minutes for one of the trainee pilot along with the API on 08.09.2008 at Begumpet Airport, Hyderabad. The aircraft took off at approx 1106 hrs IST after necessary clearance from ATC. The aircraft consumed abnormally more

length of runway for getting airborne. The climb rate was also very less after take off. Subsequently it took a sharp left turn much before the normal assigned point for the purpose of circuit and landing. The aircraft could not maintain the stabilized flight because of continuous loss of height and crashed on a small road in a thickly populated area of Sanat Nagar at approx 11:08 hrs IST. The aircraft got destroyed due impact and post impact fire. Both the crew were seriously injured due impact and fire and succumbed to the injuries while being taken to the Gandhi Medical College and Hospital, Secunderabad.

1. FACTUAL INFORMATION.

1.1 History of flight

Cessna FA152 aircraft VT-EMR owned by M/s Aero Club of India, New Delhi and operated by M/s Andhra Pradesh Aviation Academy (APAA), Hyderabad was involved in an accident immediately after take off from Begumpet Airport, Hyderabad on 08.09.2008 at approx 11:08 hrs IST.

The aircraft was programmed for an Instrument flying in the morning on 08.09.2008. The approved engineer carried out the daily inspection (DI) of the aircraft as per approved schedule. The ground run of the engine was given during DI and engine was developing required 2200 RPM and magneto drop was found within limit. Oil pressure and other parameter were also within the limit. The engine operation was also observed smooth before it was offered for flight. After satisfactory check by the AME the aircraft took off at 0905 hrs and flew uneventfully for 1:10 hrs under the command of CFI and a trainee pilot. There was no snag recorded encountered during the flight. The aircraft thereafter was planned for a circuit and landing exercise for one of the trainee pilot bearing SPL-APAA/690 along with the API of APAA bearing CPL5699. The pilot started the aircraft after obtaining the clearance from the ATC. Its rolling out of the bay was seen normal and lined up normally for take off from Rwy 27. After clearance from ATC it took off at approx 1106 hrs. It was observed that it consumed full runway for getting airborne, which is quiet abnormal. The climb rate was also observed to be very slow and the aircraft could not attain the requisite height after take off. Subsequently it took a sharp left turn much before the normal assigned point for the purpose of circuit and landing. It kept loosing height after left turn and, as appeared at the accident site, tried to make a crash landing in a small play ground by the side of a school in a thickly populated area of Sanat

Nagar. However because of high in approach to the play ground and school kids playing in the ground the pilot set the direction to a road adjacent to the play ground. In the process the landing gear strut contacted electric wire of street light, avoiding high tension electric cable, and gained approx 10 feet height momentarily and crashed on the road. Before crashing the aircraft cockpit bottom impacted to the wall of asbestos roof top. Due heavy impact the tail portion of the aircraft broke from very close to vertical fin, including horizontal fin and elevator and finally rested on the roof top. The spinner of the propeller impacted with the boundary wall of one of the house and got separated from the aircraft along with the mounting bolts and fell apart. The port wing, the fuselage and the starboard wing got destroyed due impact and subsequent fire.

Both the pilots were seen unconscious with serious injuries. The people around tried to rescue them and in the process they observed the API had severe head injuries. While the people were struggling to open the safety belt they smelled and observed fuel rushing out of damaged pipelines. Immediately after that there was an explosion and they could not rescue the crew. One of the person on ground also got fire burns on his legs in the process of rescue.

Fire tenders with the help of the local people could overcome the fire and rescue out the crew. They succumbed to the injuries while they were being taken to the Gandhi Medical College and Hospital, Secunderabad.

1.2 Injuries to persons.

INJURIES	**CREW**	**PASSENGERS**	**OTHERS**
FATAL	02	Nil	Nil
SERIOUS	Nil	Nil	Nil
MINOR	Nil	Nil	01

1.3 Damage to aircraft

The aircraft got destroyed due impact and post impact fire.

1.4 **Other damage:**

In the process of selecting a suitable place for crash landing and to minimize damage in populated area the landing gear strut contacted the electric wire

of street light and broke the wire and electric pole too got bent and finally uprooted. Before crashing the aircraft impacted on the wall of asbestos roof top and broke the roof top partially. The parapet walls of one of the house and portion of Ganesh Pandal tent also got damaged.

