

# AERO INDIA-2025

15<sup>TH</sup> INTERNATIONAL SHOW ON AEROSPACE, DEFENCE, CIVIL AVIATION,  
AIRPORT INFRASTRUCTURE AND DEFENCE ENGINEERING

10<sup>th</sup> - 14<sup>th</sup> FEBRUARY 2025  
AIR FORCE STATION  
YELAHANKA, BENGALURU

**FLYING MANUAL**

903148

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**Note: The Flying Manual & Flight Rules should be read in conjunction with Exhibitor Manual for “Aero India 2025”**

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**SECTION – I****PROGRAMME OF ACTIVITY**

1. The timing of flying activities from 4<sup>th</sup> Feb 2025 to 16<sup>th</sup> Feb 2025 as indicated below, and elsewhere in this manual are provisional. Changes, if any, will be communicated to the exhibitors during the Exhibition.

2. Customer Demonstration Flight (CDF) may also be undertaken outside these timings, with one day's advance notice subject to specific clearance by the Flying Display Committee (FDC). **PRE & POST PROGRAMME: -**

<u>Ser No</u>	<u>Date</u>	<u>Time in IST</u>	<u>Remarks</u>	<u>Vertical Limits</u>	<u>Horizontal limits</u>	
(a)	04 Feb 25	0900h – 1200 h	Individual practice by participating teams/ aircraft and mapping.	<b>GND to FL 200*</b>	<b>Airspace bounded by 130100N 0773300E – 131156N 0771401E – along with clockwise arc centred at HAL airport VOR BBG till 131143N 0780737E 130100n 0774800E – 130100N 0773300E</b>	
		1400 h – 1700 h	Stand-by Block for practice.			
(b)	05 Feb 25, 06 Feb 25 & 07 Feb 25	0900 h – 1200 h	Full force Fly-Past & Flying Display practice			
		1400 h – 1700 h	Stand-by Block for practice			
(c)	08 Feb 25	0900 h – 1200 h	Final Dress Rehearsal (FDR)			
		1400 h – 1700 h	FDR (Standby Block)			
(d)	09 Feb 25	0900 h – 1200 h	FDR (Standby day)			
		1400 h – 1700 h				
(e)	10 Feb 25	0900 h – 1200 h	Inauguration Ceremony Fly-Past and Flying Display			
		1300 h – 1500 h	Customer Demonstration Flights (CDF)			
(f)	11 Feb 25 & 12 Feb 25	1200 h – 1500 h	Flying Display			<b>GND to FL 150</b>
		1501 h – 1700 h	CDF			
(g)	13 Feb 25 & 14 Feb 25	0900 h – 1200 h	Flying Display			
		1201 h – 1359 h	CDF			
		1400 h – 1700 h	Flying Display			

**Note:**

- Changes in the programme, if any, will be informed to all concerned.
- Other Aircraft will not be permitted to depart/land during the Flying Display or Flying Display Practice.
- All timings are in IST (UTC + 05:30 HRS).
- CDF will be flown outside airspace reservation blocks using local flying area of VOYK & VOBG (published restricted areas).

**SECTION - II**

<b>GENERAL INFORMATION</b>		
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**2.1 Introduction**

This manual is intended for the use of participants to effectively display their aircraft at the AERO INDIA 2025 Exhibition, to be conducted at Air Force Station Yelahanka (AFSY) from 10<sup>th</sup> Feb to 14<sup>th</sup> Feb 2025.

**2.2 Organisers' Address****Defence Exhibition Organisation (DEO)**

Government of India, Ministry of Defence  
 Hotel Ashoka (Room 102-107), First Floor  
 Chanakyapuri, New Delhi - 110 021, India  
 Tele : +91-11-26871991/ 011-20836145 (Extn 206)  
 FAX: +91-11-26871988, E-mail : [aeroindia-ddp@gov.in](mailto:aeroindia-ddp@gov.in)

**Hindustan Aeronautics Limited, Bengaluru**

General Manager (Marketing)  
 No. 15/1 Cubbon Road, Bengaluru - 560001  
 Tele :- +91-80-22320197

**Indian Air Force**

Chief Test Pilot (ASTE)  
 Tele: +91-80-25220146, 080-23411081 Extension- 4318-7782 / 4318-7804  
 e-mail: [aeroindia.fdd@gmail.com](mailto:aeroindia.fdd@gmail.com)

## 2.3 Participation Costs

Aircraft on display at Aero India 2025 will be charged participation costs as follows:

Weight in Tonnes	Foreign Companies (In USD) (October Rate)	Indian Companies (In INR) (October Rate)	Foreign Companies (In USD) (November Rate)	Indian Companies (In INR) (November Rate)	Foreign Companies (In USD) (December onward Rate)	Indian Companies (In INR) (December onward Rate)
Upto 1 Tonne	2040	106000	2100	111000	2200	116000
Upto 3 Tonnes	4250	220000	4500	231000	4700	241000
Upto 10 Tonnes	5640	292000	5900	306000	6200	320000
Upto 25 Tonnes	8500	437000	8800	458000	9200	478000
Upto 40 Tonnes	11300	583000	11800	610000	12300	638000
Upto 60 Tonnes	14100	728000	14700	763000	15400	798000
Above 60 Tonnes	14400	743000	15000	778000	15700	814000

### Note:

1. Aircraft Display rates are applicable one time only.
2. Applicable Goods and Services Tax @18% extra for all rates.

## 2.4 Landing/Parking Charges

(a) Participating Aircraft. Aircraft participating in Aero India-2025 would not be charged for landing/parking (including support aircraft) for the duration of the Exhibition. Landing/Parking charges for the stay outside the duration of Exhibition will be levied as per tariff applicable at the time of Exhibition. All Payments would only be made through card/ Online direct bank transfer to DEO account at site or in advance in the account mentioned.

(b) Non-Participating Aircraft. Non-participating aircraft (aircraft for support role) will not be permitted to park at Yelahanka Airport for duration longer than what is expected for normal loading and offloading. Parking facilities are not available at Yelahanka Airfield. The alternative airfields for parking will be Bengaluru International (VOBL), HAL Bengaluru (VOBG) and Chennai (VOMM). Landing/Parking charges for such aircraft will be levied as per tariff applicable at the time of Exhibition.

(c) Route Navigation Facility Charges (RNFC). All aircraft landing at Yelahanka shall pay the RNFC as per tariff given in Aeronautical Information Publication (AIP)– India FAL 3-1 to 3-4.

## 2.5 Aeronautical Regulatory Authority

1. The regulatory authority responsible for civil aviation in India is the Director General of Civil Aviation (DGCA) under the Ministry of Civil Aviation.
2. **Address:** Office of the DGCA Technical Centre (Opp. Safdarjung Airport), New Delhi – 110 003
3. **Commercial Telegraphic Address:** Air Civil, New Delhi, India, Tel: +91 11 24654911, Fax: +91 11 24652760
4. Exhibitors may note that all decisions made with regard to Customer Demonstration Flights (CDF) and Display Regulations as promulgated by the Flying Display Committee are final, and strict compliance by exhibitors is required.
5. Any damage to the airport and/or airport facilities will be charged to the operator concerned.

## 2.6 Ground Handling Requirements/ Services

AI Airport Services Limited (AIASL) has been appointed as the Official Ground Handling Service Provider for AERO INDIA 2025. The details of the Ground Handling Service provider is uploaded on the Aero India website <https://aeroindia.gov.in/> and the exhibitors are/may to engage the same.

- (a) To tow their aircraft, when required, all operators are required to carry tow-bar(s).
- (b) Ground services that will be available with the Official Ground Handling Agency are listed in Form 1- Air (<http://www.aeroindia.gov.in/BookedAircraft> ). The Ground Service Unit would be located next to the Crew Briefing Unit. Exhibitors must fill up Form 1-Air online, on the above link.
- (c) Handling of cargo associated with display of aircraft on ground and in the air during Aero India 2025 would be undertaken by the Official Ground Handling Agency. This includes initial offloading and final loading of cargo/ luggage at Yelahanka. Custom formalities would be carried out by the Official Freight Forwarding Agency.
- (d) All payments related to ground handling services for aircraft would be made by the exhibitors directly to the Official Ground Handling Agency and other agencies whose services have been hired by the exhibitors.
- (e) SOP for aircraft Recovery Procedure/Salvage Operation shall be brought by the Exhibitor and handed over to ground handling team with intimation to Flight Display Director (FDD).

- (f) Details of Recovery /Salvage/Crash equipment being brought by the exhibitor must be specified.

## 2.7 Refuelling

All refueling requirements will be provided by Official Aviation Fuel Supplier for Aero India-2025. Indian Oil Corporation Limited (IOCL) has been appointed as the Official Fueling agency for AERO INDIA 2025 and the details are uploaded on the Aero India website <https://aeroindia.gov.in/> and the exhibitors are/may to engage the same.

