



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA
DIRECTORATE OF AIR TRAFFIC MANAGEMENT
RAJIV GANDHI BHAWAN, NEW DELHI-110003
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ATMC

AIR TRAFFIC MANAGEMENT CIRCULAR NO. 05 of 2023

Application of 5NM Surveillance Based Separation within Surveillance Coverage in ATS airspace of India

1 Introduction:

- 1.1 In order to cater to the ever increasing demand of air traffic, Airports Authority of India (AAI) as an Air Navigation Service Provider (ANSP) has taken various measures to enhance airspace capacity, such as providing seamless surveillance as well as communication coverage in almost whole of the ATS airspace of India. Also, the use of ADS-B has provided a redundant and reliable surveillance coverage and has contributed in enhanced situational awareness of the controllers, even over the areas which were beyond radar coverage earlier.
- 1.2 Owing to the fact that in India all the RADARs have been upgraded to MSSR and most of these with Mode-S, which employ modern RADAR technologies. Further, with the use of ADS-B, majority of the airspace has come under reliable surveillance coverage. The VHF network has also improved significantly. Along with the enhanced coverage of surveillance and VHF, all the Area Control Centers (ACCs) have modern ATM Automation Systems which can integrate surveillance feed from a number of sources. These ATM Automation Systems are also provided with robust safety-nets and decision support tools. The ICAO-APAC recommends only surveillance separations prescribed in PANS-ATM (Doc-4444) to be used in Category-S Airspace.
- 1.3 Considering all of the above, and after due process of safety assessments, it has been decided to implement 5NM Surveillance Based Separation within Surveillance Coverage in ATS airspace of India, except where a reduced separation minima is authorized by appropriate ATS authority. This will hugely contribute in facilitating climb, descent and operation of aircraft under surveillance coverage.

2 Purpose:

- 2.1 Purpose of this ATMC is to provide instructions, information and guidance to the GM (ATMs)/ATS In-Charges and controllers for implementation of 5NM Surveillance Based Separation within Surveillance Coverage in ATS airspace of India.

3 Scope:

- 3.1 This ATMC is applicable to all the ATS In-charges and Controllers at AAI Airports/ATC Centers/ATS Units wherever surveillance service is provided.

4 Procedure:

- 4.1 Provisions contained in ENR 1.6 of e-AIP, India shall be applicable for providing surveillance services.
- 4.2 Horizontal separation minima based on RADAR and/or ADS-B and/or MLAT systems shall be 5NM. Where specifically authorized, the minimum surveillance separation based on radar and/or ADS-B and/or MLAT systems shall be 3NM. (the airspace where 3NM surveillance based separation are authorized is provided under ENR 1.6 Section 7.5 of e-AIP, India)

5 Guidance:

- 5.1 The surveillance based separation as mentioned above in para 4.2 shall be applied by Air Traffic Controllers having Surveillance rating endorsement on the ATCO license or by ATCOs undergoing OJT for surveillance rating under the supervision of concerned OJT Instructor.
- 5.2 The surveillance based separation shall be applied between identified aircraft within areas where provision of surveillance service with direct controller pilot communication (Voice) is authorised.
- 5.3 Information derived from ATS surveillance systems, including safety-related alerts and warnings such as conflict alerts (STCA, MTCD, MSAW, etc.), tools like MINSEP, RBL etc. and features such as multiple windows etc. may be used to the extent possible for enhanced situational awareness in the provision of the prescribed 5NM surveillance based separation.
- 5.4 ATS in charges with the support of DMS (DBM) in-charges shall identify and notify the areas of unreliable surveillance and/or VHF coverage, for the information of the controllers, through issuance of local circulars.
- 5.5 In case of degradation of ATM/CNS infrastructure, ATS in charges may prescribe larger separation through local instruction/SOP for degraded Mode of Operation.



- 5.6 The range scale of the situation display shall be set optimally for better visualization of the traffic by the surveillance controller for provision of the prescribed separation minima. ATS In-charges shall review the controlled area sectors under their control, on the basis of the complexity as well as the air traffic demand. Wherever feasible, bifurcation of the larger control area sectors may be explored subject to the availability of the required infrastructure & trained manpower and brought to the notice of ASM Directorate at CHQ.
- 5.7 For implementation of 5NM surveillance based separation, the STCA and MTCD parameters shall be suitably configured in the adaptation database as per the separation minimum prescribed in different areas of the airspace concerned.

6 Queries:

- 6.1 Any queries or further guidance required on the contents of this ATMC should be addressed to:

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7 Validity:

- 7.1 This ATMC will remain in force until further notice.

F. S. T. F. M.
20/12/2023
(MOOSA T.F.)
EXECUTIVE DIRECTOR [ASM]
AIRPORTS AUTHORITY OF INDIA
Dated: 20-12-2023.