1.5 Personnel information:

1.5.1 Assistant Pilot instructor:

Age:	26 yrs.
Licence:	CPL 5699
Date of Issue:	02.11.2007
Valid up to:	01.11.2012
Category:	Aero plane
Class:	Single Engine, Land.
Endorsements as PIC:	Cessna 152 A
AFIR No:	763
Date of Issue:	06.06.2008
Date of last Med. Exam:	07.08.2008
Med. Exam valid up to:	06.08.2009
FRTO Licence No:	9309
Date of issue:	14.10.2005
Valid up to:	13.10.2010
AFIR No:	763
Date of issue:	06.06.2008
Valid up to:	05.06.2009
Total flying experience:	390:30 Hrs.
Experience on type:	390:30 Hrs.
Total flying experience during last 90 days:	120:30 Hrs.
Total flying experience during last 30 days:	21:30 Hrs.
Total flying experience during last 07 Days:	02:10 Hrs.
Total flying experience during last 24 Hours:	02:10 Hrs.

1.5.2 **Student Pilot:**

Age:	20 Yrs approx
Licence:	SPL
	APAA/690
Date of Issue:	02.06.2008
Total flying experience:	10:00 Hrs.

1.6 **Aircraft information:**

1.6.1 The aircraft was manufactured by M/s Cessna Aircraft Company, REIMS, France in 1986. Cessna FA152 aircraft bearing serial number FA 152-0397 has been duly registered in the register of India with effect from 09.09.1986 and allotted with registration certificate No. 2352.

Cessna FA152 aircraft is a modified version of model 152 which is a high-wing mono plane of all metal semi monocoque construction. The aircraft is equipped with fixed tubular spring steel main gear struts and a steerable nose gear. The nose gear has an air/hydraulic fluid shock strut. Two place seating is standard and a double width fold-up auxiliary seat is optional. Cessna 152 aircraft is powered with one Lycoming 4 cylinder, O-235-N2C normally-aspirated, direct drive, air cooled and horizontally opposite, carburetor equipped engine. The engine has a Horsepower rating of 108 BHP with engine speed of 2550 RPM. The aircraft is fitted with all metal fixed pitch McCauley Propellers of model No. 1A103/TCM6958 with 2 blades. The aircraft is certified for a single pilot operation. There are two doors, one each for both the seats.

1.6.2. The scrutiny of the DGCA approved weight schedule revealed that the aircraft was last weighed on 03.08.06. Weighing of the aircraft was last carried out on 03.08.2006 by appropriately licensed/approved person. The weighing machine used for weighing the aircraft was calibrated from AP aviation division of Govt. of AP. It further revealed that the aircraft has a total fuelling capacity of 101 Kg and maximum authorized all up weight was 760 Kg. The company did not have the practice of preparing the load and the trim sheet; however

analysis of available data revealed that the weight of the aircraft in the accident flight was within the limit.

1.6.2 Scrutiny of the Airframe and Engine log books of the aircraft revealed that on the day of accident, the aircraft had done 14227:20 airframe hrs since new and 585:20 hrs since the renewal of last C of A. The engine was installed on this aircraft on 24.02.2008 TSN 00:00 hrs. The last entry recorded reveals that the engine had completed 666:20 hrs before the accident sortie. Last inspection carried out was 50hrs/45 days inspection on 01.09.2008 at 641:25 hrs TSN. i.e. 24:55 hrs before accident. Last major inspection carried out was 200 hrs. /6 months inspection at 506:05 hrs on 13.07.2008. All the MOD's & SB's were complied with. The last C of A was done on 03.04.2008 and was valid till 02.04.2009. The aircraft was registered under Normal category subdivision Passenger. The highest inspection schedule required for this a/c was 200 hrs/6 months and carried out on 13.07.2008 at 14068:05 AF Hrs. Last 100 Hrs / 3 month inspection was carried out at 14252:25 AF hrs on 16.08.2008.