To get your flight refueled please follow the following procedure: -

- (a) Fill a fuel order form (available with IOCL) mentioning the Type of fuel, expected off take etc. and pay in advance in INR or USD equivalent for the quantity required. IOC accepts USD and Indian Rupees for the fuel supplied. Only JET A1 (IS 1571 issue 2008) is supplied. Other requirements may be coordinated with Official Ground Handling Agency.
- (b) The posted airfield prevailing fuel cost can be obtained online. It will only be an indicative price & the rates applicable on the date of refuelling will be charged. Fuel can also be delivered against advance authorization from international fuel vendors. Aircraft neither holding cards nor with advance authorization will be required to make advance deposits equivalent in value to anticipated off take.

**Note:** Fuel prices prevailing on the date of supply will be charged. Customer can settle the fuel bills in US\$ at the prevailing exchange rate on the date of supply.

## 2.8 Flight Coordination Centre

- (a) This office will be manned by competent staff responsible for all matters relating to aircraft movements to/from VOYK. Aeronautical Information Publication (AIP) India and relevant NOTAMS will be available at this office. All forms required to be filled up before flights, e.g. Flight Notification Form, Flight Plan (FPL), etc. will be available here. A representative of the Ground Handling Agency will also be available in the Flight Coordination Centre, to facilitate necessary coordination.
- (b) It is located on the first floor of ATC tower at AFSY.

## 2.9 Search and Rescue Facilities

SAR helicopter, Air Ambulance, ALR vehicle and ambulance facilities will be available at AFSY during the Flying Display.

**Note:** In the unfortunate event of an incident / accident, the casualties picked up by the rescue team would be transferred to designated hospitals in Bengaluru in close proximity to AFSY and thereafter shifted to specialized hospitals as per requirement.

## 2.10 Flying Briefings /Debriefs

- (a) It will be mandatory for all aircrew participating in the Air Display and Customer Demonstration Flights to attend the main briefing to be held on **04<sup>th</sup> Feb 25 at 1600 hours.**

(b) Failure to attend the daily flying briefings/ debriefs, as mentioned in Section-I, shall disqualify the participants for the day.

(c) Flying Programme for Air Display/ Customer Demonstration Flights:

(i) Participants intending to carry out air display/ customer demonstration flights must obtain the approval of Flying Display Committee (FDC) and notify the FDD latest by **1500 hours on the previous day**. Detailed flying programme will be prepared by FDD and displayed on the designated notice boards by **1800 hours** daily.

(ii) All teams to nominate and provide details of contact persons to FDD on arrival.

### 2.11 Consumables (Liquid or Gaseous)

(a) Consumables would be arranged by Ground Handling Agency. Participants requiring gases may give their requirements to the Organizers, while submitting the Form1-Air. The supply of the gases will be arranged on payment.

(b) Arrangements for the supply of other consumables, such as specialty oils, lubricants etc. can also be made, provided the exhibitors specify types and quantities required within the deadline stipulated herein.

### 2.12 Telephone /Cellular Phone/Fax/Internet Services

Telephone and other communication facilities will be available on demand. For details please refer to the Exhibitor Manual. Requirements may be submitted online.

### 2.13 Security – Exhibitor/ Crew Badges and Other

(a) All Exhibitors at all times are required to wear badges issued to them during the period of Aero India-2025. Requirements of Exhibitor Badges may be submitted for the Aircraft Exhibitors online as per the Exhibitor Manual. Passport size photograph may be submitted online. Entrance to the Exhibition area will be guarded and entry will be restricted to only those who wearing the exhibitor/official **badges**. Security personnel have the right to refuse entry to any person, who does not have the authorised badges

(b) Pilots and technicians requiring access to the Flying Display Aircraft Parking Area (FDAPA) and Static Aircraft Display Area (SADA) must be in possession of the special crew pass, which is to be obtained from the Organizers. Details of such persons may be furnished in PDF Form No. 10-A along with two copies of passport size photographs with name and company written on the reverse. The Exhibition area is within the AFSY, which is a Protected Area.

(c) The entire area is well secured. Security will be provided by the Organisers.

(d) While general security measures will be ensured by the Organisers, exhibitors are advised to have a minimum of two of their own staff members at SADA/FDAPA at all times during the Exhibition hours.



(e) For CDF, exhibitors must ensure stringent security measures during the boarding of passengers. The possibility of stowaways, hijackers or terrorists embarking on the aircraft must always be borne in mind. It is the responsibility of the exhibitor that personnel on board are fully verified as bonafide potential customers or specially invited guests who are known to the exhibitor.

(f) A list of all persons on board the demonstration flight must be given to the FDC before boarding is permitted. No exception will be allowed.

## 2.14 Application /Order Forms

(a) All applications, declarations and order forms mentioned in this Manual must be submitted by the due date. Where no services are required or approval sought, the online form should be marked "Not Applicable" and submitted by due date.

(b) Care should be taken to complete these forms fully. Reference should be made to any applicable exhibitor regulation as well as supplementary regulations which may be promulgated and also any conditions mentioned in the text or forms.

(c) All forms are to be submitted online at [www.aeroindia.gov.in](http://www.aeroindia.gov.in). It would be pertinent to mention here that getting clearance for aircraft to enter the Indian air space from the DGCA / Air Headquarters, as applicable, takes approximately 20 to 25 days. Hence in order to process the forms faster as well as to avoid embarrassment at a later date, exhibitors must submit all the forms well in advance. Also, Forms which contain application for approval of Non-scheduled flights and lists of crew / passengers may be routed through the relevant country Embassy / High Commission located now at Delhi.

(d) For quick processing of forms, a sample letter to be submitted on Embassy letterhead to the Ministry of External Affairs (MEA), Government of India, along with relevant forms, is enclosed with the forms in the Manual.

**Note:** A separate set of forms are required for each aircraft to be displayed.

**SECTION III****RULES AND REGULATIONS**

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**3.1 Organisers**

Aero India-2025 is being organized by the Defence Exhibition Organisation (DEO), Department of Defence Production, Ministry of Defence (MOD), Government of India and Ministry of Civil Aviation (MoCA), in association with Indian Air Force (IAF), Defence Research and Development Organization (DRDO), and Hindustan Aeronautics Ltd. (HAL).

### 3.2 Exhibitors

- (a) To participate in the Exhibition is specific to the exhibitor and is non-transferable. No licensing or sub-licensing may be granted by the exhibitor to any other party.
- (b) Exhibits will be limited to materials, products, or services related with the Exhibition. Organizers reserve the right to determine the eligibility of any aircraft for display.
- (c) Manufacturers and/or their authorized offices in India only are permitted to be the exhibitors. Agents will not be permitted to display exhibits.

### 3.3 Validity of Contract

Contract as set out in the Exhibitor Manual and Flying Manual will be valid only after payment of full contract price. The exhibitor shall have a revocable permission to participate in the Exhibition. This agreement is not and shall not be deemed to be a lease or an agreement for lease.

### 3.4 Payments

- (a) Applications for booking of space, chalet and aircraft must be submitted on the forms supplied by the Organizers as per the deadlines stated therein.
- (b) All payments to be net of bank charges and other service charges. For foreign participants, payments in US\$ only shall be accepted. Payments be made in favour of Defence Exhibition Organisation (DEO).
- (c) Full payment must be made within 10 days of issue of the invoice.
- (d) Payments for additional services referred to in this Manual must be made to the Agencies mentioned as per state conditions.

**Note:** These details will be published in the Brochure, Exhibitor Manual and the official website [www.aeroindia.gov.in](http://www.aeroindia.gov.in).

### 3.5 Cancellations

Except as otherwise provided in the rules, no refund will be made in the event of an exhibitor deciding not to participate in the Exhibition. The following rules shall apply.

### 3.6 Clearance / Refunds

Balance amount of security deposits, wherever applicable, shall be refunded to the exhibitors after adjusting charges for services used at site at the time of according clearance on conclusion of the Exhibition. Refunds shall be made through the Organiser's bank. All exhibitors' banks shall clear their payments before departure from AFSY. Based on the clearance, a "no dues" certificate will be issued by DEO, after which aircraft will be permitted to leave AFSY.

### 3.7 Suitability of Aircraft

Exhibitors shall ensure that their aircraft types are suitable for safe operation from AFSY. Aircraft not registered and/or certified for airworthiness by the State of Registry shall not be permitted for display flying. The certificate of airworthiness of an aircraft shall be produced in original to the FDC at their office at AFSY, prior to commencement of the first sortie of the concerned aircraft. Failure to do so would disqualify the aircraft from participating in the Exhibition.

