







Seminar & Exhibition, Air Force Auditorium, New Delhi

# Integrating New Technologies and Optimizing Legacy Systems



#### **FIELDS COVERED**

 Air Threats and Challenges • Countermeasures • New Technologies and Weapon Systems • Communications for Air Defence • Upgrades to Legacy Systems • Air Defence Battle Management • Indigenisation and self-reliance
 C-drone, C-RAM, CIWS • Joint organisation & operations • Lessons from current conflicts • Innovations



## Integrating New Technologies and Optimizing Legacy Systems

raditionally, the air force is responsible for the defence of a country's airspace and for conducting offensive operations against enemy aircraft and other airborne threats. As a result, the air force often has a strong focus on air defence operations and may have the necessary skills, training, and experience to effectively command and control air defence assets.

The future battle space will present a highly contested anti-access/area-denial environment. Both offensive and defensive operations could occur simultaneously, with all domains heavily contested.

The modern battlefield is constantly evolving, and new aerial threats are emerging as technology advances. Some of the new aerial threats that have emerged or are emerging on the modern battlefield include unmanned aerial vehicles (UAVs) (including autonomous loitering munitions), hypersonic weapons, stealth aircraft, directed energy weapons (DEW) combined with cyber attacks on air defence systems, electronic warfare and use of space-based weapons, such as satellites and missile.

Air forces today have a wide variety of aerial delivery weapons that can be used for a range of different missions and scenarios - precision-guided munitions (PGMs), smart bombs, cluster bombs, glide bombs, stand-off missiles, cruise missiles and autonomous UAVs.

#### List of active RFI/RFP/AoN

Jan 2023 AON Buy (Indian-IDDM) VSHORAD (IR Homing)
Mar 2022AoN Buy (Indian-IDDM) Air Defence Fire
Control Radar (Light)
Oct 2022RFP Buy & Make (Ind) 220 AD Guns and

1,41,576 rds of ammo

Oct 2022RFI Buy (Indian-IDDM) CUAS

There have been substantial improvements in the capabilities of radars, with longer ranges of detection, multimode operation (search, track, and fire-control), simultaneous multi-target tracking, low-observable target detection, built-in electronic counter-countermeasures and network-centric operation with other systems. Artificial intelligence and machine learning has helped in improving their performance and adapt to new and emerging threats.

Air force weapons, including fighter aircraft, bombers, and air-to-air and air-to-ground missiles are intended to gain air superiority and to attack enemy air bases and other strategic targets.

Ground ground-based air defence weapon systems - surface-to-air missiles (SAMs), anti-aircraft artillery, and short-range air defence systems (SHORAD) — are also equipped with radar systems for early warning and target acquisition.

Ground-based air defence weapons are closely integrated

with air force weapons and other air defence systems to create a layered defence and increase the overall effectiveness of the air defence system.

#### Positive indigenization list

The items listed in the positive indigenization list may provide ample visibility and opportunity to the domestic defence industry for understanding the trend and futuristic needs of the armed forces and create requisite R&D and manufacturing capacity within the country.

Name of platform/ weapon/ system/ equipment	Year of import embargo
Successor of Flycatcher and Upgraded Super Fledermaus	Dec 2020
(USFM) / AD Fire Control Radar (ADFCR)	
Simulators for Towed and Self Propelled Guns of AD	Dec 2020
Land Based MRSAM Weapon System	Dec 2021
Naval Anti-Drone System (NADS)	Dec 2022
Ship Based Medium Range Surface to Air Missile (MRSAM)	Dec 2022
Counter Drone System (Hard Kill)	Dec 2022
Counter Drone System (Soft Kill)	Dec 2022
L 70 Integrated Air Defence Combat Simulator (IADCS)	Dec 2023
Unit Level Target System for Army AD	Dec 2025
Augmented Reality (AR) based Head Mounted Display System	Dec 2025
for Weather information to Army AD Systems	
Op Control System for AD Weapon for Army (Project AKASHTEER) Dec 2026	
Automatic Missile Detection Radar for Ships	Dec 2027

#### **Opportunities for Industry**

The Indian AMD market might see significant growth during the next few years owing to demand from the armed forces, upgrade and replacement of obsolete inventory, volatile geopolitical situation, increased funding, and growing technological prowess.

The opportunities in Air and Missile Defence domain can be tapped by mapping the Technology Perspective and Capability Roadmap (TPCR), RFIs/RFPs/AoNs, and the positive indigenization list.



