

MAINTENANCE ORGANISATION APPROVAL CERTIFICATE

EASA.145.0290

Pursuant to Regulation (EU) N° 2018/1139 of the European Parliament and of the Council and to Commission Regulation (EU) N°1321/2014 and subject to the conditions specified below, the Agency hereby certifies:

EGYPTAIR MAINTENANCE AND ENGINEERING (EGYPTAIR M&E)

CAIRO INTERNATIONAL AIRPORT
11776 CAIRO
EGYPT

as a maintenance organisation in compliance with Section A of Annex II (Part-145) of Regulation (EU) N° 1321/2014, approved to maintain the products, parts and appliances listed in the attached terms of approval and issue related certificates of release to service using the above reference and, when stipulated, to issue airworthiness review certificates after an airworthiness review as specified in point ML.A.903 of Annex Vb (Part-ML) to that Regulation for those aircraft listed in the attached terms of approval.

CONDITIONS:

- 1) This approval is limited to that specified in the scope of work section of the approved maintenance organisation exposition as referred to in Section A of Annex II (Part-145), and
- 2) This approval requires compliance with the procedures specified in the approved maintenance organisation exposition, and
- 3) This approval is valid whilst the approved maintenance organisation remains in compliance with Annex II (Part-145) of Regulation (EU) N° 1321/2014.
- 4) Subject to compliance with the foregoing conditions, this approval shall remain valid for an unlimited duration unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of original issue: **22 February 2006**
Date of this revision: **21 November 2022**
Revision No: **12**

Signed:



For the European Union Aviation Safety Agency,



MAINTENANCE ORGANISATION TERMS OF APPROVAL

Reference: EASA.145.0290

Organisation: EGYPTAIR MAINTENANCE AND
ENGINEERING (EGYPTAIR M&E)
CAIRO INTERNATIONAL AIRPORT
11776 CAIRO
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CLASS	RATING	LIMITATION	BASE	LINE
AIRCRAFT	A1	Airbus A318/A319/A320/A321	Yes	Yes
AIRCRAFT	A1	Airbus A330	Yes	Yes
AIRCRAFT	A1	Airbus A340	Yes	Yes
AIRCRAFT	A1	Airbus A350	No	Yes
AIRCRAFT	A1	Airbus A380	No	Yes
AIRCRAFT	A1	Boeing 737-300/400/500	Yes	Yes
AIRCRAFT	A1	Boeing 737-600/700/800/900	Yes	Yes
AIRCRAFT	A1	Boeing 737-7/8/9	No	Yes
AIRCRAFT	A1	Boeing 757-200/300	No	Yes
AIRCRAFT	A1	Boeing 767-200/300/400	No	Yes
AIRCRAFT	A1	Boeing 777-200/300	Yes	Yes
AIRCRAFT	A1	Boeing 787-8/9/10	No	Yes
AIRCRAFT	A1	Bombardier BD-500 Series	No	Yes
AIRCRAFT	A1	Embraer ERJ-170 Series	Yes	Yes
AIRCRAFT	A1	Embraer ERJ-190 Series	Yes	Yes
ENGINES	B1	CFMI CFM56-3 Series	---	---
ENGINES	B1	CFMI CFM56-5C Series	---	---
ENGINES	B1	CFMI CFM56-7B Series	---	---
ENGINES	B1	IAE V2500-A1	---	---
ENGINES	B1	IAE V2500-A5 Series	---	---
ENGINES	B1	PW PW4090 Series	---	---
ENGINES	B1	RR RB211 Trent 700 Series	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C01	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C02	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C03	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C04	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C05	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C06	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C07	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C08	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C09	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C12	i.a.w. approved Capability List	---	---



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CLASS	RATING	LIMITATION	BASE	LINE
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C13	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C14	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C15	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C17	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C18	i.a.w. approved Capability List	---	---
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C19	i.a.w. approved Capability List	---	---
SPECIALISED SERVICES	D1	Ultrasonic Inspection	---	---
SPECIALISED SERVICES	D1	Eddy Current Inspection	---	---
SPECIALISED SERVICES	D1	Thermography Inspection	---	---
SPECIALISED SERVICES	D1	Magnetic Particle Inspection	---	---
SPECIALISED SERVICES	D1	Radiography Inspection	---	---
SPECIALISED SERVICES	D1	Liquid Penetrant Inspection	---	---

These terms of approval are limited to those products, parts and appliances and to the activities specified in the scope of work section of the approved maintenance organisation exposition,

Maintenance Organisation Exposition reference: **EGME-EASA-DOC1**

Date of original issue: **01 Feb 2006**

Date of last revision approved: **01 Oct 2022** Issue number: **22** Revision number: **0**

Approved Locations

LOCATION	NAME	Address	Country
145 - Principal Place of Business	EGYPTAIR MAINTENANCE AND ENGINEERING (EGYPTAIR M&E)	CAIRO INTERNATIONAL AIRPORT 11776 CAIRO	EGYPT
145 - Base, Engine, Component Site	EGYPTAIR MAINTENANCE AND ENGINEERING (EGYPTAIR M&E)	CAIRO INTERNATIONAL AIRPORT 11776 CAIRO	EGYPT

Signed:



For the European Union Aviation Safety Agency,



MAINTENANCE ORGANISATION APPROVAL CERTIFICATE

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as a maintenance organisation in compliance with Section A of Annex II (Part-145) of Regulation (EU) N° 1321/2014, approved to maintain the products, parts and appliances listed in the attached terms of approval and issue related certificates of release to service using the above reference and, when stipulated, to issue airworthiness review certificates after an airworthiness review as specified in point ML.A.903 of Annex Vb (Part-ML) to that Regulation for those aircraft listed in the attached terms of approval.

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- 2) This approval requires compliance with the procedures specified in the approved maintenance organisation exposition, and
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145 - Base, Engine, Component Site	EGYPTAIR MAINTENANCE AND ENGINEERING (EGYPTAIR M&E)	CAIRO INTERNATIONAL AIRPORT 11776 CAIRO	EGYPT

Signed:



For the European Union Aviation Safety Agency,



1.9 Scope of Work

1.9.1 Aircraft Maintenance.

- A1 rating Definition:**

Authorization to maintain and release aircraft (with weight above 5700 KG), The required maintenance of power plant, APU and other aircraft components, which is carried out with the components installed or removed temporary to facilitate work, is authorized in the scope as laid down in the maintenance requirements of the aircraft design organization (Aircraft maintenance manual) (e.g. engines “on wing”).

