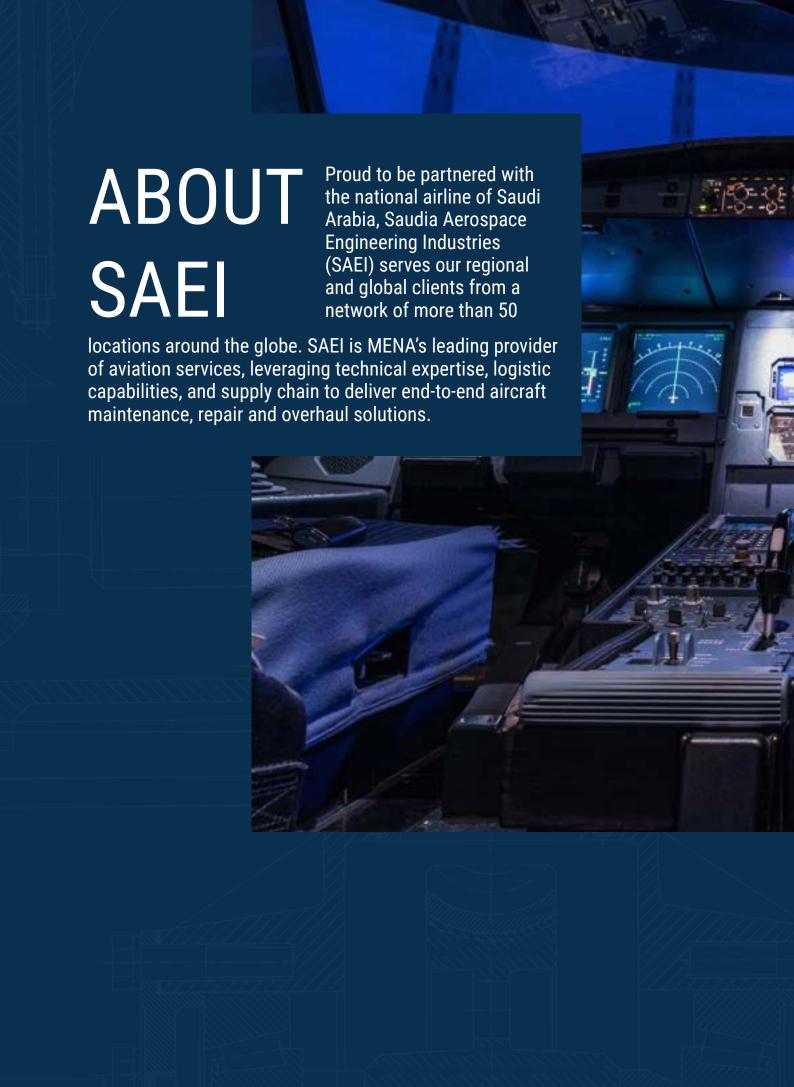


Saudia Aerospace Engineering Industries (SAEI)





OUR HISTORY SAEI, previously known as Technical Services Division (TSV), is Saudi Arabian Airlines' Engineering and Maintenance Center. It was established in 1959, and has its base at King Abdulaziz International Airport, Jeddah, Saudi Arabia.



Saudi Arabian Airlines established the first aircraft maintenance center in Jeddah known as Technical Services Division (TSV).

1959

Technical Services
Division (TSV) performed
the first aircraft overhaul.

1982

The US Federal Aviation Administration (FAA) part 145 certificate SAFY977H was obtained.

1985

#### 1975

Saudi Arabian Airlines started sending Saudis to the USA to obtain A&P and Avionics diplomas.

#### 1984

Saudi Arabian Airlines selfmanned and managed its fleet maintenance. The Jet Propulsion Center (JPC) was launched and the first engine overhaul was performed. The General Authority of Civil Aviation (GACA) Part 145 certificate AMO01was obtained.

#### 2001

The ISO 9001:2000 certificate QMS 01 - 140610 was obtained.



European Union Aviation Safety Agency (EASA) Part 145 certificate 145.0125 was obtained. The General Authority of Civil Aviation (GAGA) certificate AMTS01- for the first certified GACA school was obtained.