#### AIR & MISSILE DEFENCE INDIA 2024 SEMINAR PROGRAMME FRI, 19 July 2024

0830-0930 hrs	Registration and Tea	
SESSION 1 - INAUGURAL SESSION (0930 - 1030 hrs)		
Welcome Address Inaugural Address Special Address. Industry Persp. Release of EY-IMR 1030 – 1100 hrs	Air Vice Mshl Anil Golani, Retd, Director General, CAPS Air Chief Mshl VR Chaudhari, PVSM, AVSM, VM, ADC, Chief of Air Staff. Sh U Raja Babu, DS & DG, Missiles and Strategic Systems, DRDO (tbc). Col KV Kuber, Director Defence & Aerospace, Ernst & Young. Knowledge Paper on Air Defence. Refreshment break.	
SESSION 2 – EMERGING TECHNOLOGIES AND INDUSTRY CAPABILITIES (1100–1230 hrs)		
Chairperson: Air \ 1100 - 1115 hrs 1115 - 1130 hrs  1130 - 1145 hrs 1145 - 1200 hrs 1200 - 1215 hrs 1215 - 1230 hrs 1230 - 1245 hrs	Vice Marshal Rajiva Ranjan, VM, Asst Chief of Air Staff Ops (Space), Air HQ. Introduction of speakers and Opening Remarks by the Chairman. The Operating Environment. Air Vice Marshal PV Shivanand, VM, Asst Chief of Air Staff (Ops) Air Defence, Air HQ. Industry presentation Industry presentation.	
1245 – 1300 hrs	Q&A/ discussion.	
1300 – 1345 hrs	Lunch and exhibition.	
SESSION 3 – EMERGING THREATS, SURVEILLANCE AND DETECTION (1345 – 1500 hrs)		
	Introduction of speakers and Opening Remarks by the Chairman. Lessons in AD from the Russia-Ukraine War, Speaker from ACAS (Strategy), Air HQ. Challenges posed by next-gen air-to-air and air-to-ground weapons systems. Speaker from Air HQ. Industry presentation.	
1445 – 1500 hrs	Q&A/ discussion.	
	ice Marshal IS Walia, AVSM, VM, AD Commander, HQ Western Air Command. Introduction of speakers and Opening Remarks by the Chairman. Next Generation Air & Missile Defence Solutions. Speaker from DRDO Integrated Air & Missile Defence Roadmap for Development and Acquisition. Speaker from CAPS.  Recent developments in Indian Navy's AD capabilities. Cdr SR, Naval HQ. Current and future SHORAD solutions. Speaker from AAD Dte, Army HQ Q&A/ discussion.	
CLOSING SESSION (1630 – 1645 hrs)		
1630 – 1640 hrs 1640 – 1645 hrs 1625 onwards	Closing Remarks. <b>Air Vice Mshl Anil Golani,</b> Director General, CAPS Vote of Thanks. <b>Maj Gen Ravi Arora,</b> Chief Editor, Indian Military Review. Refreshments and dispersal.	

### **Rate Card**

#### **DELEGATE PASS**

VALID FOR FULL DAY INCLUDES LUNCH

### Rs 5,900

Delegate Pass Price includes:

- 1. Attending all sessions
- 2. Visit exhibition booths.
- 3. Interacting with sponsors, exhibitors, speakers & delegates
  - 4. All refreshments and lunch
  - 5. Video link of proceedings after the event.

Transferable and refundable if cancelled 48 hrs before the event.

### ECO STARTUP BOOTH 2x2M

LOW COST FEATURE RICH

### Rs 88,500

- Furnished octonorm booth 2X2M.
   Company profile 200 words
- Logo, contact details in event guide.
  - 3. Two delegate passes
  - 4. Contact data of all delegates and video links after the event.
- 5. Fascia, 1 table, 2 chairs, carpet, 2 lights, power box, dustbin at booth

### PREMIUM BOOTH 2x2M

MAXIMUM FOOTFALLS

### Rs 118,000

- 1. Furnished octonorm booth 2X2M.
- 2. Company profile 200 words Logo, contact details in event guide.
  - 3. Two delegate passes
  - 4. Contact data of all delegates and video links after the event.
- 5. Fascia, 1 table, 2 chairs, carpet, 2 lights, power box, dustbin at booth

#### PRESTIGE BOOTH 3x2M

FOR MORE FOOTFALLS

### Rs 194,700

- 1. One furnished octonorm exhibition booth 3X2M.
- 2. Company profile 300 words with Logo, contact details in event guide
  - 3. Half-page advt in Event Guide
    - 4. Three Delegate/ Exhibitor Staff passes
  - 5. Contact data of all delegates and video links after the event.
  - 6. Company Logo at Venue, Lobby and on Stage as Sponsor
  - 7. Distribute one Company literature item in Delegate Bags
- 8. Fascia, logo, 1 table, 4 chairs, carpet, 3 lights, power box, dustbin at booth.