Rating	TC Holder	Aircraft Type / Group Rating	Limitation	Model	Maintenance Level up to and including the following:	Base	Line
A1	Airbus	Airbus A318/A319/A320/A321 (CFM56)	Airbus A318/A319/A320/A321	A319-111 A319-112 A319-113 A319-114 A319-115 A320-211 A320-212 A320-214 A320-215 A320-216 A321-111 A321-112 A321-211 A321-212 A321-213	12,000 FH 8000 FC 12 YE	X	X
A1	Airbus	Airbus A319/A320/A321 (IAE V2500)	Airbus A319/A320/A321	A319-131 A319-132 A319-133 A320-231 A320-232 A320-233 A321-131 A321-231 A321-232	12,000 FH 8000 FC 12 YE	X	X
A1	Airbus	Airbus A319/A320/A321 (CFM LEAP-1A)	Airbus A319/A320/A321	A319-151N A319-152N A319-153N A320-251N A320-252N A320-253N A321-251N A321-252N A321-253N A321-251NX A321-252NX A321-253NX	12,000 FH 8000 FC 12 YE	X	X

Rating	TC Holder	Aircraft Type / Group Rating	Limitation	Model	Maintenance Level up to and including the following:	Base	Line
A1	Airbus	Airbus A319/A320/A321 (IAE PW1100G)	Airbus A319/A320/A321	A319-171N A319-172N A319-173N A320-271N A320-272N A320-273N A321-271N A321-272N A321-271NX A321-272NX	Weekly -check		X
A1	Airbus Canada Limited Partnership	Bombardier BD-500 Series (PW PW1500G)	BD-500-1A10 BD-500-1A11	BD-500-1A10 (A220-100) BD-500-1A11 (A220-300)	850 FH		X
A1	Airbus	Airbus A330 (GE CF6)	Airbus A330	A330-201 A330-202 A330-203 A330-301 A330-302 A330-303	144 MO	X	X
A1	Airbus	Airbus A330 (RR Trent 700)	A330-243 A330-243F A330-341 A330-342 A330-343	A330-243 A330-243F A330-341 A330-342 A330-343	144 MO	X	X
A1	Airbus	Airbus A340 (CFM56)	Airbus A340	A340-211 A340-212 A340-213 A340-311 A340-312 A340-313	144 MO	X	X
A1	Airbus	Airbus A350 (RR Trent XWB)	Airbus A350	A350-1041 A350-941	Weekly -check		X
A1	Airbus	Airbus A380 (EA GP7200)	Airbus A380	A380-861	Weekly -check		X
A1	Airbus	Airbus A380 (RR Trent 900)	Airbus A380	A380-841 A380-842	Weekly -check		X
A1	The Boeing Company	Boeing 777-200/300 (GE 90)	Boeing 777-200, 777-200LR, 777-300ER and 777F	777-200 777-200LR 777-300ER 777F	HMV Check	X	X
A1	The Boeing Company	Boeing 777-200/300 (PW 4000)	Boeing 777-200, 777-200LR, 777-300ER	777-200 777-300	HMV Check	X	X
A1	The Boeing Company	Boeing 737-300/400/500 (CFM56)	Boeing 737-100, -200, -200C, -300, -400, -500	737-300 737-400 737-500	8C / 24,000 FH	X	X
A1	The Boeing Company	Boeing 737-600/700/800/900 (CFM56)	Boeing 737-600, -700, -800, -900, -900ER	737-600 737-700 737-800 737-900 737-900ER	HMV Check	X	X
A1	The Boeing Company	Boeing 737-7/8/9 (CFM LEAP-1B)	Boeing 737-7, 737-8, 737-9, 737-8200	737-7 737-8 737-9 737-8200	Daily -check		X

Rating	TC Holder	Aircraft Type / Group Rating	Limitation	Model	Maintenance Level up to and including the following:	Base	Line
A1	The Boeing Company	Boeing 757-200/300 (RR RB211)	Boeing 757-200/300	757-200 757-300	A - check		X
A1	The Boeing Company	Boeing 767-200/300/400 (GE CF6)	Boeing 767-200/300/400	767-200 767-300	A - check		X
A1	The Boeing Company	Boeing 787-8/9/10 (GENx)	Boeing 787-8/9/10	787-8 787-9 787-10	Weekly -check		X
A1	The Boeing Company	Boeing 787-8/9/10 (RR RB 211 Trent 1000)	Boeing 787-8/9/10	787-8 787-9 787-10	1000 FH / 182 FC / 3 MO		X
A1	Embraer	Embraer ERJ-170 (GE CF34)	ERJ 170-100 LR ERJ 170-100 STD ERJ 170-200 LR ERJ 170-200 STD	ERJ 170-100 LR ERJ 170-100 STD ERJ 170-200 LR ERJ 170-200 STD	B-4 / 143 MO / 40,000 FC	X	X
A1	Embraer	Embraer ERJ-190 (GE CF34)	ERJ 190-100 ECJ ERJ 190-100 IGW ERJ 190-100 LR ERJ 190-100 SR ERJ 190-100 STD ERJ 190-200 IGW ERJ 190-200 LR ERJ 190-200 STD	ERJ 190-100 ECJ ERJ 190-100 IGW ERJ 190-100 LR ERJ 190-100 SR ERJ 190-100 STD ERJ 190-200 IGW ERJ 190-200 LR ERJ 190-200 STD	B-4 / 143 MO / 40,000 FC	X	X

- Line Maintenance is any maintenance that is carried out before flight to ensure that the aircraft is fit for the intended flight, and to be limited as follows:
 - Minor scheduled line maintenance: are those scheduled tasks not exceeding the weekly check as specified in the aircraft maintenance programme.
 - Scheduled checks: are those scheduled tasks which exceed the weekly check up to and excluding Bas Maintenance checks as determined by the MPD.
 - Trouble shooting and / or Defect Rectification: not requiring special ground support usually relevant to base maintenance (e.g.: special equipment, structured production planning, complex and lengthy maintenance).
 - Component replacement: including scheduled and unscheduled component replacement in relation to a defect rectification.
 - Minor repairs and modifications: which do not require extensive disassembly and can be accomplished by simple means.

Note:

- For LM Location names, refer to MOE 5.3 "List of Line Maintenance Locations".
- For the Scope of Work of each LM location, refer to EGME050 "List of Line Maintenance Locations".

1.9.2 Engine Maintenance.

- **B1 rating Definition:** Authorization to maintain and release removed Aircraft engine.

Rating	Engine / APU Type Limitation	(Engine / APU Model)	Maintenance level
B1	CFM56-3 Series	CFM56-3/3B/3C	As per EGME001 "capability list"
B1	CFM56-5C Series	CFM56-5C2 CFM56-5C2/F CFM56-5C2/G CFM56-5C2/4 CFM56-5C2/F4, CFM56-5C2/G4 CFM56-5C3/F CFM56-5C3/F4 CFM56-5C3/G CFM56-5C3/G4 CFM56-5C4 CFM56-5C4/1	
B1	CFM56-7B Series	CFM56-7B20 CFM56-7B22 CFM56-7B22/B1 CFM56-7B24 CFM56-7B24/B1 CFM56-7B26 CFM56-7B26/B2 CFM56-7B27 CFM56-7B27/B1 CFM56-7B27/B3 CFM56-7B26/3 CFM56-7B26E	
B1	IAE V2500 Series	V2500-A1 V2527-A5 V2527E-A5 V2533-A5	
B1	PW4000 Series	PW4090	
B1	RB211 Trent 700 Series	RB211 Trent 772B-60	

1.9.3 Component Maintenance.

- **C rating Definition:** Authorization to maintain and release removed aircraft components, other than complete engines and APU's.