### 3.8 Radio Equipment

Participants shall note that display aircraft should have only such electronic/ telecom equipment fitted in the aircraft, which is essential for Flying Display and is capable of two-way communication with ATC units on appropriate Very High Frequencies (VHF) indicated in Section VII. No other type of equipment is permitted from security point of view. List of electronic/ telecom equipment on board should be provided to the Organizers. A backup radio set is strongly recommended.

**Note:** It may be noted that High Frequency (HF) band radio is used mainly for long range communication and cannot be used for display flying operations. Any aircraft not capable of two-way VHF communication with ATC shall not be permitted to take part in the display/ demonstration flying. For Microlight/ Ultralight aircraft without VHF communication facility, separate Flying Display slots will be provided

### 3.9 Supply of Tow-Bar

Due to multiplicity of design, shape and size of aircraft, exhibitors should bring their own tow-bars (with aircraft name marked), which are to be handed over to the Ground Handling Agency on arrival at AFSY.

### 3.10 Customs and Immigration

(a) **On Arrival** - Aircraft landing directly at Yelahanka from abroad or from an airport within India without obtaining customs/immigration/health clearance will need clearances from such authorities at Bengaluru. Customs clearance and immigration facilities will be available at AFSY.

(b) **On Departure** -The exhibitors contact the Organizers and the Official Ground Handling Agency for assistance and advice regarding final departure procedures.

No aircraft will be permitted to leave AFSY without clearance from the Defence Exhibition Organisation gate. This is to be presented to the ATC who will issue an appropriate departure clearance.

### 3.11 Responsibilities

(a) **MOD, IAF, DGCA, AAI** - The Government of India, MOD, IAF, DGCA, the Airport Authority of India (AAI) and the employees or agents of any/all of them will not be liable to any exhibitor, its servants or agents or any other persons in respect

of any loss, damage or injury direct or indirect and howsoever caused, arising out of or in any way connected with the participation or proposed participation of any exhibitor or its aircraft in Static / Flying Display, CDF or in any other aspect of the Exhibition.

(b) Each exhibitor shall indemnify the Government of India, MOD, IAF, DGCA, AAI and the employees or agents of any/ all of them, against all claims of whatsoever nature which may be made against any of them arising out of or in any way connected with aircraft, with all including without limitation, any claims made against the Government India, MOD, IAF, DGCA, AAI or any Government or regulatory agency, department, statutory board body, arising out of or in any way connected with the use of Bengaluru /or proposed Yelahanka airfield/airspace during the period of Exhibition. Exhibitor is to be in possession of valid Certificate of aircraft Registration (C of R) and Certificate of Airworthiness (C of A) issued by the appropriate authority of the country of registration for its aircraft in the static aircraft display, Flying Display, CDF and any other aspect of the exhibition. Each exhibitor shall be liable to the Government of India, MOD, IAF, DGCA and AAI and exhibitor is to ensure that in the case of a civil aircraft, the aircraft is fully airworthy for participation in the Exhibition or ownership or control or use of any International Civil Aviation Organisation (ICAO) standards exist all times during the flying activity of the aircraft, which is acceptable as per DGCA and MOD norms and is to be able to carry out all such aerial activities (including aerobatics) during the Exhibition.

(c) Each exhibitor shall be liable to the Government of India, MOD, IAF, DGCA and AAI to ensure that, in the case of military aircraft, the aircraft is fully airworthy as per Military Design Standards of the country of origin or ownership and airworthiness exists at all time during the period of Exhibition. A valid certificate of maintenance and a full or partial military clearance for operations, issued by the appropriate military authority of the Ministry of Defence of the country of origin, or manufacturer on behalf of military authority/agency, and that such certificate covers all such aerial activity (including aerobatics) to be carried out during the exhibition.

(d) Each exhibitor shall indemnify and hold harmless the Government of India, MOD, IAF, DGCA and AAI for any claim or expenses arising out of the non-airworthiness of the aircraft participating in the exhibition.

### **3.12 Insurance**

(a) The exhibitor shall take third party liability insurance policy in connection with the participation of its aircraft in the static/Flying Display, CDF or any other aspect of the Exhibition for a minimum amount of Rs.100 million per accident or its equivalent in US\$.

(b) Such insurance policy shall be taken in the names of the exhibitor with the Government of India, MOD, IAF, DGCA, HAL and AAI, as additional assured with a cross liability provision whereby, subject always to the policy limit of the liability, the additional assured will receive protection from policy in the same manner as though a separate policy had been issued to each.

(c) Insurance company will indemnify the exhibitors against their legal liability to pay any expenses anywhere in India, in accordance with Indian Law.

(d) Loss, without compensation including claimant's costs, fee right of contribution from any other insurance, which may be available to the additional assured.

(e) It is hereby understood and agreed that in connection with AERO Exhibition / Flying Display organized by MOD to be held at AFSY from 10<sup>th</sup> to 14<sup>th</sup> Feb 2025, subject the policy coverage and policy limits, the insurers shall indemnify the insured and the Government of India, MOD, IAF, DGCA, HAL, AAI against public liability arising under any regulation incorporated in any agreement between the insured and MOD but excluding: Loss or damage to the aircraft loaned. Any charge for the loan of the aircraft.

(f) No tickets or passes or invitations of admission shall be required to contain any disclaimer of liability.

(g) In respect of accidents arising while the insured aircraft are operating from any airfield in India during the period of Exhibition or whilst the aircraft are flying between their home base and Yelahanka enroute to participate in the Exhibition or returning to their base from the Exhibition, if any party suffers death, body injury or damage to personal effects caused by an Aircraft insured by this policy, the insurers without raising as a defence.

(i) That the insured were not legally the owners of any aircraft loaned to the insured. OR

(ii) That spectators voluntarily accept the risk of injury or damage or are in any worse legal position than ordinary way fares. Any other purely technical defence, will pay compensation in respect of any one person up to an amount not exceeding Rs. one million which is considered adequate taking into consideration any contributory negligence, provided that if any third party refuses to accept the amount of compensation offered, then the insurer shall not be liable under the policy to make any payment in respect of the claimant.

(iii) Except as expressly stated, this endorsement is subject to the terms and conditions of the Policy.

(iv) Proposal for Aviation Insurance.

(v) It is the duty of the exhibitor to provide the proof of acceptance of liability in the terms stated above for all military/civil aircraft whether loaned or entered by a Government.

(vi) The insurance policy in connection with the aircraft participating in static/Flying Display or CDF, shall be produced in original at the office of the FDC failing which the exhibitor would be disqualified from participation.

### **3.13 Display of Military Aircraft Equipment**

Exhibitors must ensure that full details of military aircraft are made known to the MoD through PDF Form 4-Air. If weaponry is to accompany the aircraft, then PDF Form 5-Air

is also to be completed and the declaration signed. Any weaponry displayed around or under an aircraft, must have been declared by the exhibitor in Form 5-Air and cleared for import into India for display by the Organizers. Failure to provide the declaration and details on PDF Form 5-Air will result in delay, or even dis-allowance to display.

A special team constituted by FDC would be co-located at the Customs Office at AFSY for clearing the Static/Flying Display of military equipment or weaponry. This team may visit the SADA or FDAPA before the Exhibition and check the exhibits against the listing stated in PDF Form 5-Air. All inert rockets, bombs, dummy projectiles and other items of weaponry must be clearly marked "INERT" in easily readable font. No live ammunition, mines, missiles, bombs, propellant charges, etc. are permitted under any circumstances.

### **3.14 Restrictions on Aerial Photography**

- (a) Any aircraft equipped with on-board cameras must have these cameras disabled before arriving in India and whilst in India.
- (b) Rules on use of drones for aerial photography at the venue will be conveyed through a separate notification.

### **3.15 Restrictions on Ground Photography**

Restriction on ground photography will be as per promulgated guidelines.

### **3.16 Clearance of Foreign Military Aircraft**

The Organizers will inform Air Headquarters (IAF) for military aircraft flying into India for the sole purpose of participating in Aero India-2025. Further clearance/modalities would be undertaken by the ACAS (Int), Air HQ. For early clearance, please route your PDF Forms No. 9, 10 & 11 – Air through your Embassy/High Commission in India.

### **3.17 Tarmac Damage**

All exhibitors of aircraft are advised to place drip trays in position at all times. Exhibitors will be charged for any damage caused to the tarmac due to oil/ fuel leakage from the aircraft as determined by MOD, IAF or AAI.

### **3.18 No Smoking Area**

Parking areas of Flying Display or Static display aircraft, Vehicle parking as well as exhibition hangars / areas are strictly "No Smoking" areas. Smoking in public is prohibited by law in India and may be carried out at designated smoking zones, which will be properly marked.

