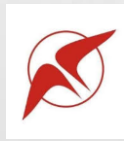


NEW INDIA RISING AVIATION IN INDIA

ASHWANI ACHARYA



CEO REDBIRD FLIGHT TRAINING ACADEMY



07 April 2026

MRO TO BE THE NEXT BIG FOCUS AREA FOR AVIATION IN INDIA?

**FIRM AIRCRAFT ORDERS, INCREASING PASSENGER AND CARGO
TRAFFIC, NEW AND LARGE AIRPORTS**



MRO INDUSTRY IN INDIA: OVERVIEW AND OPPORTUNITIES

**AN OVERVIEW OF THE MAINTENANCE, REPAIR, AND OVERHAUL
(MRO) SECTOR IN INDIA**



INTRODUCTION

- **INDIA IS THE 3RD LARGEST DOMESTIC AVIATION MARKET GLOBALLY.**
- **THE GLOBAL AIRCRAFT MRO MARKET IS PROJECTED TO EXPAND FROM US\$91.16 BILLION IN 2022 TO US\$134.07 BILLION BY 2030**
- **STRATEGIC LOCATION MAKES INDIA A POTENTIAL MRO HUB FOR ASIA-PACIFIC - TARGET \$4 BILLION BY 2030**
- **ATMANIRBHAR BHARAT- MAKE IN INDIA AND TRAIN IN INDIA**
- **INDIA HAS A HUGE AIRCRAFT ORDER BOOK— FLEET TO DOUBLE BY 2035**

MRO SEGMENT SHARE

Market Size & Distribution

India MRO Market Size - Various data points 80-85 % IS OUTSOURCED ABROAD

Projected 2032: ~USD 5.16 billion

Projected 2034: ~USD 7.0 billion (CAGR ~6.1%)

Domestic Share: ~30–40% of total MRO work.

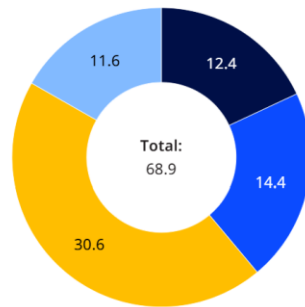
**Overseas Share: ~60–70% outsourced abroad.
SINGAPORE, ME, MALAYSIA, USA and others.**

MRO SEGMENT SHARE

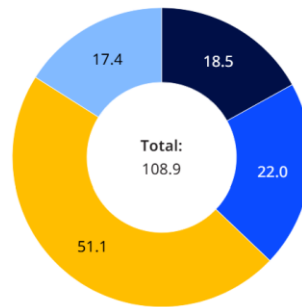
MRO share by segment, 2026-2036

In US \$ billions

Select class: All NB RJ TP WB



2026 MRO



2036 MRO

■ Airframe ■ Component ■ Engine ■ Line

Notes: Narrow Body (NB), Wide Body (WB), Regional Jet (RJ), Turboprop (TP)

Source: Oliver Wyman analysis

**ENGINE AND COMPONENT
MRO OPPORTUNITY NEEDS A
PUSH BY ALL THE STAKE
HOLDERS
CAPITAL
INFRASTRUCTURE
REGULATORY ECO SYSTEM
GLOBAL RECOGNITION
AAI AIRPORTS -DEVELOP
LONG LEASE**

GOVERNMENT INITIATIVES

- **100% FDI ALLOWED IN MRO SECTOR UNDER AUTOMATIC ROUTE.**
- **REDUCED GST ON MRO SERVICES FROM 18% TO 5%.**
- **LEASING AND FINANCING REFORMS TO SUPPORT AVIATION ECOSYSTEM.**
- **DEVELOPMENT OF MRO HUBS AT MAJOR AIRPORTS (E.G., NAGPUR, HYDERABAD, KOCHI, JEWAR, GAUHATI, BANGALORE).**

OPPORTUNITIES IN MRO

- **GROWING FLEET BOTH IN GENERAL AND COMMERCIAL AVIATION /FIXED AND ROTORY WINGS**
- **LINE MAINTENANCE**
- **BASE AND HEAVY MAINTENANCE**
- **AIRCRAFT LEASE REDELIVERIES**
- **MAJOR MODIFICATIONS /STC'S**
- **STRUCTURE REPAIRS**
- **COMPONENT-LEVEL MROS FOR AVIONICS, LANDING GEAR, ENGINES.**
- **ESTABLISHING LARGE-SCALE MRO HUBS WITH GLOBAL STANDARDS.**
- **PARTNERSHIPS WITH OEMS AND GLOBAL MRO PROVIDERS.**
- **EXPORT POTENTIAL TO NEIGHBORING COUNTRIES IN SOUTH ASIA AND MIDDLE EAST.**

OVERVIEW

- **AIESL**
- **AIR INDIA – GROUP**
- **AIRWORKS**
- **GMR AERO**
- **INDAMER TECHNICS – NAGPUR**
- **INDIGO**
- **MAX AEROSPACE**
- **SAFRAN**
- **ABOUT 166 DGCA APPROVED CAR 145 AMO'S IN INDIA**