Rating	A T A	P/N	Designation	Manufacturer	Reference of the CMM	Level of Maintenance	Work shop
C1 Air Cond. & Press. C2 Auto Flight. C3 Comms & Nav C4 Doors – hatches C5 Electrical Power. C6 Equipment. C7 Engine - APU C8 Flight Controls C9 Fuel - Airframe C12 Hydraulic. C13 Instruments C14 Landing Gear C15 Oxygen C17 Pneumatic C18 Protection ice/rain/fire C19 windows			As listed in EgyptAir M&E capability list reference EGME001.				

1.9.4 Specialized Services Maintenance.

- **D rating:** Authorization to carry out and certify special process (e.g. nondestructive testing, welding, painting, machining ... etc.).

1.9.4.1 NDT with D1 Rating.

- **D1 rating:** Authorization to perform NDT tasks and release such tasks using an EASA Form One using one or more of the following methods.

Rating	Limitation	Detail of Limitation
D1	Liquid penetrant. (PT)	Techniques in accordance to the current EGME NDT Manual approved by the Responsible NDT level 3.
	Magnetic particles. (MT)	
	Eddy current. (ET)	
	Ultrasonic. (UT)	
	Radiography. (RT)	
	Thermography. (IRT)	

1.9.4.2 NDT without D1 Rating (in the course of maintenance).

- All the above-mentioned methods are applied also in the course of Aircraft / Aircraft component maintenance without issuance of EASA Form One certificate.

1.9.4.3 Other Specialized Activities

- EgyptAir Maintenance and Engineering has the following specialized activities:

Specialized activity	Reference data	Location/ workshop	Limitation
Painting	As per EgyptAir M&E Capability List (EGME001)		
Welding/Brazing			
Machining			
Composite Repairs			

1.9.5 Maintenance Away from the Approved Locations as per 145.A.75 (c)

- EgyptAir M&E can perform maintenance works away from the approved locations, for A1 rating & B1 Rating subject to the condition specified in MOE 2.32 "Maintenance away from approved location"

1.9.6 Parts Fabrication

- EGME may fabricate parts in the course of maintenance carried out on aircrafts under Rating A1, Engines under Rating B1, Components under Cx Rating as per MOE 2.30 "Fabrication of Parts"

1.9.7 Component maintenance under aircraft or engine rating

In the course of maintenance carried out on aircrafts under Rating A1, EGME may perform maintenance for Engines using the applicable EMM and /or Components using the applicable CMM as per MOE 2.31 "Procedure for Component Maintenance under Aircraft or Engine Rating".

1.9.8 Airworthiness review privileges

- Not Applicable for EGME.

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Air Agency Certificate

Number 3EMY437B

This certificate is issued to
EGYPT AIR MAINTENANCE & ENGINEERING

whose business address is
CAIRO INTERNATIONAL AIRPORT
CAIRO, EGYPT

*upon finding that its organization complies in all respects
with the requirements of the Federal Aviation Regulations
relating to the establishment of an Air Agency, and is
empowered to operate an approved* REPAIR STATION

with the following ratings:

LIMITED AIRFRAME, LIMITED RADIO, LIMITED POWERPLANT
LIMITED ACCESSORY, LIMITED INSTRUMENT,
LIMITED NON-DESTRUCTIVE INSPECTION, TESTING & PROCESSING
LIMITED EMERGENCY EQUIPMENT

*This certificate, unless canceled, suspended, or revoked,
shall continue in effect* until April 30, 2027

By direction of the Administrator

Date issued:
APRIL 11, 2010

WYATT E SEEGER Digitally signed by WYATT E SEEGER
Date: 2025.05.19 13:02:15 -05'00'
Wyatt Seeger, Manager DFW IFO

**This Certificate is not Transferable, AND ANY MAJOR CHANGE IN THE BASIC FACILITIES, OR IN THE LOCATION THEREOF,
SHALL BE IMMEDIATELY REPORTED TO THE APPROPRIATE REGIONAL OFFICE OF THE FEDERAL AVIATION ADMINISTRATION**

~~Any alteration of this certificate is prohibited by a fine of not exceeding \$1,000 or imprisonment not exceeding 6 years, or both.~~

Table of Contents

Part A

	HQ CONTROL DATE	EFFECTIVE DATE	AMENDMENT NUMBER
001 Issuance and Applicability	05/06/2022	01/11/2023	11
002 Definitions and Abbreviations	12/14/2017	02/27/2018	8
003 Ratings and Limitations	04/03/2017	09/12/2023	17
004 Summary of Special Authorizations and Limitations	09/23/1998	08/11/2016	8
007 Designated Persons	09/08/2021	03/27/2023	12
025 Electronic/Digital Recordkeeping System, Electronic/Digital Signature, and Electronic Media	04/03/2017	02/27/2018	10

A001 . Issuance and Applicability

HQ Control: 02/11/2016

HQ Revision: 05e

a. These operations specifications are issued to EGYPTAIR MAINTENANCE AND ENGINEERING, a Repair Station, located outside the United States, pursuant to 14 CFR Part 145, § 145.53. The repair station certificate holder shall conduct operations in accordance with 14 CFR Part 145 and these operations specifications.

The certificate holder's address:

Fixed Location:
Cairo International Airport
Cairo, .
Egypt

Mailing Address:
Cairo International Airport
P.O. Box 11776
Cairo, Egypt

b. The holder of these operations specifications is the holder of certificate number 3EMY437B and shall hereafter be referred to as the "certificate holder".

c. These operations specifications are issued as part of this repair station certificate and are in effect as of the date approval is effective. This certificate and these operations specifications shall remain in effect until the expiration date on the issued certificate for a repair station that is located outside the United States unless previously surrendered, suspended, or revoked.

d. U.S./EU Aviation Safety Agreement Repair Station/Maintenance Organization Approvals not authorized.

e. The certificate holder is authorized to use only the business name which appears on the certificate to conduct the operations described in subparagraph a.

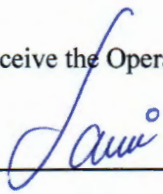
Delegated authorities: None

1. Issued by the Federal Aviation Administration.
2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Donald T Rigg, Principal Maintenance Inspector (FS57)
[1] EFFECTIVE DATE: 8/11/2016, [2] AMENDMENT #: 10
DATE: 2016.08.12 09:46:00 -05:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

 22, Aug 2016

Samy, Mohamed, FAA Accountable Manager, 145 Date

A002 . Definitions and Abbreviations

HQ Control: 12/14/2017

HQ Revision: 05d

Unless otherwise defined in these operations specifications, all words, phrases, definitions, and abbreviations have identical meanings to those used in 14 CFR and 49 U.S.C., as cited in Public Law 103-272, as amended. Additionally, the definitions listed below are applicable to operations conducted in accordance with these operations specifications.