#### **BRONZE SPONSOR**

VALUE FOR MONEY WITH SPEAKING AND BRANDING

### Rs 295,000

- 1. Speaking Slot 10 mins
- 2. 3x2m furnished octonorm booth
- 3. Five Delegate/Exhibition Staff Passes
  - 4. Half-Page Advt in Event Guide
- 5. Company Profile (500 words with logo, contact details) in Event Guide
- 6. One company literature items/gift in Delegate Folders
- 7. Delegate List with contact details and videos of all presentations after event.
  - 8. Sponsor Logo on event promotion
  - 9. Logo on all marketing materials
    - 10. Banner on Event website
  - 11. Company Logo at Venue, Lobby and on Stage as Sponsor
- 12. Fascia, logo, 1 table, 2 chairs, carpet, 3 lights, power box, dustbin at booth.

#### **SILVER SPONSOR**

MULTIPLE BENEFITS WITH SPEAKING AND BRANDING

### Rs 389,400

- 1. Speaking Slot 15 mins
- 2. 3x2m furnished octonorm booth
- 3. Eight Delegate/ Exhibition staff Passes
- 4. Full Page Advt in Event Guide
- 5. Enhanced Company Profile 600 words (with logo and contact details) in Event Guide
  - 6. Up to Two company literature items/gift in Delegate Folders
- 7. Delegate List with contact and videos of speakers presentations after the event.
- 8. Sponsor Logo on event promotion
- 9. Logo on all marketing materials
  - 10. Banner on Event website
- 11. Company Logo at Venue, Lobby and on Stage as Silver Sponsor
- 12. Fascia, logo, 2 tables, 4 chairs, carpet, 4 lights, power box, dustbin, magazine rack at booth.

#### **GOLD SPONSOR**

ELITE BENEFITS WITH SPEAKING SLOT AND BRANDING

### Rs 495,600

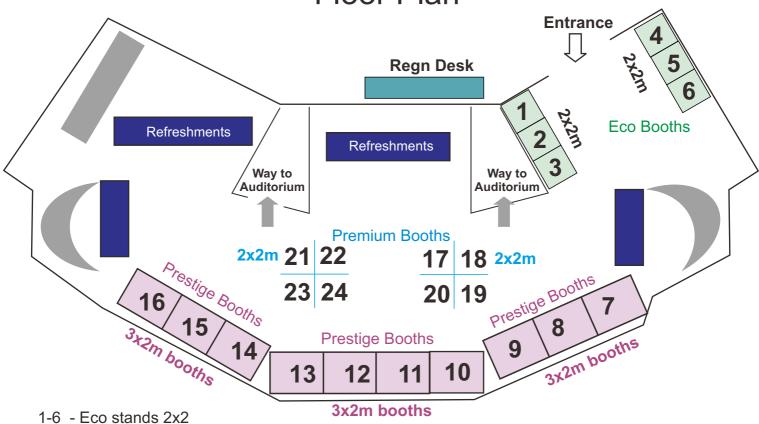
- 1. Speaking Slot 15 mins
- 2. 6x2m furnished octonorm booth
- 3. Twelve Delegate/ Exhibition Staff Passes
- 4. Full Page Advt in Event Guide
- 5. Full Page Company Profile (with logo, contact details) in Event Guide
- 6. Up to Two company literature items/gift in Delegate Folders
- 7. Delegate List with contact details and videos of speakers presentations after the event.
- 8. Sponsor Logo on event promotion
- Logo on all marketing materials
   Banner on Event website
- 11. Prominent Company branding at Venue, Lobby and on Stage as Gold Sponsor
- 12. Custom Fascia, logo, 3 tables, 6 chairs, carpet, 6 lights, 2 power boxes, dustbin, 42" LED at booth.

Contact IMR Media for additional furniture, LEDs, customisatisation an Backdrop flex/ vinyl baneers

#### **IMR Media Pvt Ltd**



# Air Force Auditorium Floor Plan



7-16 - Prestige stands 3x2m 17-24 - Premium booths 2x2m





Foyer exhibition area

600-seat auditorium