2004

The Technical Services Business Strategic Unit (TSV) was officially registered as a Limited Liability Company officially named Saudia Aerospace Engineering Industries (SAEI) wholly owned by Saudi Arabian Airlines Holding.

2009

SAEI established the largest mobile hangar for aircraft maintenance in the world.

2019

#### 2007

The Saudi Accreditation Committee Certificate (SAC) 14N - 1425 was obtained.

#### 2013

SAEI overhauled Saudi Arabian Airlines first CFM5-56B engine. SAEI overhauled Saudi Arabian Airlines first Honeywell GTCP - 500 -331 APU.

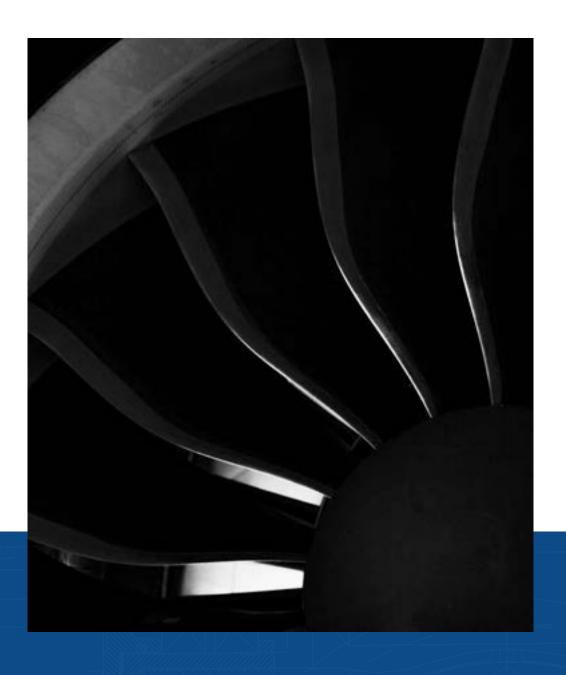
#### 2022

SAEI was appointed the first authorized Honeywell service center in the Middle East. SAEI launched its Future Lab, powered by Thales.

## **MISSION**

At SAEI, our mission is meticulous safety and quality across the spectrum of maintenance, repair and overall, and the achievement of excellence.





# VISION

SAEI strives to be a partner of choice, and a catalyst for the success of aviation both regionally and globally.

#### **SAEI Values**

#### **SAFETY**

Our commitment to safety never falters. We take action to make our workplace, ourselves, and those around us safer.

#### **ACCOUNTABILITY**

We strive to perform every task to the highest standard. We listen to the needs of our customers. We actively seek feedback from colleagues and customers and thoughtfully act on their input.

#### **EXCELLENCE**

We maintain a continuous cycle of enhancement through the acquisition of new knowledge and skills. We are united in our efforts to meet our goals and accelerate progress.

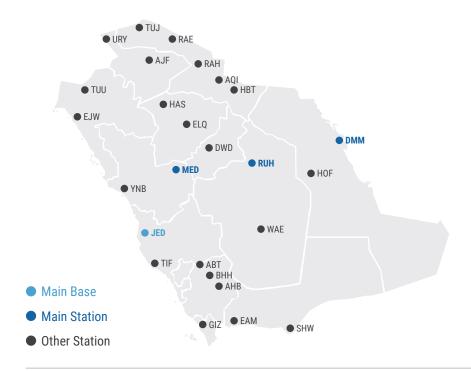
#### **INGENUITY**

We innovate to achieve the best possible outcome, sharing ideas and communicating across all levels. We use solution-based thinking to build our organization's capacity for growth and success.



### **Stations Domestic & International**

SAEI operates 25 international and 27 Saudi-based stations, providing unparalleled support to the Saudia fleet and other clients around the globe.







## Credentials

SAEI is certified to operate by 11 international authorities...