BASA	The Bilateral Aviation Safety Agreement (BASA) is an executive agreement concluded between the United States and a foreign country for the purpose of promoting aviation safety; also known as an Agreement for the Promotion of Aviation Safety.
Certificate Holder	In these operations specifications, the term "certificate holder" means the holder of the repair station certificate described in these operations specifications in Part A paragraph A001 and any of its officers, employees, or agents used in the conduct of operations under this certificate.
CAAS	Civil Aviation Authority of Singapore
CFR	Code of Federal Regulations
Class Rating	As used with respect to the certification, ratings, privileges of airframes, powerplants, propellers, radios, instruments, and accessories within a category having similar operating characteristics.
EASA	European Aviation Safety Agency
EASA Accountable Manager	The manager who has corporate authority for ensuring that all maintenance required by the customer can be financed and carried out to the standard required by the EASA full-member Authority.
EU	European Union
Exemption	An authorization that permits an alternate means of compliance with a specific CFR. The exemption must meet the procedural requirements of 14 CFR Part 11.
FOCA	Federal Office of Civil Aviation
FAA Accountable Manager	A person designated by the certificated repair station who is responsible for and has authority over all repair station operations that are conducted under 14 CFR Part 145, including ensuring that the repair station's personnel follow the regulations and serving as the primary contact with the FAA.

Geographic Authorization	Authorization provided to a repair station located outside the United States to perform maintenance support under contract for a U.S. air carrier (or an operator of U.S.- registered aircraft under 14 CFR Part 129) at a location other than the repair station's main facility. A geographic authorization is issued by the FAA to respond to a U.S. air carrier's or Part 129 foreign operator's need for maintenance at a station where the frequency and scope of that maintenance does not warrant permanently staffing and equipping the station for its accomplishment.
Limited Rating	A rating issued to repair stations for the performance of maintenance on particular makes and models of airframes, powerplants, propellers, radios, instruments, accessories, and/or parts.
Limited Ratings - Specialized Services	Rating issued for a special maintenance function when the function is performed in accordance with a specification approved by the Administrator.
Line Maintenance	Any unscheduled maintenance resulting from unforeseen events, or scheduled checks where certain servicing and/or inspections do not require specialized training, equipment, or facilities.
MAG	The Maintenance Annex Guidance (MAG) defines the process that the FAA and EASA undertake in the inspection, findings of compliance certification, and monitoring of repair stations, as well as their joint cooperation in quality assurance and standardization activities in support of the EASA Agreement, Annex 2, Maintenance. The term Maintenance Agreement Guidance (MAG) defines the processes and activities applicable to a specific country under an MIP, and is not associated with the EASA Agreement.
Maintenance	The inspection, overhaul, repair, preservation, and replacement of parts, but excludes preventive maintenance.
U.S./EU Aviation Safety Agreement, Annex 2, Maintenance	Annex 2 covers the reciprocal acceptance of findings of compliance, approvals, documentation and technical assistance regarding approvals and the monitoring of repair stations/maintenance organizations.
MIP	Maintenance Implementation Procedures (MIP) are procedures for implementing the provisions of a BASA that apply to maintenance performed under 14 CFR Part 145, Section 145.53(b).
MOE	A maintenance organization exposition (MOE) pertains to procedural manuals used by maintenance organizations certificated by a foreign country. The MOE along with the FAA Supplement, sets forth the structure and procedures of the repair station to meet the requirements of 14 CFR Part 145 under a MIP.

**Preventive
Maintenance**

As defined in 14 CFR part 1 and part 43 appendix A,
subparagraph (c).

QCM

Quality Control Manual

**Repair Station located
in the United States**

A FAA certificated repair station located in the United States.

**Repair Station located
outside the United
States**

A FAA certificated repair station located outside of the United States.

RSM

Repair Station Manual

1. Issued by the Federal Aviation Administration.
2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Tonya Ellis, Principal Maintenance Inspector (FS56)
[1] EFFECTIVE DATE: 2/27/2018, [2] AMENDMENT #: 8
DATE: 2018.02.27 10:47:43 -06:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

A handwritten signature in blue ink, appearing to read "Samy".

28, Feb 2018

Samy, Mohamed, FAA Accountable Manager, 145 Date

A003 . Ratings and Limitations

HQ Control: 04/03/2017

HQ Revision: 01a

The certificate holder is authorized the following Ratings and/or Limitations:

Class Ratings

None authorized

Limited Ratings

<u>Rating</u>	<u>Manufacturer</u>	<u>Make/Model</u>	<u>Limitations</u>
Airframe	Airbus	A319, A320, A321 Series.	Limited to all checks up to and including 12,000 FH/8,000 FC/12 YE Checks.
		A330 Series.	Limited to all checks up to and including 144 MO Checks.
		A340-200/300 Series	Limited to all checks up to and including 144 MO Checks.
	Airbus Canada Limited Partnership	BD-500 Series	Limited to all checks up to and including 850 FH Checks.
		B777 Series.	Limited to all checks up to and including HMT Checks.
	Boeing	B737-600/700/800/900	Limited to all checks up to and including HMT Checks.
		B737-300/400/500	Limited to all checks up to and including 8C//24,000 FH Checks.
		B737 7/8/9	Limited to all Line Maintenance Checks up to and including Weekly Checks.
		B757-200/300	Limited to all checks up to and including "A" Checks.
		B767-200/300	Limited to all checks up to and including "A" Checks.
		B-787 All Series	Limited to all checks up to and including 1,000 FH/182 FC / 3 MO Checks.
	Embraer	170 Series	Limited to all checks up to and including B-4/143 MO/40,000 FC Checks.
		190 Series	Limited to all checks up to and including B-4/143 MO/40,000 FC Checks.
Engines	CFMI	CFM 56-7B; CFM LEAP-1A, CFM56-3	Limited to Power Plant components and module level removal & installation and

Operations Specifications

<u>Rating</u>	<u>Manufacturer</u>	<u>Make/Model</u>	<u>Limitations</u>
		Series, CFM56-5C Series.	module disassembly & assembly for CFM56-7B & CFM 56-5C, to include Engine Test. Limited to on-wing only for LEAP-1A engines.
	CFMI	CFM 56-5A; CFM56 - 5B,CFM Leap-1B	Limited to on-wing only for LEAP-1B engines.
	IAE	V2500-A1/A5	Limited to Power Plant components and module level removal & installation. Module disassembly & assembly (the extent of disassembly & assembly is limited to high pressure system module.). Engine Test.
	IAE	IAE PW1100G	Limited to on-wing only.
	General Electric	GE nx and GE 90, CF6, CF34.	Limited to on-wing only.
	Pratt & Whitney	PW4000, PW4090	Limited to on-wing only. PW 4090 Limited to on-wing only Power Plant Component Module Removal & Installation to include Engine Test.
	Engine Alliance	EA GP 7200, Pratt & Whitney Manufacturer	Limited to on-wing only.
	Rolls Royce	Trent 700 RB211 Trent 900 Trent 1000	Limited to Power Plant components and module level removal & installation, disassembly & assembly, to include Engine test. Limited to on-wing only for RR RB-211 Trent 900 Trent 1000 engines.
Accessories	From the accepted Capability List, as amended.	From the accepted Capability List, as amended.	From the accepted Capability List EGME 001 as amended.
Instruments	From the accepted Capability List, as amended.	From the accepted Capability List, as amended.	From the accepted Capability List EGME 001 as amended. Perform tests and inspections required by 14 CFR 91.411 as follows: In compliance with 14 CFR Appendix E(a) and (c) to Part 43 on aircrafts Make and Models listed under the Airframe Rating. In compliance with 14 CFR Appendix E(b) to Part 43, for Altimeter units removed from aircraft, and listed in the accepted Capability List EGME 001 as amended.
Radio	From the accepted Capability List, as amended.	From the accepted Capability List, as amended.	From the accepted Capability List EGME 001 as amended. Perform tests and inspections of ATC transponder required by 14 CFR 91.413, as