### **3.19 Fire Services**

Aircraft Rescue and Fire Fighting services would be available during ATC watch hours only. Other fire services would be available near the site of the Exhibition.

### **3.20 Round The Clock Notification of Person On Board Aircraft**

Before any flight is made during the period of Exhibition, the details of persons on board along with their nationalities, gender and age are to be given to the FCC. At the time of start-up, the pilot shall pass number of persons on board to Aerodrome Control on Radio Telephony (R/T). For arrivals and departures, requisite clearances will be obtained by the aircraft from the FDC, only then the aircraft will be permitted to land or take off from Yelahanka.

### **3.21 Presence of Aircraft Throughout Exhibition**

It is a condition of acceptance for participation in the Exhibition, that exhibitors must agree to their aircraft remaining in the SADA or any other area allotted to them throughout the period of the Exhibition. Premature removal will not be permitted unless under exceptional circumstances. As a part of the departure process, all pilots are required to complete a departure form in the FCC which is required to be endorsed by Director, Defence Exhibition Organisation.

### **3.22 Departure of Aircraft**

Exhibitors have to vacate the Exhibition site latest by 1600H on 16<sup>th</sup> February 2025. Aircraft remaining thereafter will be liable to additional charges such as landing & housing charges. International departures must comply with normal out bound procedures such as customs/ immigration / health clearances etc.



**SECTION IV**

<b>STATIC AIRCRAFT DISPLAY</b>		
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Exhibitors who have applied to the Organizers for **Static Display only**, are required to present their aircraft at AFSY between 0800 hours on 05<sup>th</sup> Feb 2025 and 1600 hours on 08<sup>th</sup> Feb 2025.

**Notes:** Aircraft arriving for Static Display before **05<sup>th</sup> Feb 2025** need to take clearance from AF Stn, Yelahanka before planning their arrival.

In order to facilitate the entry and exit of aircraft engaged in CDF or Flying Display, the positioning of aircraft in SADA will be at the discretion of FDC. Aircraft solely on Static Display will be positioned to the Southern dispersal, away from the south parallel taxiway. Exhibitors must indicate on Form 1 ([www.aeroindia.gov.in/Login](http://www.aeroindia.gov.in/Login)) for civil and military aircraft respectively, whether their aircraft is on Static Display only or is also being utilized for Flying Display. To facilitate the clearance of incoming aircraft, exhibitors should ensure that all flight plans contain the following information. This applies particularly to the last flight plan filed in the event of an intermediate stop. The owner or operator is to be entered in the appropriate column. Under "Remarks," enter "Participating in Aero India-2025."

Exhibitors should complete PDF Form 7-Air (A) and Form 7-Air (B). The information above refers only to participating aircraft, and not support aircraft.

**4.2 Static Aircraft Display Area (SADA)**

The SADA is located to the south of Yelahanka Runway. Two aircraft dispersals (aprons) have been earmarked at SADA (refer site plan on the last page of this manual). Aircraft will be available for viewing by visitors in the SADA. However, aircraft may be removed to take part in the Flying Display or Customer Demonstration Flights. Under no circumstances are exhibitors allowed to park vehicles, caravans, mobile stands, construct temporary buildings in the SADA, or place packing material in this area. All movements into and out of the SADA will be carried out by the Ground Handling Agency who must be notified the day before the arrival of the aircraft and also the intended time for moving out. The SADA lies in the prohibited area of AFSY.

- (a) Unauthorized personnel are not permitted within this prohibited area, which is guarded by security personnel.
- (b) Exhibitors are advised to read Section II Para 2.13, on the subject of security in the SADA. The SADA is strictly a "No Smoking Area" and no refuelling is permitted on the site.

**SECTION – V****CUSTOMER DEMONSTRATION**

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**5.1 Customer Demonstration Flights (CDF)**

(a) Flights for the purpose of demonstrating the aircraft to potential customers, press, publicity and other purposes will be possible on each of the Exhibition days outside the flying display time blocks (refer Section-I).

(b) AFSY Airport will remain open for normal traffic throughout the exhibition, except for the period when the Flying Displays are taking place. Practice flights and CDF must, therefore, be coordinated to fit in with the scheduled arrivals and departures. The time allocated for CDF on different days is mentioned in Section-I. CDF may also be permitted after 1700 hrs up to last landing time at Yelahanka based on specific request. Flight plans must be submitted to the FDC and FCC for approval on a special form available at the location.

**2 Regulations Governing Customer Demonstration Flights****(a) Fixed Wing Aircraft–**

(i) Aircraft which are presented for Static Display during the initial days of the Aero India-2025 and are required to undertake CDF subsequently would be towed from the SADA to the appropriate apron on the eve of their demonstration flight. The exhibitors should indicate such a requirement for towing their aircraft in Form1-Air.

(ii) All aircraft departing from their allocated parking position may do so only after appropriate clearance has been given by the ATC at AFSY. The relevant airfield procedures (including R/T calls) are given in the “ATC Procedures” (Section-VII).

(iii) CDF may be conducted in the designated sectors. Aircraft not equipped with DVOR receiver would maintain within the sector radials centred on Yelahanka NDB. Instrument Flight Rules (IFR) and Visual Flight Rules (VFR) flights for civil as well as military aircraft would be conducted only in the designated airspace sectors for Aero India 2025.

**Procedures would be briefed during the Main Briefing on 04<sup>th</sup> Feb 25.**

(iv) Exhibitors intending to carry out CDF are required to submit their FPL to the FCC on the evening prior to their demonstration flights. CDF will be made available on a first-come-first-served basis. Submission of multiple flight plans for CDF will be acceptable.

(v) Flight crew members are to familiarize themselves and comply with the rules and regulations applicable for flying within Indian Air Space.

**(b) Rotary Wing Aircraft–**

(i) All rotary wing aircraft, which are intended to be flown for CDF, would be parked at Apron C. Helicopters which are presented for Static Display during the initial days of the Aero India-2025 and required for CDF subsequently would be towed from the SADA to the appropriate apron. The exhibitors should indicate such a requirement for towing their aircraft in Form1-Air.

(ii) The relevant airfield procedures are given in the ATC Procedures (Section VII). The sectors allotted for CDF of rotary wing aircraft are in restricted area VOR 185 B and 185 C. The upper limit in these sectors is 6000 Ft. If higher operating levels are required, then the aircraft would proceed to restricted area VOR 185D (fixed wing acft sectors).

(iii) No attempt is to be made to enter the runway for a take-off until positive ATC clearance has been obtained.

**(c) Microlight/ Ultralight Aircraft**

Microlight/ Ultralight aircraft intended to be flown during Aero India-2025 would be parked at Apron C. Specific time slots would be allotted for the demonstration flights of microlight / ultralight aircraft. Considering that some of these aircraft may not be equipped with radio communication facilities, it is of utmost importance that the pilots of these aircraft strictly adhere to their departure and arrival times.

**SECTION – VI****PROGRAMME FOR FLYING DISPLAY**

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**1 Introduction**

Exhibitors who wish their aircraft to be considered for the Flying Display must first make an application to the Organizers and submit their proposed display sequence to the FDD. The proposed sequence should be in the form of a written description together with a three dimensional ribbon diagram. Landing and take-off manoeuvres can be seen from the viewing areas and thus, may be included in the sequence. If accepted, exhibitors must ensure their aircraft and pilots arrive in time and are present for the main briefing at **1600H on 04<sup>th</sup> Feb 2025** which precedes practice days of **05<sup>th</sup> Feb to 8<sup>th</sup> Feb 25 (inclusive)**. Pilots who have flown in on the same day may need rest and their aircraft may need maintenance before commencing practice flights. Teams must cater to this aspect.

**6.2 Arrival of Aircraft**

Aircraft participating in the Flying Display should arrive at AFSY latest by **1200 hrs of 04<sup>th</sup> Feb 2025**. The main briefing for all display flying will take place at **1600 hours on 04<sup>th</sup> Feb 2025**. Exhibitors should complete Form 7-Air (A) & Form 7- Air (B). Teams may cater for maintenance before commencing practice flights.

**6.3 Flying Display Programme**

Flying Display Programme is shown in Section I. In view of the limited number of display slots available during the periods, it is expected that the demand will be high. Only exhibitors who have applied to the Organizers by completing PDF Form 4- Air and have submitted other relevant documents by **10<sup>th</sup> January 25** at the latest, will be considered for participation. There will be no additional charges for participation in Flying Display but

the FDD reserves the right to decide which aircraft will be accepted for inclusion, the order and duration of flying and to impose restrictions on the display content as they deem fit. The time allocated by the FDD to each aircraft for display within the Flying Display Programme will be sufficient for an interesting and convincing demonstration.