INDAMER TECHNICS NAGPUR



INDAMER TECHNICS NAGPUR



INDAMER TECHNICS NAGPUR

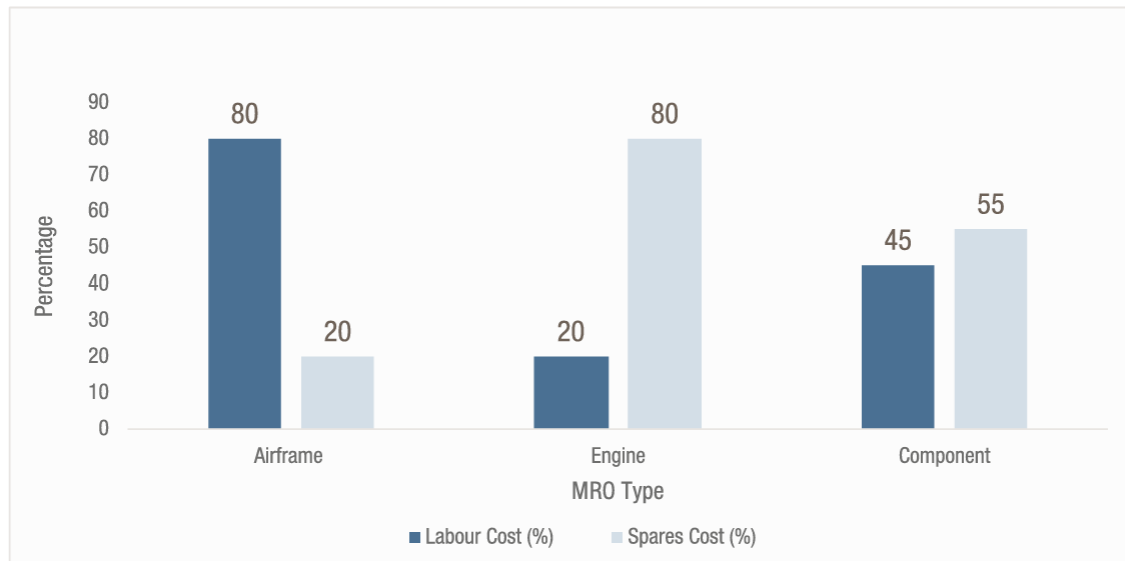


INDAMER TECHNICS NAGPUR

- **HEAVY MAINTENANCE – C CHECKS**
- **LEASE RETURNS**
- **CABIN INTERIORS**
- **AIRCRAFT PAINT SHOP**
- **WHEEL AND BRAKES**
- **BATTERY /WELDING/FLOOR BOARDS/ANCILLARY WORKS**
- **STRUCTURE REPAIRS**
- **TRAINING**
- **AUTOMATION- RAMCO**

OPPORTUNITIES IN MRO-DISTRIBUTION

Figure 4 – Labour and Spares Cost Distribution of MRO Components



Source: FICCI

OPPORTUNITIES IN MRO

- **.SKILL DEVELOPMENT PROGRAMS:**
 - **INVEST IN TRAINING PROGRAMS TO DEVELOP A SKILLED WORKFORCE CAPABLE OF MEETING THE DEMANDS OF THE EVOLVING MRO SECTOR.**
- **INFRASTRUCTURE DEVELOPMENT:**
 - **ENCOURAGE INVESTMENT IN MRO INFRASTRUCTURE TO ENHANCE SERVICE CAPABILITIES AND ATTRACT INTERNATIONAL BUSINESS.**
- **COLLABORATION AND PARTNERSHIPS- COMPONENT AND ENGINE/APU**
 - **FOSTER PARTNERSHIPS BETWEEN OEM AND INTERNATIONAL MRO PROVIDERS TO LEVERAGE EXPERTISE AND TECHNOLOGY.**

CHALLENGES

- **THERE ARE MANY CHALLENGES – CAPITAL, INFRASTRUCTURE, CONNECTIVITY, REGULATORY,OEM COLLABORATION ,LIMITED R&D AND INNOVATION IN MRO TECHNOLOGIES ETC.**
- **MY TAKEAWAY IS :**
- **COMPETENCY BASED**
- **SHORTAGE OF SKILLED TECHNICIANS AND ENGINEERS FOR AIRCRAFT MAINTENANCE AND RELATED TECHNICAL FUNCTIONS LIKE RELIABILITY,PLANNING ,LOGISTICS,SHOPS,MAJOR LINE AND BASE ACTIVITIES,QUALITY ,COMPLIANCES,SMS,.....**

SKILL GAP

- **SHORTAGE OF SKILLED TECHNICIANS AND ENGINEERS.**
- **IS AME CONSIDERED A CHOICE FOR CAREER ?**
- **LIMITED PATHWAYS / LOW SALARY LEVELS/LONG ROAD MAP TO BECOME A CS**
- **AB-INITIO SCHOOLS THROUGHPUT QUALITY**
- **INDUSTRY SUPPORT – PAID OJT ?**
- **HANDS-ON LEARNING -ONLY MRO CAN PROVIDE**
- **FASTEST LEARNING CURVE FOR A TECHNICIAN – BASE MAINTENANCE**
- **INSTRUCTIONAL CAPABILITIES – LOW**
- **WE NEED TO DO A VERY FOCUSED AND POINTED COLLABORATION OF INDUSTRY /ACADEMIA/THOUGHT LEADERSHIP IN THE SEGMENT AND CREATE A UNIVERSE OF PRODUCING QUALIFIED AND SKILLED AIRCRAFT ENGINEERS EQUIPPED WITH TECHNIQUES AND TECHNOLOGICAL TOOLS**

FUTURE OUTLOOK

- **INDIA POISED TO BECOME A REGIONAL MRO HUB.**
- **PROJECTED MARKET SIZE OF USD 4 TO 7 BILLION**
- **COMPONENT MRO IS A MAJOR AREA TO CONSIDER**
- **ADOPTION OF AI, IOT, AND PREDICTIVE MAINTENANCE TOOLS.**
- **INCREASED PRIVATE AND FOREIGN INVESTMENT.**
- **STRATEGIC PLANNING CAN MAKE INDIA A GLOBAL MRO DESTINATION.**
- **YET TO LOOK AT EVTOL AND DRONES !!! SHORT TIME FOR THIS SESSION**

THANK YOU



- **FOR NO QUESTIONS !!!**