Operations Specifications

<u>Rating</u>	<u>Manufacturer</u>	<u>Make/Model</u>	<u>Limitations</u>
			installed on the aircraft, and in compliance with 14 CFR Appendix F to Part 43, for aircrafts Make and Models listed under Airframe Rating.
Emergency Equipment	From the accepted Capability List, as amended.	From the accepted Capability List, as amended.	From the accepted Capability List EGME 001 as amended.
Nondestructive Inspection, Testing, and Processing	Liquid Penetrant, Magnetic Particle, Eddy Current, Ultrasonic, Radiographic, and Thermography		All NDT personnel must be qualified in accordance with AIA-NAS-410, EN4179 or FAA accepted equivalent.

Limited Ratings - Specialized Services

<u>Rating</u>	<u>Specifications</u>	<u>Limitations</u>
None Authorized		

1. Issued by the Federal Aviation Administration.
2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Jocelyn MacGregor, Principal Avionics Inspector (FS56)
[1] EFFECTIVE DATE: 9/12/2023, [2] AMENDMENT #: 17
DATE: 2023.09.12 12:53:09 -05:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

Samy 18, Sep. 2023
Mohamed Samy, FAA Accountable Manager, 145 Date

A004 . Summary of Special Authorizations and Limitations

HQ Control: 09/23/1998

HQ Revision: 010

a. The certificate holder, in accordance with the reference paragraphs, is authorized to:

Use an approved electronic recordkeeping system, electronic/digital signature, and/or electronic media.

Reference
Paragraphs

A025

b. The certificate holder is *not* authorized and shall not:

Use Exemptions.

Reference
Paragraphs

A005

Perform maintenance with EASA ratings where the scope of work is authorized by a BASA/MAG (U.S.-EU), MIP/MaG (U.S.-Swiss).

A060

Perform work, including continuous operations, at additional locations other than at its primary fixed location.

A101

Conduct operations choosing to have an antidrug and alcohol misuse prevention program.

A449

Perform maintenance in accordance with foreign repair station geographic authorizations.

B050

Perform work, excluding continuous operations, at additional locations other than at its primary Fixed Location.

D100

Perform line maintenance for cert. holders conducting operations under Parts 121 and 135 and for foreign carriers/persons operating non-U.S. registered aircraft in common carriage under Part 129, apart from D100 which authorizes that work away from station.

D107

1. Issued by the Federal Aviation Administration.
2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Donald T Rigg, Principal Maintenance Inspector (FS57)
[1] EFFECTIVE DATE: 8/11/2016, [2] AMENDMENT #: 8
DATE: 2016.08.12 09:46:02 -05:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

Samy 22 Aug 2016
Samy, Mohamed, FAA Accountable Manager, 145 Date

A007 . Designated Persons

HQ Control: 09/08/2021

HQ Revision: 03a

a. The personnel listed in the following table are designated to officially apply for and receive operations specifications for the certificate holder indicated below.

Table 1 – Designated Persons to Apply for and Receive Authorizations

Title	Name	Parts Authorized	Email Address
FAA Accountable Manager, 145	Samy, Mohamed	A	accountablemgr.me@egyptair.com
Director of Quality Assurance	Shawky, Medhat Ahmed	A	qa.me@egyptair.com

b. The following personnel listed in Table 2 are designated by the certificate holder to receive Information for Operators (InFO) messages for the certificate holder as indicated below. A receipt for the information by an operator or person is not required.

Table 2 – Designated to Receive InFO Messages

Name	Email Address	Telephone No.	Type of Information to Receive
Shawky, Medhat Ahmed	qa.me@egyptair.com	+201005335345	ALL

1. Issued by the Federal Aviation Administration.

2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Benjamin Thompson, Principal Avionics Inspector (FS56)

[1] SUPPORT INFO: Added email addresses and removed D OPSS.

[2] EFFECTIVE DATE: 3/27/2023, [3] AMENDMENT #: 12

DATE: 2023.03.27 11:56:13 -05:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

03/27/2023

Medhat Ahmed Shawky, Director of Quality Assurance Date

**A025 . Electronic/Digital Recordkeeping System,
Electronic/Digital Signature, and Electronic Media**

HQ Control: 04/03/2017

HQ Revision: 00b

a. The certificate holder is authorized to use an acceptable electronic/digital recordkeeping system, described and/or referenced in this paragraph (if none, enter N/A.)

N/A

b. The certificate holder is authorized the use of the following electronic/digital signature procedures (if none, enter "N/A").

N/A

c. The certificate holder is authorized to use electronic media for the repair station and quality control manuals, if acceptable (if none, enter "N/A").

Repair Station Manual 2-3, MOE 2.8

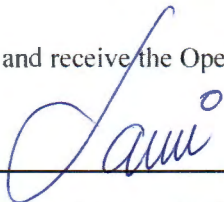
1. Issued by the Federal Aviation Administration.

2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Tonya Ellis, Principal Maintenance Inspector (FS56)
[1] EFFECTIVE DATE: 2/27/2018, [2] AMENDMENT #: 10
DATE: 2018.02.27 10:49:12 -06:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

 28, Feb 2018

Samy, Mohamed, FAA Accountable Manager, 145 Date

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Air Agency Certificate

Number 3EMY437B

This certificate is issued to
EGYPT AIR MAINTENANCE & ENGINEERING

whose business address is
CAIRO INTERNATIONAL AIRPORT
CAIRO, EGYPT

*upon finding that its organization complies in all respects
with the requirements of the Federal Aviation Regulations
relating to the establishment of an Air Agency, and is
empowered to operate an approved* REPAIR STATION

with the following ratings:

LIMITED AIRFRAME, LIMITED RADIO, LIMITED POWERPLANT
LIMITED ACCESSORY, LIMITED INSTRUMENT,
LIMITED NON-DESTRUCTIVE INSPECTION, TESTING & PROCESSING
LIMITED EMERGENCY EQUIPMENT

*This certificate, unless canceled, suspended, or revoked,
shall continue in effect* until April 30, 2027

By direction of the Administrator

Date issued:
APRIL 11, 2010

WYATT E SEEGER Digitally signed by WYATT E SEEGER
Date: 2025.05.19 13:02:15 -05'00'
Wyatt Seeger, Manager DFW IFO

**This Certificate is not Transferable, AND ANY MAJOR CHANGE IN THE BASIC FACILITIES, OR IN THE LOCATION THEREOF,
SHALL BE IMMEDIATELY REPORTED TO THE APPROPRIATE REGIONAL OFFICE OF THE FEDERAL AVIATION ADMINISTRATION**

~~Any alteration of this certificate is prohibited by a fine of not exceeding \$1,000 or imprisonment not exceeding 6 years, or both.~~

Table of Contents

Part A

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004 Summary of Special Authorizations and Limitations	09/23/1998	08/11/2016	8
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A001 . Issuance and Applicability

HQ Control: 02/11/2016

HQ Revision: 05e

a. These operations specifications are issued to EGYPTAIR MAINTENANCE AND ENGINEERING, a Repair Station, located outside the United States, pursuant to 14 CFR Part 145, § 145.53. The repair station certificate holder shall conduct operations in accordance with 14 CFR Part 145 and these operations specifications.