## **6.4 Regulations Governing Flying Displays**

### (a) Control of the Presentation of aircraft: -

(i) Control of Flying Display Aircraft is vested in the FDC. Exhibitors presenting aircraft and their pilots must comply with Exhibition regulations governing the presentation and flying of aircraft and all subsequent instructions issued by the FDC. The Organizers reserve the right to change and interpret any regulation governing the presentation and flying of aircraft. The FDD is empowered to withdraw the Flying Display approval of any pilot who disregards instructions or disobeys the regulations. During the Flying Display, positive control will be exercised by the FDD at all times, on frequency as per para 7.9. The authority of the FDD is absolute in that instructions given in the interest of safety are mandatory and must be complied with immediately.

(ii) Control of flying will be exercised on R/T using English language and all pilots participating in the presentation of aircraft must be adequately fluent in this language. Briefing/ debrief for all pilots taking part in the Flying Display will be held daily. These briefings will be conducted in English. A notice board showing the daily flying programme with times for engine start, taxi, take offs and landings will be available at Flight Operation Centre, FCC and FDC Office by 1900 hours.

(iii) A copy of the day's flying programme would be sent by email to all the participating crew.

(iv) Exhibitors must comply with all Indian statutory requirements and regulations applicable to their presentation of aircraft.

(v) Exhibitors must submit evidence to the Organizers that each aircraft has valid Certificate of Registration and Certificate of Airworthiness, or equivalent military approvals recognized as valid in India which do not prohibit public Exhibition (see Para 3.7 of Section-III).

(vi) All the participants must mention the minimum visibility and cloud base for carrying out both fair weather and bad weather Flying Displays.

### (b) Other Mandatory Requirements

(i) No live ammunition, rockets or bombs, external tanks containing fuel, or radioactive material may be displayed with aircraft in the SADA nor carried on aircraft during the Flying Display. No equipment transmitting powerful electromagnetic signals or lasers shall be operated during the flight or the static display.

(ii) On board cameras, if fitted, must be immobilized during all flying in India, including the Flying Display and practice flights.

- (iii) The use of smoke is permitted during the Flying Displays.
- (iv) Exhibitors are responsible for ensuring that their nominated pilots are adequately qualified to undertake all flying activities of display as well as CDF. All participating crew shall report to FDD prior to commencement of practices.
- (v) Clearance of flying display by individual pilots will be subject to the approval of the FDD after having seen the flying display practice. On approval of the display programme by the FDD, pilots shall provide a written undertaking that flight display will conform in every respect to the approved demonstration. Forms for this purpose will be provided by the office of FDD, in which all manoeuvres shall be listed by the owner of the demonstrating aircraft.
- (vi) The FDD reserves the right to exclude any particular manoeuvres or the complete Flying Display. In the latter case, a revised Flying Display shall be demonstrated to the satisfaction of the FDD before the aircraft can participate in the Flying Display. A Flying Display revised at the request of the FDD, or by the pilot, must not include any manoeuvres or linking manoeuvres not previously authorized by the FDD. Although the sequence of the individual display may be changed with the approval of the FDD, it may not be possible to arrange further demonstration(s) for the FDD in the time available. The FDD is solely empowered to decide on the inclusion or exclusion of the aircraft from the Flying Display in such cases.

## 6.5 Flying Limitations during the Flying Display

During the Flying Display, it is the intention of the FDD to permit skilful and convincing displays, but flight safety and the safety of the public are of paramount importance. Only manoeuvres consistent with the designed role of the aircraft shall be permitted. The following rules are to be complied with during practice flying as well as in the Flying Display:-

- (a) The minimum height for straight and level fly pasts is **300 ft above ground level (AGL)**, provided the aircraft is clear of any constructed structure by **800 ft** laterally and **300 ft** vertically.
- (b) The minimum height for all other manoeuvres including fly past is **500 ft AGL**. However, all pilots are to note that manoeuvres in the looping plane which involve pulling through the vertical must be completed higher than **500 ft (AOL)**.
- (c) The minimum height for all helicopters is **150 ft AOL**. Helicopters are not permitted to perform more than one rolling manoeuvre during any one pass.
- (d) The above quoted heights are to be observed as minimum separation distances (MSD) from any structure on the surface/land. The MSD is defined as the distance between the lowest part of an aircraft and the highest point of any surface obstacle in the aircraft path. The aircraft must remain within the designated display zone at all times, except for take-off and landing. Breach of this regulation may lead to immediate exclusion.

- (e) A multi-engine aircraft must not fly below the speed at which it is not possible to climb away, without change of configuration, should any engine fail to respond to an acceleration demand.
- (f) Engines **are not to be shut down** during Flying Display.
- (g) Aircraft should not be flown outside the aircraft's proven limitations and must not exceed flying speeds of M 0.95".
- (h) No manoeuvre is to be attempted which is likely to jeopardize the safety of spectators in the event of mishap or mis-judgement. Only manoeuvres which have been validated by the FDD shall be performed.
- (j) Whilst carrying suspended loads, helicopters must not be flown within such proximity to personnel, aircraft or buildings that hazard would be caused if the load were to become detached or control difficulties be experienced.
- (k) The aircraft shall not cross the foul line (**Southern Edge** of the runway) towards the viewers at any altitude. Spectators shall strictly not to be over flown, at any altitude.

#### **Notes:**

1. The above limitations may be superseded by more stringent limitations, if any, imposed by national authorities, manufacturer or other operational authorities.
2. The FDD may impose increased limitations on individual aircraft at their discretion.
3. Dispensations will only be given in exceptional circumstance.
4. Helicopter aerobatics are permitted only by those helicopters which have a certified capability proven to the satisfaction of the FDD.
5. Breach of flying discipline will result in termination of the current flying display. Series of breaches during the Exhibition will result in complete suspension. Pilots taking part in the display must attend the daily briefing held at the Flight Operations Centre (FOC) at **0800 hours** and present themselves for individual debrief to the FDD post completion of the display block.

### **6.6 Description of Flying Displays**

- (a) Exhibitors presenting aircraft in the Flying Display must submit for each aircraft, a full written description, with accompanying sketches in the form of a three dimensional ribbon diagram of the flight manoeuvres and linking manoeuvres to be used in the proposed display in both good and bad weather conditions. Should it subsequently become necessary to change or reduce the length of the flight display, only those manoeuvres shown may be performed.
- (b) Good weather conditions, when the display is permitted, are defined as cloud base at 5,000 ft, visibility 8 km and vertical & horizontal clearance from clouds of 1000 Ft.

(c) Bad weather conditions, when the display is permitted, are defined as cloud base at 3000 ft, visibility 5 km and vertical & horizontal clearance from clouds of 1000 Ft. Flying Display will not be permitted in weather conditions which are more adverse than that given for bad weather. However, horizontal profiles may be permitted by the FDD.

(d) The FDD will decide on the appropriate display after considering the prevailing weather conditions. The description of the Flying Display should commence with entry into the display area at a minimum height of 500 ft AOL after take-off from Yelahanka Runway (RW) 09 or 27, and the timing of the display would be considered from the take off to landing.

## 6.7 Briefing, Practice, Validation and Rehearsal of Flying Display

### (a) Briefing for Flying Display Practice

(i) The Main briefing will be held at the Exhibition site in the FOC, AFSY for all participating air crew in the Flying Display on 04<sup>th</sup> Feb 2025 at 1600H. The presence of all participating pilots (including reserve pilots) at this briefing is mandatory.

(ii) Inability to attend these briefings will result in the display pilot not being allowed to participate in the practice sessions, or the display itself.

(iii) All briefings/ debriefs will be held at Flight Operations Centre, AFSY. A full schedule of all briefings is as follows:

Description	Day and Date	Time
Main Briefing	Tuesday, 04 <sup>th</sup> Feb 2025	1600 hours
Daily Briefing/ Debrief	05 <sup>th</sup> Feb 2025 – 14 <sup>th</sup> Feb 2025	0800 hours and Post Display

### (b) Individual Practice

(i) Pilots of all participating aircraft are encouraged to carry out individual practice of their display from 05<sup>th</sup> February to 8<sup>th</sup> February, 2025 at VOYK. Practice sessions will be coordinated by the FDD.

(ii) Exhibitors are to make known individual practice requirements along with their flying display profiles / CDF profiles to the FDD as early as practicable (latest by Main Briefing at 1600H on 04<sup>th</sup> Feb 2025).

(iii) Flight profile in tabular form and ribbon diagram should be sent to FDD through e-mail in advance. This should also indicate the total display time from Take Off to Landing.

(iv) The time allotted may be modified by the FDD, depending on the number of participants. The decision of FDD would be binding and all participants would have to modify their profiles accordingly.



(c) Validation

(i) Prior to the opening of AERO INDIA-2025, a demonstration must be given before the FDD of the intended Flying Display previously described in writing. The demonstration is known as validation.

