

**FINAL REPORT ON SERIOUS INCIDENT BETWEEN JAI792
and LLR626 in NAGPUR ACC on 02.12.2016.**

1. Aircraft
Type : B737-800/ATR-72
Nationality : INDIAN
Registration : VT-JFP (Jet Airways)/ VT-AIV (Alliance Air)
2. Owner/ Operator : M/s Jet Airways / M/s Alliance Air
3. Pilot – in –Command : ATPL Holder for both Jet Airways and Alliance Air
Extent of injuries : Nil
4. First Officer : CPL Holder for both Jet Airways and Alliance Air
Extent of injuries : Nil
5. Place of Incident : Nagpur ACC
6. Date & Time of Incident : 02nd December 2016; 10:07 UTC
7. Last point of Departure : Gwalior for Alliance Air and Indore for Jet Airways
8. Point of intended landing : Mumbai for Alliance Air and Delhi for Jet Airways
9. Type of operation : Schedule Operation for Jet Airways & Alliance Air
10. Crew on Board : 02+05 Crew for Jet Airways and 02+02 for Alliance Air
Extent of injuries : Nil
11. Passengers on Board : 129 (Jet Airways) and 60 (Alliance Air)
Extent of injuries : Nil
12. Phase of operation : Level Cruise for Alliance Air & Climbing for Jet Airways
13. Type of Occurrence : Air Proximity

(ALL TIMINGS IN THE REPORT ARE IN UTC)

SYNOPSIS:

“On 02.12.2016, JAI792, Jet airways, B738 departed from Indore to Delhi was assigned FL160 by the planning Controller. LLR628, Alliance Air ATR, opposite direction traffic was flying at FL180 from Gwalior to Mumbai. JAI792 climbed up to FL178 and minimum distance was around 4NM. LLR628 reported traffic on TCAS but no RA reported by both aircraft. Controller took action to resolve the traffic but it was too late by the time incident was happened. As per Controller’s statement, intention was to climb JAI792 FL160 and maintain but unknowingly uttered FL180.”¹

JAI792 aircraft B737-800, registration VT-JFP from Indore to Delhi operating on ATS route G590-BPL-Q24 was given climb to F180 and traffic information in respect of 12’ O Clock traffic (LLR 628) was also passed. JAI 792 in a routine manner acknowledged the Climb by saying “Roger Climb and maintain flight level FL180.” After sometime, JAI792 came in close proximity with Alliance Air LLR 628, ATR-72, registration VT-VIV from Bhopal to Mumbai, maintaining FL180. The Lateral separation which should be 10 NM was reduced to 4.02 Nm whereas the vertical separation which should be 1000 feet was reduced to 200 feet simultaneously at time 10:07:05. The Radar Controller and Crew of JAI792 instead of resolving the traffic started having argument on the Channel/RT. The Controller thereafter gave a left heading of 360 degrees, (northerly heading), which was just less than 30 degrees (As the aircraft JAI 792 was flying heading 027, NNE at the time of airprox and just before it). This northerly heading of 360 degrees seems to be insufficient for resolving the conflict. The aircraft on its own flew more divergent heading to 330 degrees i.e. NNW. LLR 628, ATR-72 reported having JAI792 on TCAS and the traffic (JAI792) passed right wing and was 3’O Clock 04 miles (NM). Thereafter both the aircrafts were clear of traffic. JAI792 was given climb to FL280 and direct routing to waypoint BUKLO. LLR628 continued to its destination maintaining flight level FL180. Thereafter the flights were uneventful. The replay of RSR Frequency, replay of radar data, ATC tape transcripts, the statement of controller, flight Crew and the ATC Log Books reveals that:

1. LLR 628, ATR-72, VT-VIV, from Bhopal to Mumbai was maintaining Flight Level FL180 and was in two way communication with Route Surveillance Radar (RSR)