1.6.3 Scrutiny of the aircraft records further revealed that all the modifications on the aircraft were found to be complied with at the time of accident.

1.6.4 Scrutiny of the snag register reveled that there was no snag reported on the aircraft before the accident flight.

1.6.5 Scrutiny of the aircraft records further revealed that

- No inspection Schedule was due to carry out on the day of the accident.
- All the inspections were carried out by appropriately licenced/ approved persons.
- ASI & VSI were installed on 04.12.2007 and due for change only at 15215:25 hrs. / 04.12.2010.
- Altimeter was installed on 08.01.2008 and due for change only at 08.01.2010.
- DG & AH were installed on 25.09.2007 and due for change only at 13919:45 hrs/ 25.09.2009.

- No major snag was reported / recorded and all the SB's and MOD's were found complied.
- ELT battery was replaced on 03.04.2008. Daily ELT check was not recorded.
- VHF transceiver Com 1 RT-385 was replaced on 26.06.2008.
- Oil change was carried out at 641:25 (i.e) 14:55 hrs before accident on 01.09.08.
- Stator, LH & RH magnetos were replaced on 13.07.2008 with overhauled magnetos TBO i.e 160:15 hrs before accident.
- Ignition switch was replaced on 20.07.2008 due operational reasons, the reason was not spelt out specifically.
- Throttle cable & Mixer cable were replaced on 07.08.2008 due operational reasons.
- Serviceable propeller was installed on 30.08.2008.

1.7 **Meteorological information:**

The Met Report issued at 0440 UTC on 08.09.08, prior to departure, Begumpet Airport Hyderabad reveals winds 280deg/07 knots, visibility 6 KM, temp 26 deg, QNH 1010 HPA and QFE 0948 HPA.

The Met Report issued at 0540 UTC reveals winds 280deg/04 knots, visibility 6 KM, temp 26 deg, QNH 1010 HPA and QFE 0948 HPA.

1.8 **Aids to navigation:**

Begumpet Airport Hyderabad was equipped with all the latest navigational aids such as DVOR, DME, MM, ILS Cat I, ASR/MSSR etc and all were maintained operational by Airports Authority of India.

The aircraft was adequately equipped to navigate under VFR in VMC during day. The aircraft was cleared for circuit and landing exercise maintaining 2800 ft in the circuit after climb.

1.9 **Communications:**

The recording on ATC tape maintained and operational at Begumpet Airport Hyderabad reveals that the pilot had trouble free two way

communication with ATC Begumpet Airport as well as another aircraft in circuit. They mutually maintained communication on VHF R/T with ATC tower Begumpet Airport frequency 122.25 MHz.

The last communication recorded made between the pilot and the ATC tower at 0536 UTC as "VMR TRAFFIC VTRGI ON LEFT DOWN WIND RWY27 NOW, RWY 27 CLEARED FOR TAKE OFF WIND 270 DEG 06 KT", to which the pilot replied as "CLEARED FOR TAKE OFF VMR".

The tower controller was busy controlling other movement at the airport and at 0538 UTC, the tower made several call to VTEMR but none was responded by VTEMR.

1.10 **Aerodrome information:**

The airport at Begumpet also popularly known as Hyderabad Airport is controlled and maintained by Airport Authority of India. Besides civilian aircraft the airport is also used by military aircrafts. The airport is located at 17°27'11?N, 078°28'03?E with 1742 ft of elevation from AMSL. The direction of the runway is 09/27, used depending on the wind direction. The dimension of the runway is 3230X45M total runway length is 10,600 feet.

The aircraft was cleared for left hand circuit and landing exercise maintaining 2800 feet after departure from runway 27. The aircraft crashed at approx 1 KM away from the end of runway 09.

1.11 **Flight recorders:**

Not fitted with FDR/CVR as per regulation.