(ii) Where more than one pilot is nominated to fly an aircraft in the Flying Display during the period of the Exhibition, the FDD will require each pilot to validate the flight display. Once approved by the FDD, this demonstration cannot be changed without the express approval of the FDD.

(iii) Exhibitors are reminded of the requirement to file the list of all persons on board with the FDD before each flight, including the Flying Display, as specified in Section III of this Manual.

(d) Rehearsals

(i) A full scale rehearsal of participating aircraft whose pilots have successfully completed the qualification procedure will be carried out on 8<sup>th</sup> Feb 2025 at 0900 hours, with an alternative plan at 1400 hours on the same day or at 0900 hours next day as practicable, in the event of unsuitable weather or an unsatisfactory rehearsal. The purpose of the rehearsal is to enable both the pilot and the FDD to become accustomed to the sequence of the display including the actual flight manoeuvres of the aircraft preceding and following their own.

(ii) Exhibitors shall forward the details of commentary to be made during the Flying Display.

(iii) Failure to participate in at least one full-scale rehearsal display will disqualify pilots from participating in the actual displays

## **6.8 Terminology to be used during the Flying Display**

The general R/T terminology to be used during the Aero India 2025 is given in the "ATC Procedures" (Section VII)

## **6.9 Restrictions on Persons on Board (POB) During Flying Displays**

Only those persons performing the essential functions of flight crew members of an aircraft are to board an aircraft during Flying Display, including practice and validation. No passengers are to be carried during Flying Displays and practice sessions.

**SECTION VII****ATC PROCEDURES**

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**7.1 Aim**

To provide all relevant information to operators, to facilitate planning and display of their aircraft/ products effectively at AFSY.

**7.2 Parking Facilities**

A general layout plan of AFSY is given on the last page. Aircraft parking areas are indicated for aircraft taking part in Flying Display and Static Display.

**7.3 Display Information**

All activities connected with the Flying Display will be controlled and coordinated by the FDD.

## 7.4 Flight Coordination Centre (FCC)

FCC will provide all necessary information regarding flight planning, briefing, local flying and general ATC procedures. The FCC will be located in the ATC premises.

## 7.5 Official Ground Handling

In coordination with surface movement control / Aerodrome Control, official ground handling agency would arrange for the ground movement/ refuelling of aircraft (see para 2.6 & 2.7 of Section II for details of the Agency). Any technical assistance as requested by crew/ operator will be provided by this agency.

## 7.6 Airfield Information

(a)	Yelahanka Aerodrome Co-ordinates (ARP)		130811.16 N 0773632.36E	
(b)	Elevation		3047 ft (927.8m)	
(c)	Runway	09R/27L	8004 ft x150 ft	
(d)	Pavement Classification Number		Rigid-63 Flexible-80	
(e)	<b>Distances</b>		<b>RW 09</b>	<b>RW 27</b>
	Take Off Run Available (TORA)		8004 ft	8004 ft
	Take Off Distance Available (TODA)		8200 ft	8499 ft
	Available Landing Distance Available (LDA)		7707 ft	7485 ft
	Accelerate Stop Distance (ASDA)		8200ft	8499 ft
	Over-Run Area		196 ft	495 ft

**Landing threshold for Runway 09 is permanently displaced by 297 ft due to ILS Localizer antenna on approach. Landing threshold for Runway 27 is permanently displaced by 519 ft due to presence of National Highway-44 (NH-44) on approach.**

- (f) Runway Markings (standard markings as per ICAO Anex-14).
- (g) Airfield Lighting: -
  - (i) Runway edge lights – High Intensity Runway Lights installed as elevated light units on runway edges, 60m apart, as per standard colour and intensity configuration.
  - (ii) Taxi way edge lights – Standard blue elevated light units installed.
  - (iii) Precision Approach Path Indicator (PAPI) – PAPI for Runway 27 is installed on the right shoulder and for RW 09 on the left shoulder. Approach slope angle is set at 3<sup>0</sup>.

(iv) Approach Lights – Cat-II approach lights are installed for runway 27 upto 900m from threshold. (Approach centre line light units are not available at 330m and 360m from threshold due to presence of highway). Simple Approach Lighting System of 420 m length is available for runway 09.

(v) Aerodrome Beacon (alternating white & green; RPM – 12)

(vi) Threshold lights and runway end lights are available.

(h) Gradient of Runway Surface at AFSY Average Slope Segment wise RW 09 extremity to 375 m = +0.78 degree; 375 m to 765 m = +0.54 degree; 765 m to 1500 m = +0.51 degree; 1500 m to 2100 m = + 1.07 degree.

## 7.7 Aerodrome Obstructions

Ser No.	Obstructions	Bearing/ Dist (NM)	Elevation	Elevation
			(AMSL in Feet)	(AMSL in Mtr)
1.	Hangars (North)	020°/0.08	3068	935
2.	Bethalsuru Hill	028°/1.5	3338	1017
3.	Huttanahalli	047°/2.7	3072	938
4.	NDB Mast	257°/1.6	3104	946
5.	North Disp Light	330°/180 m	3109	948
6.	North Disp Light	310°/250 m	3109	948
7.	Water Tank (near PO)	115°/0.6	3108	947
8.	Water tank (Domestic Area)	115°/1.0	3115	949
9.	ATC Tower	175°/250 m	3109	948
10.	SRE ATCR 33S	356°/0.61	3135	956
11.	ASTRA IDL Chimney	180°/2.3	3125	968
12.	WCDMA Tower near NDB	248/1.66	3170	966
13.	WCDMA Tower near Dog Squad	152°/ 0.37	3173	967
14.	Hangars South	177°/0.5	3111	948
15.	'A' hangar	180°/0.5 NM	3142	952
16.	'E' hangar	177°/0.5 NM	3115	948
17.	Ecopolis Building (Gulf oil)	148°/0.9	3192	978
18.	Signal tower on Hill top	023°/1.4 NM	3283	1001
19.	Ramky Estates Residential Building	269°/2.3	3120	951

20.	Shri Prop Building	268°/2.26	3111	949
21.	Power Grid Corp. Tx Lines	287° to 307°/ 3.45 – 7 NM	3291	1003
22.	M/s Prestige Estates	276°/1.23	3153	961
23.	Signal Tower on Hill Top	023°/1.43	3285	1001
24.	M/s Vijram Estates	273°/2.33	3101	945
25.	Yelahanka Chimney	198°/2.6	3075	937
26.	Water tank (Wheel & Axle)	198°/2.6	3075	937
27.	KPCL Chimney / Crane	218°/1.99	3185	971
28.	Spice tower(from 27 db)	192°/1.0	3209	978
29.	Hutch tower(from 27 db)	015°/1.1	3209	978
30.	Reliance Tower(from 27 db)	018°/0.6	3183	970
31.	Shobha Developers	258°/2.0	3150	960
32.	Canara Housing Proj. Ltd	247°/2.0	3193	973
33.	MWT at Domestic Area	125°/0.5 NM	3160	964
<b>Within 10 NMs</b>				
1.	TV Tower at Bengaluru	187°/8.1	3521	1073
2.	High Ground	270 °/10.0	3445	1050
3.	Group of signal tower at high ground	315 °/9.9	3363	1025
4.	MWT in group signal tower	311°/9.9	3363	1025
5.	MWT at Tagor Nagar	186°/7.0	3347	1020
6.	MWT at Banshankari	186°/9.1	3363	1025
7.	MWT at Bengaluru city	186°/9.5	3347	1020
8.	MWT at Bengaluru	206°/7.6	3314	1010
9.	Kundana Hills	012°/7.5	3304	1007
10.	MWT at Chokkasandra	222°/7.5	3297	1005
<b>Within 25 NMs</b>				
1.	MWT on Hill Top Nandi Hill	018°/14.5	4902	1494
2.	Sivaganga Hills	274°/23.0	4548	1386
3.	High terrain near Magadi	237°/23.0	4023	1226
4.	MWT at Bengaluru	188°/13.9	3363	1025

5.	MWT at Bengaluru City	186°/10.1	3346	1020
6.	MWT at Timmondyakar	284°/21.3	3330	1015
7.	MWT at Building Top	180°/10.2	3298	1004
8.	MWT at Along Road	259°/23.3	3293	1004
9.	MWT Chikballapur	022°/19.0	3281	1000
10.	MWT at Chintamani Hill Top	059°/30.3	3281	1000
11.	Knoll	277°/13.3 NM	3250	990
12.	Hemapura Hill	270°/18.7 NM	3350	1021
13.	Adrangipura Hill	272°.23 NM	4500	1371
14.	Ajjahelli Hill	268°/24.2 NM	3350	1021
15.	Chillur Hill	257°/25 NM	3600	1433
16.	Savandurga Hill	235°/22.4	4700	1097