ISO 9001-2015

KSA	General Authority of Civil Aviation (GACA)					
USA	Federal Aviation Administration (FAA)					
EU	European Union Aviation Safety Agency (EASA)					
UAE	General Civil Aviation Authority (GCAA)					
Kuwait	Directorates General of Civil Aviation (DGCA)					
Bahrain	Approval Certificate (BCAA)					
Bangladesh	Civil Aviation Authority, Bangladesh (CAAB)					
Philippines	Civil Aviation Authority (CAA)					
Cayman Island	Approval Certificate (CAACI)					
Nepal	Civil Aviation Authority (CAAN)					
Qatar	Civil Aviation Authority (QCAA)					
	A2LA – Metrology Laboratory					
Accreditations	A2LA - NDT Laboratory Nondestuctive Test Laboratory					
	A2LA – Fluid Analysis Laboratory					

# We comply with all applicable IOSA requirements

**Since 1984** AM01-0

**Since 1985** SAFY977H

**Since 2004** 145.0125



#### **Our Service Lines**



## Manufacture & Design Center (MDC)

Specialized in reverse engineering capabilities. The MDC is able to design fixtures, manufacturing tools, plastic molds, and aircraft maintenance tools. A range of CNC machines enables our team to produce parts with high precision manufacturing and a large-sized production.



#### Line Maintenance

The technical line support covers routine and non-routine services as well as progressive maintenance checks up to full A-checks on a large number of aircraft types with various combinations of engine types.



#### Base Maintenance

We offer comprehensive aircraft maintenance services including base maintenance above A-checks, cabin refurbishments, modifications as well as major repairs and alterations.



## Component Maintenance

Our outstanding shops are well prepared to test, repair, overhaul and modify your components. We also offer material provisioning, purchasing, replenishing and pool services as well as the entire material supply and logistics process.



## Engine Maintenance

Our Jet Propulsion Centre has capabilities for repair and overhaul of jet engines, auxiliary power units, thrust reversers and various engine parts with excellent turn around-times.



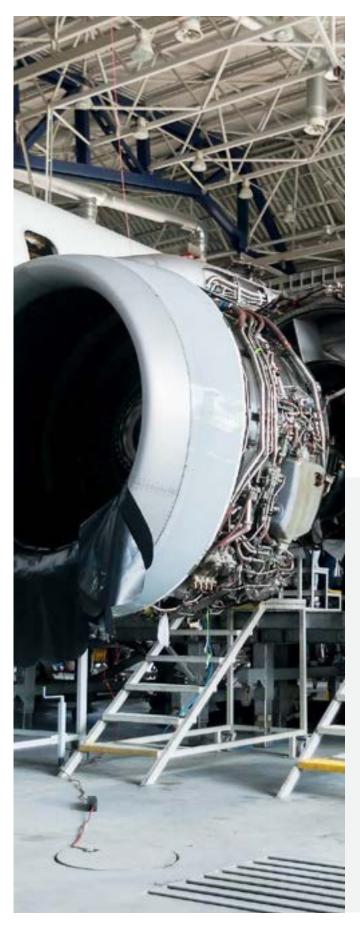
#### Military

SAEI has strong and expanding capabilities to support military projects. This includes military to civilian conversions, inspection, engineering, manufacture, and design; livery design, and application.



#### Aerospace Product Maintenance

Our services go beyond commercial jets, we are expanding our services to include maintenance of other aerospace products and supplementary services.



#### Line Maintenance

Our qualified line maintenance workforce has the right knowledge to serve our customers. SAEI is located in 25 international and 27 KSA stations. Our Duty Manager Office is the central point of contact for all Aircraft on Ground (AOG) technical inquiries, available 24/7 and backed up by highly experienced technicians and engineers. We provide expert tooling and logistic support for troubleshooting and compliance with unplanned repairs wherever and whenever aircraft are grounded.

#### **Main Services**

Transit/Turnaround Maintenance Services

Checks up to "A" Check

Dispatch

Maintenance Rectification Group (MRG)



# Manufacturing & Design Center (MDC)

Specialized reverse engineering capabilities enable SAEI to examine an object and then create an in-house manufacturing and design pathway to reproduce the object. To do this the MDC analyzes the design, composition, and manufacturing method of an object. This process involves manual measurement, 3D scanners, coordination measurement machines, material analyzers, and other destructive and non-destructive methods.

The MDC is able to design fixtures, manufacturing tools, plastic molds, and aircraft maintenance tools. A range of CNC machines enables our team to produce parts with high precision manufacturing and a large-sized production. The MDC has extensive experience in the design and application of aircraft livery.