The certificate holder's address:

Fixed Location:
Cairo International Airport
Cairo, .
Egypt

Mailing Address:
Cairo International Airport
P.O. Box 11776
Cairo, Egypt

b. The holder of these operations specifications is the holder of certificate number 3EMY437B and shall hereafter be referred to as the "certificate holder".

c. These operations specifications are issued as part of this repair station certificate and are in effect as of the date approval is effective. This certificate and these operations specifications shall remain in effect until the expiration date on the issued certificate for a repair station that is located outside the United States unless previously surrendered, suspended, or revoked.

d. U.S./EU Aviation Safety Agreement Repair Station/Maintenance Organization Approvals not authorized.

e. The certificate holder is authorized to use only the business name which appears on the certificate to conduct the operations described in subparagraph a.

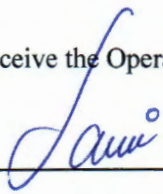
Delegated authorities: None

1. Issued by the Federal Aviation Administration.
2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Donald T Rigg, Principal Maintenance Inspector (FS57)
[1] EFFECTIVE DATE: 8/11/2016, [2] AMENDMENT #: 10
DATE: 2016.08.12 09:46:00 -05:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

 22, Aug 2016

Samy, Mohamed, FAA Accountable Manager, 145 Date

A002 . Definitions and Abbreviations

HQ Control: 12/14/2017

HQ Revision: 05d

Unless otherwise defined in these operations specifications, all words, phrases, definitions, and abbreviations have identical meanings to those used in 14 CFR and 49 U.S.C., as cited in Public Law 103-272, as amended. Additionally, the definitions listed below are applicable to operations conducted in accordance with these operations specifications.

BASA	The Bilateral Aviation Safety Agreement (BASA) is an executive agreement concluded between the United States and a foreign country for the purpose of promoting aviation safety; also known as an Agreement for the Promotion of Aviation Safety.
Certificate Holder	In these operations specifications, the term "certificate holder" means the holder of the repair station certificate described in these operations specifications in Part A paragraph A001 and any of its officers, employees, or agents used in the conduct of operations under this certificate.
CAAS	Civil Aviation Authority of Singapore
CFR	Code of Federal Regulations
Class Rating	As used with respect to the certification, ratings, privileges of airframes, powerplants, propellers, radios, instruments, and accessories within a category having similar operating characteristics.
EASA	European Aviation Safety Agency
EASA Accountable Manager	The manager who has corporate authority for ensuring that all maintenance required by the customer can be financed and carried out to the standard required by the EASA full-member Authority.
EU	European Union
Exemption	An authorization that permits an alternate means of compliance with a specific CFR. The exemption must meet the procedural requirements of 14 CFR Part 11.
FOCA	Federal Office of Civil Aviation
FAA Accountable Manager	A person designated by the certificated repair station who is responsible for and has authority over all repair station operations that are conducted under 14 CFR Part 145, including ensuring that the repair station's personnel follow the regulations and serving as the primary contact with the FAA.

Geographic Authorization	Authorization provided to a repair station located outside the United States to perform maintenance support under contract for a U.S. air carrier (or an operator of U.S.- registered aircraft under 14 CFR Part 129) at a location other than the repair station's main facility. A geographic authorization is issued by the FAA to respond to a U.S. air carrier's or Part 129 foreign operator's need for maintenance at a station where the frequency and scope of that maintenance does not warrant permanently staffing and equipping the station for its accomplishment.
Limited Rating	A rating issued to repair stations for the performance of maintenance on particular makes and models of airframes, powerplants, propellers, radios, instruments, accessories, and/or parts.
Limited Ratings - Specialized Services	Rating issued for a special maintenance function when the function is performed in accordance with a specification approved by the Administrator.
Line Maintenance	Any unscheduled maintenance resulting from unforeseen events, or scheduled checks where certain servicing and/or inspections do not require specialized training, equipment, or facilities.
MAG	The Maintenance Annex Guidance (MAG) defines the process that the FAA and EASA undertake in the inspection, findings of compliance certification, and monitoring of repair stations, as well as their joint cooperation in quality assurance and standardization activities in support of the EASA Agreement, Annex 2, Maintenance. The term Maintenance Agreement Guidance (MAG) defines the processes and activities applicable to a specific country under an MIP, and is not associated with the EASA Agreement.
Maintenance	The inspection, overhaul, repair, preservation, and replacement of parts, but excludes preventive maintenance.
U.S./EU Aviation Safety Agreement, Annex 2, Maintenance	Annex 2 covers the reciprocal acceptance of findings of compliance, approvals, documentation and technical assistance regarding approvals and the monitoring of repair stations/maintenance organizations.
MIP	Maintenance Implementation Procedures (MIP) are procedures for implementing the provisions of a BASA that apply to maintenance performed under 14 CFR Part 145, Section 145.53(b).
MOE	A maintenance organization exposition (MOE) pertains to procedural manuals used by maintenance organizations certificated by a foreign country. The MOE along with the FAA Supplement, sets forth the structure and procedures of the repair station to meet the requirements of 14 CFR Part 145 under a MIP.

**Preventive
Maintenance**

As defined in 14 CFR part 1 and part 43 appendix A,
subparagraph (c).

QCM

Quality Control Manual

**Repair Station located
in the United States**

A FAA certificated repair station located in the United States.

**Repair Station located
outside the United
States**

A FAA certificated repair station located outside of the United States.