### 7.8 Navigational Aids and Landing Aids

Yelahanka NDB	223 KHz	Code(YH)
Yelahanka ILS RW 27/DME	108.7 MHz	Glidepath 330.5 MHz
Yelahanka DVOR/DME	117.0 MHz	Code (YLK)
Yelahanka SRE ATCR33S (Approach radar)	Available on frequency 122.9 MHz	
Bengaluru International Airport ARSR ATCR33S (VOBL)	Available on frequency 127.75 MHz	
HAL Bengaluru ARSR (VOBG)	Available on frequency 127.7 MHz	

### 7.9 RT Frequencies

<b>Flying Display / Yelahanka Aerodrome (VOYK)</b>	
Pre-flight Procedure / Surface Movement	120.2 MHz
Flying Display (Main)	120.8 MHz
Flying Display (Stand by)	122.150 MHz
Yelahanka Approach	122.9 MHz
Yelahanka Aerodrome Control Tower	120.9 MHz
<b>Bengaluru International Airport (VOBL)</b>	
Bengaluru Approach	127.75 MHz
Bengaluru Control (Area)	119.45 MHz
<b>HAL Bengaluru (VOBG)</b>	
HAL Approach	127.7 MHz

Air Traffic Services in Yelahanka LFA (VOR 185 A, B, C and D) is provided by Yelahanka Approach. Approach control service for en-route traffic arriving from / proceeding towards North is provided by Bengaluru / Bangalore International Airport on 127.75 MHz. Approach control service for en-route traffic arriving from / proceeding towards South is provided by HAL Bengaluru on 127.7 MHz

## 7.10 Local Flying Restrictions

- (a) Circuit Pattern VOYK : Right hand circuit for runway 09 and left hand circuit for runway 27.
- (b) Restricted Airspaces, Controlling Unit & Frequency
- (i) VOYK Local Flying Area (LFA)      VOR 185-A, 185-B, 185-C & 185-D  
Yelahanka Approach 122.9MHz,  
Yelahanka Tower-120.9 MHz
- (ii) VOBG Local Flying Area (LFA)      VOR 181-A & 181-B  
HAL Approach (127.7 MHz)
- (iii) Danger area (VOD179 A & B), active only when notified by NOTAM
- (c) ATC Procedure and Operations
- (i) For the conduct of flypast and flying displays the airspace reserved would be as follows: -
- Horizontal Limits - From 5 NM to 30 NM between radials 300 and 060 from BBG (HAL DVOR).** No manoeuvres permitted over BIAL runway.
- Vertical Limits-** Ground level to **FL 200** on rehearsal days and 10 Feb 24. On other days Ground Level to **FL 150**.
- All operators are to refer to NOTAM that will be issued for Airspace Reservation for Air Show.
- (ii) **Rehearsal Flights.** Pilots shall obtain a time slot for their rehearsal flights by notifying their flight plan to FDD and the time slot allocated by FDD must be adhered to. Changes, if any, would be with the approval of FDD.
- (iii) Movement of pedestrians or vehicles at Yelahanka Aerodrome on manoeuvring area shall be governed by procedure promulgated in ICAO Doc 4444 Chapter-7 Section 7.6.3.2.1

*“The movement of pedestrians or vehicles on the manoeuvring area shall be subject to authorization by Aerodrome Control tower. Persons, including drivers of vehicles, shall be required to obtain authorization from ATC tower before entry to the manoeuvring area. Notwithstanding such an authorization, entry to runway or runway strip or change in the operation authorized shall be subject to further specific authorization by Aerodrome Control Tower.”*

**Note:** As far as possible, ATC procedures will be the same as for the actual display and the rehearsal flying.

### 7.11 Timing

Time allowed for display will be measured from wheels roll for take-off or entry into display area (if the aircraft was over holding pt) till the aircraft touches down after completing the display.

### 7.12 Taxi Holding Point

Runway 09/27 – Short of Dumbbell 09/ 27 as marked on the taxi way. Note: As per prevailing wind pattern **runway 09 is likely to be in use.**

### 7.13 R/T

#### (a) R/T Procedure

- (i) The first contact (at least 15 minutes before take - off) is to be made on pre- flight procedure & surface movement frequency using the air show call sign. ATC will pass Altimeter Setting (QNH), temperature prevailing surface winds and runway in use. This call is only to confirm to the tower that the aircraft is ready to perform the flight as planned and concurred. Start-up will be at the crew's discretion.
- (ii) Taxi clearance will be on the same frequency. After obtaining clearance, the pilot will taxi to the runway holding point for the runway in use. At taxi holding point, pilot is to change over to FDD frequency and maintain listening watch. Pilot can ask for line-up after "cleared to land" call for preceding aircraft, and line-up behind the landing aircraft accordingly. In case of any doubt, ask on RT. Clearance for Line-up and Take off will be with the Air Traffic Controller. The entire display, from take-off to landing is to be carried out on the Main Display Frequency.
- (iii) During the display the FDD will give "2 minutes" and "1 minute remaining" calls, which shall be acknowledged by the pilot
- (iv) After Display completion, FDD will hand over the aircraft to Tower for recovery and landing. Down Wind call is to mandatorily include the call sign/ type of ac coming in to land. Tower shall acknowledge this call with prevailing surface wind and provide landing clearance before the aircraft approaches on final / or on final.
- (v) After vacating runway, the pilot will change over to surface movement frequency and taxi back to parking area as briefed. If required, revised instructions would be passed on R/T by the ATC.

### 7.14 Visual Holding Point

Display aircraft that intend to get airborne and hold in the air till their allotted time slot, would maintain with VOYK approach. This is to be indicated to FDD, in advance.



### 7.15 Run in Direction

Run-in-Direction for the display manoeuvres will be along the runway axis (East/West) and all further manoeuvres will be to the North of runway. All manoeuvres should be conducted without violating the foul line of VOYK (in such a manner that the display aircraft's flight path is along runway centre line). The Flying Display is expected to be concluded within the allotted display timing. R/T transmissions will be kept to the minimum so that the pilots may concentrate on Flying Display with minimum distraction. Minimum R/T transmission will be satisfactorily achieved only if the participants in the Flying Display adhere strictly to ATC briefing.

### 7.16 Customer Demonstration Flying (CDF)

- (a) Aircraft intending to carry out CDF and having been cleared by the FDD for the conduct of the same, shall notify the FCC by filing of FPL at least one hour prior to Expected Time of Departure (ETD) and obtain necessary clearance from the FCC.
- (b) All customer demonstration flights shall normally be conducted in VOR 185 D. However, VOR 181A or 181B could also be allotted. Allotment of sectors would be based on the density of traffic, nature of operation and operating level. Helicopter flights will be in VOR 185 B or 185 C.
- (c) Helicopters intending to use higher levels would be accommodated.

### 7.17 Diversion

- The participating pilot shall indicate the intended diversion airfield in the FPL. If the aircraft wishes to divert or is instructed to divert, Yelahanka shall issue necessary clearance (track and flight level) to proceed to the diversionary airfield. Information on the diversionary airfield will be available at the ATC Briefing/Operations Room.
- The following airfields are designated as diversion airfields: -

<u>Ser No</u>	<u>Obsutructi ons</u>	<u>Hal Bengaluru VOBG</u>	<u>Bengaluru International VOBL</u>	<u>Chennai VOMM</u>
1.	Location	12 <sup>0</sup> 57'08" N /077 <sup>0</sup> 39'53"E	13 <sup>0</sup> 11'56"N 077 <sup>0</sup> 42'20"E	12 <sup>0</sup> 59'42" N 080 <sup>0</sup> 10'32" E
2.	Elevation	2912 Ft (887.5 m)	3002 Ft (915 m)	52 Ft (15.75 m)
3.	Watch hrs	H-24	H 24	H 24
4.	Runway	09/27 (088°/268°)	09L/ 27R (092 / 272°) 09R/ 27L (092 / 272°)	07/25 (071/251°) 12/30 (118-298°)
5.	Length	10847 Ft (3306m)	13123 Ft (4000m) (both runways)	12011 Ft (3661M) 9480 Ft (2890 m)
6.	Surface	Flexible	09L/27R – Flexible 09R/27L - Flexible	RW 07/25 - Flexible/Rigid RW 12/30 - Flexible / Rigid