## Capabilities:

#### **Engineering:**

**Reverse Engineering** 

Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM)

**Tool Design** 

#### Manufacturing:

**CNC 5 Axis Milling** 

**CNC 4 Axis Lathe** 

CNC 4 Axis Water Jet

**CNC 7 Axis Tube Building** 

**CNC Thermoforming** 

**CNC 5 Axis Router** 

**CNC EDM 4 Axis Wire Cut** 

**Sheet Metal Bending** 



Livery:

Design

**Livery Application** 

Reverse Engineering and Inspection:

Laser Scanner

CMM Machine (up to 5-micron accuracy)

#### **Base Maintenance**

We perform heavy maintenance for a wide selection of commercial jets in the MENA region:



Above "A" Check

**Engine Change and Borescope Inspection** 

Modifications, Supplemental Structural Inspections s (SSI), Major Repairs and non-destructive testing (NDT)

Seats/Interior/Entertainment/Refurbishment/Upgrade/Retrofit

**Aircraft Recovery** 

Aircraft Wash

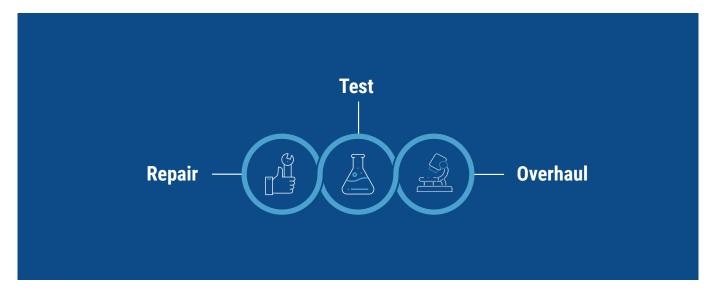
Aircraft Structure and Interior Components Shops (Composite Repairs, Metal Forming, Sheet Metal Repairs, Interior and PAX Seats, and Thermoforming)



### Components Maintenance

With the General Authority of Civil Aviation (GACA), European Union Aviation Safety Agency (EASA) and Federal Aviation Administration (FFA) approvals, SAEI components shops are adept at overhauling, repairing and testing different components, including Aircraft Avionics and Electro-Mechanical Components, Mechanical and Hydro-Mechanical Components as well as Airframe and Emergency Equipment Shops.





### **Engine Maintenance**

## Overhaul Capability



## Overhaul Capability Under Development

#### QEC Buildup/ Minor Repair Capability



**Engine and Test Cell** 

CFM56-5B4/3 (A320/A321)

APU

GTCP331-350 (A330) GTCP331-500 (B772/B773)

**Thrust Reverser** 

\_

**Engine and Test Cell** 

CFM56-2A (E-3 Sentry AWACS) LEAP 1A (A320 NEO) GE90-115B (B773)

APU

131-9 A/B (A320/B737)

**Thrust Reverser** 

-

**Engine and Test Cell** 

Trent 772B-60/16 (A330 International) Trent 768B-60/16 (A330 Regional) GE90-94B (B772) GE90-I15B (B773) GEnx-1B70 (B787-9) GEnx-2B67 (B747-8)

APU

APS3200 (A320/A321) APS5000 (B787-9) PW901C (B747-8)

**Thrust Reverser** 

A320 A330 B772 B773

The SAEI engine maintenance center houses a number of specialized shops, including clean line, non-destructive testing (NDT) composite, plating (polishing, etching; shot peen and glass bead peen), plasma, paint, welding, machine (jig boring, drilling and reaming, grinding, electro discharge, turning, CNC grinding, lathe and

turning machine with five axis travelling column capability), balancing, blades and vanes, sheet metal, thrust reverser, QEC, bearing, harness and heat treatment shops.

Test Cell 14m x 14m, 150,000 lbs thrust.

Modules and most of the piece parts are overhauled in house.