RSM

Repair Station Manual

1. Issued by the Federal Aviation Administration.
2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Tonya Ellis, Principal Maintenance Inspector (FS56)
[1] EFFECTIVE DATE: 2/27/2018, [2] AMENDMENT #: 8
DATE: 2018.02.27 10:47:43 -06:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

[Handwritten signature]

28, Feb 2018

Samy, Mohamed, FAA Accountable Manager, 145 Date

A003 . Ratings and Limitations

HQ Control: 04/03/2017

HQ Revision: 01a

The certificate holder is authorized the following Ratings and/or Limitations:

Class Ratings

None authorized

Limited Ratings

<u>Rating</u>	<u>Manufacturer</u>	<u>Make/Model</u>	<u>Limitations</u>
Airframe	Airbus	A319, A320, A321 Series.	Limited to all checks up to and including 12,000 FH/8,000 FC/12 YE Checks.
		A330 Series.	Limited to all checks up to and including 144 MO Checks.
		A340-200/300 Series	Limited to all checks up to and including 144 MO Checks.
	Airbus Canada Limited Partnership	BD-500 Series	Limited to all checks up to and including 850 FH Checks.
		B777 Series.	Limited to all checks up to and including HMT Checks.
	Boeing	B737-600/700/800/900	Limited to all checks up to and including HMT Checks.
		B737-300/400/500	Limited to all checks up to and including 8C//24,000 FH Checks.
		B737 7/8/9	Limited to all Line Maintenance Checks up to and including Weekly Checks.
		B757-200/300	Limited to all checks up to and including "A" Checks.
		B767-200/300	Limited to all checks up to and including "A" Checks.
		B-787 All Series	Limited to all checks up to and including 1,000 FH/182 FC / 3 MO Checks.
	Embraer	170 Series	Limited to all checks up to and including B-4/143 MO/40,000 FC Checks.
		190 Series	Limited to all checks up to and including B-4/143 MO/40,000 FC Checks.
Engines	CFMI	CFM 56-7B; CFM LEAP-1A, CFM56-3	Limited to Power Plant components and module level removal & installation and

Operations Specifications

<u>Rating</u>	<u>Manufacturer</u>	<u>Make/Model</u>	<u>Limitations</u>
		Series, CFM56-5C Series.	module disassembly & assembly for CFM56-7B & CFM 56-5C, to include Engine Test. Limited to on-wing only for LEAP-1A engines.
	CFMI	CFM 56-5A; CFM56 - 5B,CFM Leap-1B	Limited to on-wing only for LEAP-1B engines.
	IAE	V2500-A1/A5	Limited to Power Plant components and module level removal & installation. Module disassembly & assembly (the extent of disassembly & assembly is limited to high pressure system module.). Engine Test.
	IAE	IAE PW1100G	Limited to on-wing only.
	General Electric	GE nx and GE 90, CF6, CF34.	Limited to on-wing only.
	Pratt & Whitney	PW4000, PW4090	Limited to on-wing only. PW 4090 Limited to on-wing only Power Plant Component Module Removal & Installation to include Engine Test.
	Engine Alliance	EA GP 7200, Pratt & Whitney Manufacturer	Limited to on-wing only.
	Rolls Royce	Trent 700 RB211 Trent 900 Trent 1000	Limited to Power Plant components and module level removal & installation, disassembly & assembly, to include Engine test. Limited to on-wing only for RR RB-211 Trent 900 Trent 1000 engines.
Accessories	From the accepted Capability List, as amended.	From the accepted Capability List, as amended.	From the accepted Capability List EGME 001 as amended.
Instruments	From the accepted Capability List, as amended.	From the accepted Capability List, as amended.	From the accepted Capability List EGME 001 as amended. Perform tests and inspections required by 14 CFR 91.411 as follows: In compliance with 14 CFR Appendix E(a) and (c) to Part 43 on aircrafts Make and Models listed under the Airframe Rating. In compliance with 14 CFR Appendix E(b) to Part 43, for Altimeter units removed from aircraft, and listed in the accepted Capability List EGME 001 as amended.
Radio	From the accepted Capability List, as amended.	From the accepted Capability List, as amended.	From the accepted Capability List EGME 001 as amended. Perform tests and inspections of ATC transponder required by 14 CFR 91.413, as

Operations Specifications

<u>Rating</u>	<u>Manufacturer</u>	<u>Make/Model</u>	<u>Limitations</u>
			installed on the aircraft, and in compliance with 14 CFR Appendix F to Part 43, for aircrafts Make and Models listed under Airframe Rating.
Emergency Equipment	From the accepted Capability List, as amended.	From the accepted Capability List, as amended.	From the accepted Capability List EGME 001 as amended.
Nondestructive Inspection, Testing, and Processing	Liquid Penetrant, Magnetic Particle, Eddy Current, Ultrasonic, Radiographic, and Thermography		All NDT personnel must be qualified in accordance with AIA-NAS-410, EN4179 or FAA accepted equivalent.

Limited Ratings - Specialized Services

<u>Rating</u>	<u>Specifications</u>	<u>Limitations</u>
None Authorized		

1. Issued by the Federal Aviation Administration.
2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Jocelyn MacGregor, Principal Avionics Inspector (FS56)
[1] EFFECTIVE DATE: 9/12/2023, [2] AMENDMENT #: 17
DATE: 2023.09.12 12:53:09 -05:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

Samy 18, Sep. 2023
Mohamed Samy, FAA Accountable Manager, 145 Date

A004 . Summary of Special Authorizations and Limitations

HQ Control: 09/23/1998

HQ Revision: 010

a. The certificate holder, in accordance with the reference paragraphs, is authorized to:

Use an approved electronic recordkeeping system, electronic/digital signature, and/or electronic media.

Reference
Paragraphs

A025

b. The certificate holder is *not* authorized and shall not:

Use Exemptions.

Reference
Paragraphs

A005

Perform maintenance with EASA ratings where the scope of work is authorized by a BASA/MAG (U.S.-EU), MIP/MaG (U.S.-Swiss).

A060

Perform work, including continuous operations, at additional locations other than at its primary fixed location.

A101

Conduct operations choosing to have an antidrug and alcohol misuse prevention program.

A449

Perform maintenance in accordance with foreign repair station geographic authorizations.

B050

Perform work, excluding continuous operations, at additional locations other than at its primary Fixed Location.

D100

Perform line maintenance for cert. holders conducting operations under Parts 121 and 135 and for foreign carriers/persons operating non-U.S. registered aircraft in common carriage under Part 129, apart from D100 which authorizes that work away from station.

D107

1. Issued by the Federal Aviation Administration.
2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Donald T Rigg, Principal Maintenance Inspector (FS57)
[1] EFFECTIVE DATE: 8/11/2016, [2] AMENDMENT #: 8
DATE: 2016.08.12 09:46:02 -05:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

Samy 22 Aug 2016
Samy, Mohamed, FAA Accountable Manager, 145 Date

A007 . Designated Persons

HQ Control: 09/08/2021

HQ Revision: 03a

a. The personnel listed in the following table are designated to officially apply for and receive operations specifications for the certificate holder indicated below.

Table 1 – Designated Persons to Apply for and Receive Authorizations

Title	Name	Parts Authorized	Email Address
FAA Accountable Manager, 145	Samy, Mohamed	A	accountablemgr.me@egyptair.com
Director of Quality Assurance	Shawky, Medhat Ahmed	A	qa.me@egyptair.com

b. The following personnel listed in Table 2 are designated by the certificate holder to receive Information for Operators (InFO) messages for the certificate holder as indicated below. A receipt for the information by an operator or person is not required.