7.	PCN	60/F/A/X/T	09L/27R – 74/F/B/W/T 09R/27L – 98/F/C/W/T	RW 07/25 – 105/F/C/W/T RW 12/30 – 89/F/C/W/T
8.	Circuit	09 Right Hand 27 Left Hand	09 Left Hand 27 Right Hand	07 Left Hand 25 Right Hand 12 Left Hand 30 Right Hand
9.	Safety lane	260	--	303
10.	Transition Altitude	7000 Ft	7000 Ft	4000 Ft
11.	Transition Level	By ATC		
12.	DVOR OCA	3300 Ft	3620 Ft	810 Ft (for all runways)
13.	ILS OCA	3140 Ft	ILS RW 09L -3205 Ft ILS RW 27R -3120 Ft ILS RW 09R -3174 Ft ILS RW 27L -3173 Ft	RW 07 (GP out)-570 Ft RW 25 (GP out)- 610 Ft RW 07-284 Ft RW 25- 360 Ft
14.	ILS Code & Frequency	IBLR 110.5 MHz	ILS RW 09L -109.300 MHz ILS RW 27R -108.300 MHz ILS RW 09R -109.900 MHz ILS RW 27L -111.500 MHz	RW 07- IAMS, LLZ 110.3 GP – 335.0 MHz RW 25 – ICHN, LLZ 105.8 GP – 332.2 MHz
15.	VOR/DME	BBG 115.5	BIA116.8 BIB 114.5	DVOR- MMV 112.5 MHz
16.	Track / Dist from VOYK	156°/12 NM	056°/6.7 NM	092°/150 NM

### 7.18 Operations from Bengaluru

Aircraft operating from HAL Bengaluru (VOBG) & Bengaluru International Airport (VOBL) may be required to hold for sequencing in the display. The visual reference point for hold shall be **Magadi (242°/31NM from DVOR BIA, coord N12°57'07" E 77°13'42")**

### 7.19 Flight Safety & Ejection Area

(a) All operators shall abide by Flight Safety aspects that will be briefed during "Main Briefing for all Flying Display flight-crew" prior to the event. Salient aspects will be covered during daily flight-crew briefings. Senior Aero Space Safety & Inspection Officer (SASIO) at Air Force Station Yelahanka will act as single point of contact for reporting of incidents / accidents. (Tele 080-23411081, Extension-7345).

(b) Being IAF aerodrome, further investigation / reporting will be as per IAF procedures (Air Force Order 08/14 and Air Force Order 12/19), in conjunction with DGCA India guidelines, as applicable.

(c) Whenever possible, aircraft should be abandoned in straight and level flight and clear of populated area provided that this does not prejudice the chance of successful abandonment. In circumstances where it may not be possible to land even though the aircraft is controllable in flight, it is to be abandoned west of VOYK, on a westerly heading, approx 20 NM from aerodrome. The aircraft should be abandoned below 10,000 AGL at the optimum escape speed. The maximum possible warning to bail out or eject should be given in order to alert the rescue services. Jettisoning of fuel is to be avoided, but if unavoidable, it is to be undertaken west of the airfield.

## 7.20 Radio Communication Failure (RCF) Procedure

Aircraft experiencing radio failure during the display flying should: -

- (a) Complete the pre-briefed sequence and land on time.
- (b) If unable to land, leave the display area on a heading of 270 deg, at 6000 ft on QNH up to 10 NM and then proceed to VOBG or to the diversionary airfield as mentioned in the FPL. Aircraft equipped with transponders to squawk 7600.
- (c) If the receiver only is functional, listen out on 122.9 MHz for instruction from VOYK after leaving the display area.
- (d) Should an aircraft already in the air and waiting to carry out manoeuvres, develop RCF, it shall fly overhead along the runway axis at the allotted time and join circuit for landing without carrying out any display manoeuvres.

## 7.21 Time Standard

All operations will be in Indian Standard Time (IST) (UTC plus 5 ½ hours)

## 7.22 Meteorological Facilities

- (a) A **Type B** Meteorological (Met) Office is available in the ATC building with 24 hours observation watch and 18 hours forecasting watch. Notice of at least 3 hours is required for departing aircraft for flight documentation and other services.
- (b) However, for Flying Display the following services will be available: -
  - (i) Area forecast.
  - (ii) Route and aerodrome forecast.
  - (iii) Aerodrome warnings (Weather warning in IAF parlance).

**SECTION VIII****ABBREVIATIONS**

Para No.	Contents	Page Nos.
8.1	Abbreviations	36-37
AAI	Airport Authority of India	
AFSY	Air Force Station, Yelahanka	
AGL	Above Ground Level	
AIP	Aeronautical Information Publication	
AIS	Aeronautical Information Service	
ALR	Air Land Rescue	
Alt	Altitude	
AMSL	Above Mean Sea Level	
AOL	Above Obstruction Level	
ASDA	Accelerate Stop Distance Available	
ASTE	Aircraft and Systems Testing Establishment (Indian Air Force)	
ATS	Air Traffic Control	
CDF	Customer Demonstration Flight	
C of A	Certificate of Airworthiness	
C of M	Certificate of Maintenance	
C of R	Certificate of Registration	
CIQ	Customs, Immigration and Quarantine	
Cm	Centimetre	
DEO	Defence Exhibition Organisation	
DGCA	Director General of Civil Aviation	
DME	Distance Measuring Equipment	
DRDO	Defence Research & Development Organisation	
ETD	Expected Time of Departure	
FAX	Facsimile	
FCC	Flight Coordination Centre	
FDAPA	Flying Display Aircraft Parking Area	
FDC	Flying Display Committee	
FDD	Flying Display Director	
FIR	Flight Information Region	
FL	Flight Level	
FOC	Flight Operations Centre	
FPL	Flight Plan	
Ft	Feet	
HAL	Hindustan Aeronautics Limited	
HF	High Frequencies	
HIRL	High Intensity Runway Light	
IA	Indian Airlines	

IAF	Indian Air Force
ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
ILS	Instrument Landing System
MC	Instrument Meteorological Conditions
IOC	Indian Oil Corporation
IST	Indian Standard Time
JET A1	Aviation Turbine Fuel, also known as AVTUR
kg	Kilogram
kt	Knot
LCN	Load Classification Number
LDA	Landing Distance Available
M	Mach Number
m	Meter
MAS	Madras/Chennai
MEA	Ministry of External Affairs, Government of India
Met	Meteorological
MOD	Ministry of Defence, Government of India
MSD	Minimum Separation Distance
MTOW	Maximum Take Off Weight
NDB	Non Directional Radio Beacon
NM	Nautical Miles
POB	Persons On Board
RCC	Rescue and Coordination Centre
RCF	Radio Communication Failure
RNFC	Round Navigation Facility Charges
R/T	Radio Telephony
RW	Runway
RW 09/27	Two Runways at Yelahanka Airport
SAR	Search And Rescue
SSR	Secondary Surveillance Radar
TBD	To Be Decided
Tel	Telephone
Tlx	Telex
TORA	Take Off Run Available
TODA	Take Off Distance Available
VASI	Visual Approach Slope Indicator System
VFR	Visual Flight Rules
VHF	Very High Frequency
VOR	Very High Frequency Omni-directional Range (Beacon)
VOBL	Designator for Bengaluru International (BIA) Airfield
VOBG	Designator for Bengaluru (HAL) Airfield
VOYK	Designator for Yelahanka (Bengaluru) Airfield

**VENUE MAP DEPICTING LAYOUT FOR AERO INDIA-25**

To be updated by DEO upon finalization

903148



**AIRSPACE RESERVATION: AI-25 (04 FEB – 14 FEB 25)**

SI No	Date	Time in IST	Remarks	Vertical Limits	Horizontal limits
(a)	04 Feb 25	0900h – 1200 h	Individual practice by participating teams/ aircraft and mapping.	<b>GND to FL 200*</b>	<b>Airspace bounded by 130100N 0773300E – 131156N 0771401E – along the clockwise arc centred at HAL airport VOR BBG till 131143N 0780737E 130100n 0774800E – 130100N 0773300E</b>
		1400 h – 1700 h	Stand-by Block for practice.		
(b)	05 Feb 25, 06 Feb 25 & 07 Feb 25	0900 h – 1200 h	Full force Fly-Past & Flying Display practice		
		1400 h – 1700 h	Stand-by Block for practice		
(c)	08 Feb 25	0900 h – 1200 h	Final Dress Rehearsal (Main)		
		1400 h – 1700 h			
(d)	09 Feb 25	0900 h – 1200 h	Stand by day for Final Dress Rehearsal		
		1400 h – 1700 h			
(e)	10 Feb 25	0900 h – 1200 h	Inauguration Ceremony, Fly-Past and Flying Display		
(f)	11 Feb 25 & 12 Feb 25	1200 h – 1500 h	Flying Display		
(g)	13 Feb 25 & 14 Feb 25	0900 h – 1200 h	Flying Display		
		1400 h – 1700 h	Flying Display		



**NOTAM FOR AIRSPACE RESERVATION DURING AI-25**

NOTAM for airspace reservation to be updated after publication by AAI

903148