## **Aerospace Products Maintenance** Our services go beyond commercial jets, we are expanding our services to include Limited Helicopter Maintenance Manufacturing & Design **Unmanned Aerial Vehicle On-Site Support** (UAV) Maintenance Calibration **Business Jet Maintenance** Military Maintenance Non-Destructive Testing Supplementary Services Technical Laboratories Borescope Inspection

### Military Projects

#### Capabilities:



**Supply Chain** 

Authorized to support and supply military aircraft parts AWACS Boeing 707 material supply



**Bridging Check** 

Convert military aircraft to civilian aircraft under the authorization of GACA within the period of six months



C-130 VIP
Maintenance
(civilian-military)

Performing hangar checks for military and civilian programs

Issuing GACA 8130-3 certificate for RSAF

Fleet scheduling and OTP stands now at 97%

## **Special Projects**



Pilatus systems repair project

BAE SYSTEMS

**BAE System tubes manufacturer** 

BAE SYSTEMS

BAE system parts manufacturing



THAAD system parts manufacturing



**RSAF** aircraft conversion

### MRO Village Overview

The MRO Village and JPC is being built to meet the needs of the broader KSA aviation eco-system and to unlock profitability through scale and operational efficiency.



904,000 m<sup>2</sup>

Project Area



26 Shops

**Engine & Components** 



21,000 m<sup>2</sup>

Consolidated HQ



152,347 m<sup>2</sup>

Supply Chain equivalent to 28 football fields



2025

Completion date



11

Hangar Buildings

Houses one-of-a-kind Aerospace mall

One of the largest Test-Cells in the world

Growing engineering talent to harness future growth

Up to 31 aircraft accommodated at one time

Jet Propulsion International Center of Excellence

Direct workforce 8,000 to 12,000 jobs

#### The Future of MRO

The MRO Village wil unlock adjacent value segments, strengthen existing partnerships, build new ones.





### **SAEI Capabilities**



Information for Component and Certificates

## **BCAA**Bahrain Civil Aviation Affairs

# **GCAA**UAE General Civil Aviation Authority

**CAAP**Civil Aviation Authority of the Philippines

**QCAA**Qatar Civil
Aviation Authority

**CAAB**Civil Aviation Authority
of Bangladesh

**DGCA**Kuwait Directorate General of Civil Aviation

**CAAN**Civil Aviation Authority
of Nepal

**CICAA**Cayman Islands Civil
Aviation Authority

**A2LA**American Association for Lab. Accreditation

PHMSA Us-dot (Phmsa) - Hydrostatic Test Authorization



**Federal Aviation Administration Since 1985** 





**Since 2004** 







**Since 1984** 



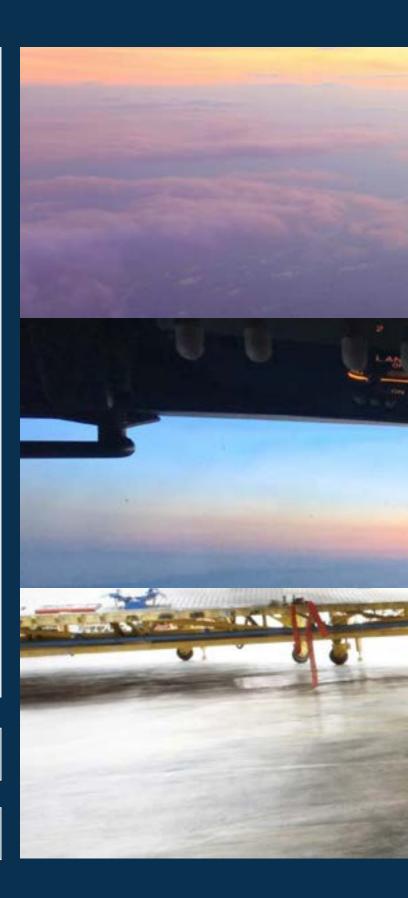




The number of components



The number of certified technicians





## **SAEI Capabilities**

#### Line Maintenance

Aircraft/ Engine Type		Aircraft Line Maintenance Capability												
	JED	MED	DMM	RUH	GIZ	HAS	HOF	АНВ	AJF	ELQ	TIF	TUU	внн	ABT
A320	•	•	•	•	•	•	•	•		•	•	•	•	•
A319 /A320 /A321 / CFM56	• •	•	•	• •	•	•	•	•	•	•	•	•	•	•
A318-112 /CFM56	• •	•	•	•										
A318/A319 /A320 / A321 / V2500		•	•	•				•		•	•			
A320/V2500														
A330 - 343 / TRENT 700	•	•	• •	• •						•				
A330 /CF6-80			•	• •										
A340	•	•	•	•										
B787-9 /10 / Genx	•	•	•	•										
B787 -9 / Trent 1000			•	•										
B777F / GE90-115	•	•	•	•										
B777-300ER/GE 90	•	•	•	• •										
B777-200 / GE90-90	•	•	•	• •										
A350- 900/1000 / TRENT XWB			•	•										
B747-400/SP-68/-8F	•	•	•	•										
L382G (C130)	•													