1.12 **Wreckage and impact information:**

The accident occurred during climb in Sanat Nagar at approx 11:08 hrs IST which is approx 1 KM from Begumpet Airport. The wreckage was found at radial 250 in localized area. There was a fire after accident and part of the fuselage, wings and the cockpit was burnt. The details of the damages and the observations about the flight/engine control settings and various instrument positions in the cockpit area as recorded are as follows:

- Cockpit was completely damaged and seats of both instructor and trainee (left side) were burnt.
- All circuit breakers (C.Bs) were propped out (May be due to short circuit/ fire after crash).
- All instruments were completely damaged and destroyed in the flame.
- **Flaps at the time of crash were in 0 degree position i.e. fully up and Flap position switch was at zero degree.**
- PILOTS Control column of both sides were broken.
- ELT Completely burnt.
- The position of engine controls (i.e.) Mixture control and Throttle control after the crash were in fully in position i.e. throttle fully in, mixture fully rich position.
- Rudder pedal were functioning freely.
- **The position of ignition switch after the crash was in ON and indicating the Left position; which demonstrates only left magneto was in operation. The ignition switch key was broken inside the slot.**
- Fuel shut off valve was in 'ON' position when aircraft crashed.
- Doors of both sides of fuselage were completely burnt and damaged, wind shield broken into pieces.
- Complete Empennage (TAIL SECTION) broken from aft of the fuselage as single unit consist of horizontal tail plane along with Elevator, vertical stabilizer (rudder). However the control movements were free and even trim tab secondary system function controls are free movements (This complete assembly was broken and found on the top of the roof).
- On the starboard side wing some structure was found which includes Flap, Aileron but was damaged from inboard side to out board side; however fuel tank was damaged.
- Nose wheel was found at a distance of 50 meters away from the site and nose wheel strut was completely damaged.
- Propeller hub, fly wheel was detached after impact and found separated from each other and the Leading edge of the propeller was having scratch marks.
- The port wing is completely damaged beyond recognition as well the fuel Tank, Flaps, Ailerons in the wing was damaged completely. However left aileron bell crank was operating

smoothly. Some of the wingtip structure and left aileron found in one of the civilian house on which the aircraft impacted.

- Main wheel landing gear on port wing was completely damaged exposing the bare axle landing strut.
- Engine firewall was completely damaged resulting in damaging the engine mount and its related controls. Crank case LH side near front bearing and thrust washer was cracked towards #2 cylinders by approx 6 inches. Crank shaft flange was observed bent.
- Various pipelines and the hoses on the engine were found burnt and sign of high temperature all around including carbon/shoot deposit. It was lifted with the crane and the available oil was drained for examination.

The engine has been sent for strip examination. The bench test was not possible as Crank case got cracked due to impact and the accessories damaged/burnt due impact and fire.

1.13 **Medical and pathological Information:**

Both the crews succumbed to the injuries while they were taken to the Gandhi Medical College and Hospital, Secunderabad. The post mortem was carried out by the Dept of Forensic Medicine Gandhi Medical College and Hospital, Secunderabad and the report reveals that the instructor died due to head injuries. The cause of the death of the trainee was established as neurogenic shock - as a result of burns associated with other injuries.

1.14 **Fire:**

There was evidence (witness) of post impact fire in which part of the fuselage, wings and the cockpit was burnt.

1.15 **Survival aspects:**

Both the occupant succumbed to injuries.

1.16 **Tests and research:**

The spark plugs were removed from all the four cylinders and visual inspection was carried out and recorded. All the eight plugs were subjected to BOMB test for ascertaining the firing pattern. The test

revealed that all the plugs were firing satisfactorily. However the visual inspection of the spark plugs revealed that the plug fitted in cylinder #1 & #3 top and bottom were comparatively dirtier.

The engine LYCOMING O-235-N2C, SR. NO. L-25584-15, installed on the aircraft was strip examined at Bombay Flying Club, Juhu, Mumbai. The extract of the report received from strip examination is as:

- ✓ Initially the engine was tried to rotate manually but could not be rotated and it was appeared to be seized.
- ✓ Crankcase splitted to facilitate removal of Crankshaft and Camshaft. Main Bearing are found in normal condition except front main Bearing which are found shifted and Bearing Bore damaged. L.H. Crankcase found cracked in front portion, due to which Crankshaft could not be rotated.
- ✓ Throttle Shaft Pump Linkage, Pump Inlet and Carburetor Mounting Flange found broken. Hence no test could be carried out on Carburetor.
- ✓ All the Spark Plugs are removed from the Cylinders and found normal.
- ✓ Ignition Harness found in pieces.
- ✓ Induction Pipes of Cylinder Nos. 1, 2 and 4 removed and found damaged due to impact. Pipe of Cylinder No. 3 are found missing.
- ✓ Cylinder No. 1, 2, 3 and 4 removed and found in normal condition. Rocker Box found damaged externally.
- ✓ Piston & piston pin removed along with Cylinders and found in normal condition.
- ✓ All the gears removed from the Engine and are found in normal condition.
- ✓ All Con Rods removed and found in normal condition however it was seized to operate as Crankshaft found bent.
- ✓ No abnormalities are found in Cam Shaft.
- ✓ Face of Starter Ring Gear found broken at Bolt holes where Propeller is attached. Support Assembly found separated from Ring Gear due to impact.

The overall observation reveals that if at all the engine was developing less power it might be due to Magnetos

The Magneto bearing Sr. No. 05090215 and 05061954 of Slick 4381 model fitted on the engine was removed and sent to Delhi Flying Club for testing in order to establish its functioning during the accident flight. The report revealed that the internal parts of both the magnetos such as Distributor Block, Primary Leads, Condensers, Rotor Gears, Contact Breakers, Distributor Gear Assembly and Carbon Brushes were burnt and no test could be carried out.

1.17 **Organizational and management information:**

The Cessna FA152 aircraft VT-EMR was allotted to APAA in October 1986 by M/s Aero Club of India, New Delhi for training purposes. APAA is in possession of the Certificate of Approval No. 03/2003 as flying training organization which is revalidated presently up to 31.10.2008. The organization had valid approval of maintenance of Cessna FA 152 aircraft, its engine and associated accessories, Radio, Com & Navigation equipment installed up to 1200 hrs/3 yrs inspection period excluding major engine overhaul. The organization was found lacking in up-keep of maintenance and operational records/documents.

1.18 **Additional information:**

Nil

1.19 **Useful or effective investigation techniques**:

Nil

2. ANALYSIS

2.1 Serviceability/Maintainability of the aircraft

The aircraft had completed 14227:20 airframe hrs since new and 585:20 hrs since the renewal of last C of A. The last C of A was done on 03.04.2008 and was valid till 02.04.2009. The highest inspection schedule required for this aircraft was 200 hrs/6 months and carried out on 13.07.2008 at 14068:05 AF Hrs. Last 100 Hrs/3 months inspection was carried out at 14252:25 AF hrs on 16.08.2008. The

new engine was installed on this aircraft on 24.02.2008 and had completed 666:20 hrs before the accident sortie. All the MOD's & SB's were complied and there was no snag reported on the aircraft before the accident flight.

On the day of the accident the approved engineer carried out the daily inspection (DI) of the aircraft as per approved schedule. The ground run of the engine was given during DI and engine was developing required 2200 RPM, magneto drop was found within limit. Oil pressure and other parameter were seen within the limit. The engine operation was also observed smooth before it was offered for flight.

The company did not have the practice of preparing the load and the trim sheet; however comparison of available data with the DGCA approved weight schedule revealed that the weight of the aircraft in the accident flight was within the limit.

The aircraft flew uneventfully for 1:10 hrs before the accident flight on the same day under the command of CFI and a trainee pilot no snag recorded encountered during the flight.

Lab investigation of the engine also did not reveal any reason so as to prove it was not developing sufficient power due technical problem. Keeping the above deliberation in sight maintenance aspect of the aircraft doesn't seem to be the factor of the accident.

The organization was found lacking in up-keep of maintenance records/documents however it doesn't appear anyway contributing to the cause of the accident.

2.2 Operational Aspect

The operating crews were the API and a student pilot of the academy. Both of them were appropriately licensed and the circuit and landing exercise was duly authorized by Chief Flying Instructor of the Academy.

