

GOVERNMENT OF INDIA
MINISTRY OF CIVIL AVIATION
RAJYA SABHA
UNSTARRED QUESTION NO : 1630
(TO BE ANSWERED ON THE 18th December 2023)

SIGNAL SPOOFING OR JAMMING OF NAVIGATION SYSTEM OF AIRCRAFTS

1630. SHRI PARIMAL NATHWANI

Will the Minister of CIVIL AVIATION be pleased to state:-

- (a) the manner in which Government plans to tackle the issue of signal spoofing or jamming the navigation system of the aircrafts;
- (b) the areas where incident of signal spoofing are suspected to have affected the navigation system; and
- (c) the details of the extent to which such incidents were threats to the safety of aircrafts and passengers?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF CIVIL AVIATION

(GEN. (DR) V. K. SINGH (RETD))

(a): Directorate General of Civil Aviation (DGCA) had constituted a Committee on 04.10.2023 for monitoring Global Navigation Satellite System (GNSS) spoofing in Indian airspace. The committee has conducted meetings with Indian airline operators and Airports Authority of India to sensitize them regarding the emerging threat of GNSS interference. The committee has consulted experts from Airbus and the Federal Aviation Administration (FAA) who are working on GNSS interference.

DGCA has issued an Advisory Circular on subject 'GNSS Interference in Airspace' with guidelines for airline operators, pilots, Airports Authority of India and Air Traffic Controllers.

(b): As published in the DGCA Advisory Circular, GNSS Interference cases have been observed in geographical areas surrounding conflict zones, southern and eastern Mediterranean and Black sea, Baltic Sea and Arctic area, especially in Istanbul and Flight Information Regions (FIRs) of Ankara, Baghdad, Tehran, Tel Aviv, Cairo, Amman among others in Mid- East region, Samara, Moscow and Minsk.

(c): Aircraft have encountered GPS/GNSS spoofing which has resulted in deviation from the flight routes, this results in loss of terrain data and leads to loss of situational awareness.

DGCA has issued a detailed circular 01/2023 on "GPS interference in Airspace". All airlines have formulated Standard Operating Procedures on GPS/GNSS spoofing to tackle this situation. The updation of SOP and Safety Risk Assessment on real time basis, shall be reviewed and reformulated by the Airlines. The SOPs in place have been made to enhance crew awareness, which will enable the crew to take action appropriately in case such GPS/GNSS events occur.