GACA

EASA

FAA

## **SAEI Capabilities**

#### Line Maintenance

Aircraft/ Engine Type	Aircraft Line Maintenance Capability												
Ancially Engine Type	AQI	RAE	EAM	TUI	URY	KMC	WAE	EJH	DWD	RAH	SHW	ULA*	YNB
A320			•										•
A319 /A320 /A321 / CFM56	•	•	•	•	•	•	•	•	•	•	•		•
A318-112 /CFM56													
A318/A319 /A320 / A321 / V2500													
A320/V2500													
A330 - 343 / TRENT 700													
A330 /CF6-80													
A340													
B787-9 /10 / Genx													
B787 -9 / Trent 1000													
B777F / GE90-115													
B777-300ER/GE 90													
B777-200 / GE90-90													
A350- 900/1000 / TRENT XWB													
B747-400/SP-68/-8F													
L382G (C130)													

FAA

EASA

GACA

## **Heavy Maintenance**

CHK Fleet	A-CHK	С-СНК	D-CHK	Heavy Maintenance Limitation (GACA)	Heavy Maintenance Limitation (FAA)	Heavy Maintenance Limitation (EASA)
B747-400		•				
B747SP		•		•		
B777-200		•		•		
B777F		•		•	•	
B777-300		•		•	•	
B747-8F						
B787-9/10	• •			•	•	
A318		•	•	•	•	•
A319		•	•	•	•	•
A320		•	•	•	•	•
A321		•	•	•	•	•
A320Neo	• •			•		•
A330-300		•	•	•	•	
Gulf stream GIV	• •			•	•	
Gulf Stream III	•				•	
Falcon 7X	•			•		
Hawker 400XP	•			•		
Lockheed C-130		•		•		

- GACA
- EASA
- FAA
- Preventive Maintenance, major repair, major alterations and maintenance up to and including C-CHK
- In-service Check, Transit Check, pre departure, walk around check, daily check and LRU based on AMM
- Preventive maintenance, Line Maintenance and maintenance up to and including A-CHK
- Authorized to perform maintenance, preventive maintenance, up to and including B-CHK inspection
- Authorized to perform maintenance, preventive maintenance, up to and including A-CHK inspection
- Authorized to perform maintenance, preventive maintenance, up to and including C-CHK inspection
- Maintenance including 7500 FH / 5000 FC / 24 MO and 12 year structure check

## **Engine & APU**

#### Information for Component and Certificates

Engine/APU cap	Overhaul	QEC Build up	Repair	GACA Limitation	FAA Limitation	EASA Limitation
CFM56-5B (A320)	• •		•	•	•	Inspect, Repair and Overhaul
GE90-115B (B777- 300)		•		•		
Trent 700 (A330)		•	•	•		
TRENT 768- 60/772B- 60		•			•	
GE90-115B		•				
Genx-2B (B747-8F)		•	•	•	•	
GEnx-1B (B747-8F)		• •	•	•		
LEAP -1A (A320)		•	•	•	•	
V2500 (A320)		•	•	•		
GTCP 331-350 (A330)	• •			•		Inspect, Repair and Overhaul (Except gear box and load compressor)
GTCP 331-500 (B777)	•			•		Inspect, Repair
131-9A (A320)						

- GACA
- EASA
- FAA

- Maintenance, Preventive maintenance and Overhaul including minor repairs
- Under Development
- Maintenance, Preventive maintenance including minor repairs
- Maintenance and Preventive maintenance.
- QEC kit and accessories removal and installation.
- Fan case removal and replacement, QEC kit removal and installation.

### **SAEI Clients**















































































