The aircraft flew uneventfully for 1:10 hrs in the morning and there was no snag recorded encountered during the flight. The aircraft

thereafter was planned for a circuit and landing exercise for one of the trainee pilot along with the API. The pilot started the aircraft after obtaining the clearance from the ATC. Its rolling out of the bay was seen normal and lined up normally for take off from Rwy 27. After clearance from ATC it took off, subsequently it took a sharp left turn at low height much before the normal assigned point for the purpose of circuit and landing. It was reported that it consumed full length of runway for getting airborne, which is quiet abnormal. The climb rate was also observed to be very low. The aircraft could not attain the requisite height after take off. The aircraft got stalled due to sharp turn at low height; the pilot could not be able to recover from it and crashed.

The reason of left turn before the assigned point remained undiscovered as there was no communication made/recorded between the aircraft and the air traffic controller after final clearance for take off. However, the anomalous take off performance must have created doubt and panic in the mind of the pilot. Thereby he probably decided to make a short circuit and land back leading to the aircraft getting stalled and uncontrollable.

On site inspection revealed that Flaps at the time of crash were in 0 degree position i.e. fully up and Flap position switch in the cockpit was also at zero degree. The position of ignition switch after the crash was in ON and indicating the Left position; which demonstrates only left magneto was in operation. The ignition switch key was broken inside the slot.

As per recommended practice before starting take off role the pilot is supposed to Check "magnetos on both" and "Flaps at 10° and then release the breaks.

As only one magneto was working because of improper selection made by the pilot, it was obvious the engine was not delivering the full power. Taking off with the flap selected at zero degree would lead to consume longer runway length and slow rate of climb.

It seems evident from above discussions that non adherence of the recommended practice was the contributory factor of the accident.

The organization was found lacking in up-keep of operational records/documents however it doesn't appear anyway contributing to the cause of the accident.

3. **CONCLUSIONS:**

3.1 **Findings:**

a) The aircraft was maintained in airworthy condition and no defect was pending for rectification.

b) All the MOD's & SB's were complied and there was no snag reported on the aircraft before the accident flight.

c) On the day of the accident the approved engineer carried out the daily inspection (DI) of the aircraft as per approved schedule. The ground run of the engine was given during DI and engine was developing required RPM, magneto drop was found within limit. Oil pressure and other parameter were within limit. The engine operation was also observed smooth before it was offered for flight.

d) Lab investigation of the engine did not reveal any reason so as to prove it was not developing sufficient power due technical problem.

e) The company did not have the practice of preparing the load and the trim sheet; however comparison of available data with the DGCA approved weight schedule revealed that the weight of the aircraft in the accident flight was within the limit.

f) The prevailing weather was fine and had no contribution to the accident.

g) The pilots were appropriately licensed and authorized to undertake the flight. Their license, medical fitness certificate and the ratings were valid at the time of accident.

h) The pilot started the aircraft after obtaining the clearance from the ATC. Its rolling out of the bay was seen normal and lined up normally for take off from Rwy 27.

i) After clearance from ATC the aircraft took off and no communication between the aircraft and the ATC was recorded after that.

j) The aircraft was reported having consumed full length of runway for getting airborne, which was quiet abnormal. The climb rate was also observed to be very low.

k) The aircraft took a sharp left turn at low height much before the normal assigned point causing it to go in stall and subsequently crashed.

l) The reason of left turn before the assigned point remained undiscovered as there was no communication made/recorded between the aircraft and the air traffic controller after final clearance for take off.

m) The position of the flap at the time of crash was 0 degree i.e. fully up and Flap position switch in the cockpit was also at zero degree. This is not a recommended practice.

n) The position of ignition switch after the crash was seen on a single magneto which was not a recommended practice.

o) The organization was found lacking in up-keep of maintenance and operational records/documents.

3.2 **Probable cause of the accident**:

Sharp turn at low height caused stalling and subsequently crash landing of the aircraft.

Non adherence of recommended operating procedure was the contributory factor.

4. **SAFETY RECOMMENDATIONS**:

4.1 The Accident may be brought to the notice of all the Flying Training Academy/Institute and small aircraft operators.

4.2 Comprehensive Safety Audit of the Operator may be carried out.

Sd/-
(Sanit Kumar)
Assistant Director Air Safety
Inspector of Accidents VT-EMR

Place: New Delhi
Date: 29.12.2008