¹ Message from OPS Control room vide email dated 02/12/2016 at time 14:54 UTC

Controller, Nagpur on frequency 123.9 MHz

2. At time 10:03 UTC, JAI792 came in contact with RSR Controller Nagpur and was passing FL 103 for FL160. JAI792 was identified by RSR Controller. Subsequently JAI792 which was release by Indore was passing FL122 for FL160.
3. At time 10:04:11, RSR Controller instructed JAI792 to Climb and maintain Flight Level FL180 and also passed on the Essential traffic "Traffic 12' O Clock, 30 miles (NM) opposite direction ATR Flight Level FL180."
4. At time 10:04:20, JAI792 acknowledged RSR Controller's instruction- "Roger Climb and maintain Flight Level FL180."
5. At time 10:06:34, JAI792 asked the RSR Controller "Confirm Maintain Flight Level 180 ." to this the RSR Controller replied maintain FL160 at time 10:06:42.
6. From time 10:06:42 there was argument between JAI792 and RSR Controller on the channel.
7. At time 10:06:57, RSR controller gave first avoiding action "Turn left heading 360 due traffic." And the pilot of JAI792 replied "We are turning 330. "
8. At time 10:07:05, LLR628, ATR-72 confirmed that "they have traffic on TCAS.
9. From time 10:07:08, RSR Controller gave LLR628 Climb to FL190 to which LLR628 replied "We Climb 190, but traffic passed just right wing, Traffic 3' O Clock 4 miles. Traffic has already passed we can maintain FL180."
10. At time 10:08, JAI792 was clear of traffic LLR628. JAI 728 was given climb to FL280 and direct routing to waypoint BUKLO."
11. There was again argument between the RSR Controller and JAI792.
12. The Visibility was 2400 M at the time of airprox.
13. The lateral & vertical separation was reduced to 4.02 NM & 200 feet respectively.

There was no injury to person on board both the aircraft and there was no fire.

Ministry of Civil Aviation constituted² a committee of inquiry to investigate the cause of the Serious Incident under Rule 11 (1) of Aircraft (Investigation of Accidents and Incidents), Rules 2012 comprising of Dr. Jitender Loura, Assistant Director, AAIB as Chairman, Shri Raje Bhatnagar, Assistant Director, AAIB as member.

²Ministry of Civil Aviation Notification Vide No AV-15013/13/2016-DG dated 29th December 2016.

1. FACTUAL INFORMATION

1.1 History of the flight

On 02.12.2016, JAI792 aircraft B737-800, registration VT-JFP operating schedule flight from Indore to Delhi on ATS route G590-BPL-Q24 was given climb to F180 and traffic information in respect of essential/12' O Clock traffic was also passed (LLR 628). LLR 628, ATR 72, registration VT-AIV, also operating as schedule flight from Indore to Mumbai was at cruise level FL180. JAI 792, B737-800 came in close proximity with Alliance Air LLR 628, ATR-72. The Lateral separation was reduced to 4.02 Nm whereas the vertical separation was reduced to 200 feet simultaneously as against the standard Lateral and Vertical separation of 10 NM and 1000 feet respectively.. The Radar Controller after having an argument with JAI792 gave a left heading of 360 degrees, north, which was just less than 30 degrees (As the aircraft JAI 792 was flying heading 027, NNE at the time of airprox and just before it). The aircraft on its own flew more divergent heading to 330 degrees i.e. NNW. LLR 628, ATR-72 reported having JAI792 on TCAS and the traffic (JAI792) passed right wing and was 3'O Clock 04 miles (NM). Both the aircraft were clear of conflict at time 10:08 and thereafter LLR 628 proceeded to Mumbai maintaining flight level FL180 and JAI792 was given direct routing to waypoint "BUKLO" and climb to flight level FL280. Thereafter the flights were uneventful.

1.2 Injuries to persons.

INJURIES	CREW	PASSENGERS	OTHERS
FATAL	Nil	Nil	Nil
SERIOUS	Nil	Nil	Nil
MINOR/NONE	(02+05) Jet airways (02 +02) Alliance Air	129 Jet Airways 60 Alliance Air	Nil

1.3 Damage to aircraft: NIL

1.4 Other damage: NIL