Table 2 – Designated to Receive InFO Messages

Name	Email Address	Telephone No.	Type of Information to Receive
Shawky, Medhat Ahmed	qa.me@egyptair.com	+201005335345	ALL

1. Issued by the Federal Aviation Administration.

2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Benjamin Thompson, Principal Avionics Inspector (FS56)

[1] SUPPORT INFO: Added email addresses and removed D OPSS.

[2] EFFECTIVE DATE: 3/27/2023, [3] AMENDMENT #: 12

DATE: 2023.03.27 11:56:13 -05:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

03/27/2023

Medhat Ahmed Shawky, Director of Quality Assurance Date

**A025 . Electronic/Digital Recordkeeping System,
Electronic/Digital Signature, and Electronic Media**

HQ Control: 04/03/2017

HQ Revision: 00b

a. The certificate holder is authorized to use an acceptable electronic/digital recordkeeping system, described and/or referenced in this paragraph (if none, enter N/A.)

N/A

b. The certificate holder is authorized the use of the following electronic/digital signature procedures (if none, enter "N/A").

N/A

c. The certificate holder is authorized to use electronic media for the repair station and quality control manuals, if acceptable (if none, enter "N/A").

Repair Station Manual 2-3, MOE 2.8

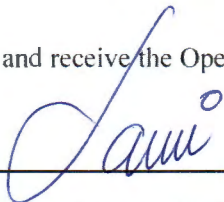
1. Issued by the Federal Aviation Administration.

2. These Operations Specifications are approved by direction of the Administrator.



Digitally signed by Tonya Ellis, Principal Maintenance Inspector (FS56)
[1] EFFECTIVE DATE: 2/27/2018, [2] AMENDMENT #: 10
DATE: 2018.02.27 10:49:12 -06:00

3. I hereby accept and receive the Operations Specifications in this paragraph.

 28, Feb 2018

Samy, Mohamed, FAA Accountable Manager, 145 Date

Airbus Amber

EGYPTAIR Maintenance & Engineering Company

Cairo International Airport, Terminal Building (1), Heliopolis
P.O. Box 11776

For the attention of: Yousef Wahby -
Director of Marketing, Maintenance Contracts, and Customer
Support

COPY

Mavandiyoor JAYARAM - Suppliers Development Manage
Dominique CHALLET - HO Airframe & Flight Training Services
Procurement
Timo ECKARDT - HO Customer Support Africa

FROM

Lucie CHARCELLAY -
MRO & Airframe Conversion
Procurement Manager Customer
Services Procurement - PESA

DATE

18th of August 2025

E-MAIL

lucie.charcellay@airbus.com

OUR REFERENCE

M25001518

Reference: Business Agreement reference CT2405402 dated on 20th of January 2025

Subject: Aircraft MRO assessment in the frame of Business Agreement

Dear Sir,

Airbus performed an assessment of Egyptair M&E facilities at Cairo International Airport, in March 2025. This assessment was performed in the frame of a Business Agreement between both organizations and covers the airframe base maintenance division of Egyptair M&E.

Airbus is pleased to confirm that Egyptair M&E was found to be at a standard meeting the requirements of Airbus to be a qualified supplier for the scope of airframe base maintenance.

The qualification of Airbus will be valid for 3 years, in accordance with the terms and conditions of the Business Agreement reference CT2405402.

This qualification shall be regarded as a recognition of Egyptair's commitment to industry standards & professionalism to support the aviation ecosystem, thereby contributing to overall safety and quality in maintenance services of Airbus aircraft in Africa.

In accordance with Business Agreement reference CT2405402 dated on 20th of January 2025 and its article 9.2 "Publicity", Egyptair is authorised to submit a public announcement or news release upon a prior written consent given by Airbus.

With sincere appreciation from Airbus Company,



Frederic PIERRE

Title: Head of Aftermarket Suppliers Development
Customer Services Operations



Florian LAGARDE

Title: Head of MRO Working Party me Procurement
Customer Services Procurement



COMMEMORATIVE CERTIFICATE OF SIGNING

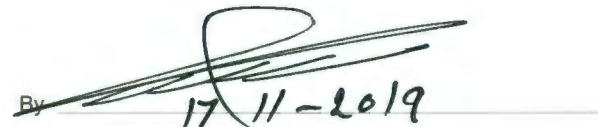
NOVEMBER 2019

**EGYPTAIR MAINTENANCE & ENGINEERING becomes the first Boeing
supplier for MRO and Supply Chain support in Africa & the Middle East**

With sincere appreciation from The Boeing Company

By 

Ted Colbert
President and Chief Executive Officer
Boeing Global Services

By 
17/11-2019

Eng. Mostafa Ali El Din Emam
Chairman & Chief Executive Officer
EGYPTAIR Maintenance & Engineering



May 25, 2010

Subject: B/E Aerospace Approved Service Center - Africa

To whom it may concern

B/E Aerospace Inc. Commercial Airline Product Group recognizes and designates Egyptair Maintenance & Engineering as a B/E Aerospace Approved Service Center for Refrigeration and Galley Insert Products in the African region.

Egyptair Maintenance & Engineering provides B/E Aerospace customers with inspection repair and overhaul support for refrigeration and galley insert equipment utilizing B/E original equipment replacement parts. Upon review of Egyptair's M & E facilities, we found a level of quality that is consistent with the high standards B/E Aerospace's customers have come to expect.

We recognize and appreciate their contribution to B/E's global leadership role in the support and maintenance of our refrigeration and galley insert products.

Sincerely,

A handwritten signature in blue ink, appearing to read "KEAL", enclosed within a large, loopy blue oval.

Kevin E. Eastley
Vice President, Global Customer Support & Field Service

Attach. (Capabilities List)



B/E Aerospace Approved Repair Center Capabilities List

Egypt Air Maintenance & Engineering
Cairo International Airport
Refrigeration & Galley Insert Workshop
Cairo, Egypt.

May 25, 2010.

Refrigeration Products Capabilities List:

<u>Part No.</u>	<u>Applicable CMM</u>	<u>CMM Rev.</u>
348-7	25-30-11	6 (or later)
228-1	25-36-16	6 (or later)
377-1/-2	25-30-31	4 (or later)
355-1/-3/-6	25-30-18	6 (or later)
267SV/-100/-500	25-30-43	8 (or later)
230-22-521	25-36-41	0 (or later)
230-22-21/230-12 series	25-36-02	8 (or later)
230-2-6/230-23-1	25-36-02	8 (or later)
344-1	25-30-15	4 (or later)
338-3	25-30-45	1 (or later)
276-2	25-30-47	2 (or later)
374-8/-10	25-30-30	7 (or later)
374-9	25-30-48	2 (or later)
348-19	25-30-35	4 (or later)
236-8/-508	25-30-36	4 (or later)
267-5/16/-6	25-30-10	10 (or later)

Galley Insert Capabilities List:

<u>Part No.</u>	<u>Applicable CMM</u>	<u>CMM Rev.</u>
4323100-00-66-22	25-35-08	6 (or later)
4323101-00-66-22	25-35-08	6 (or later)
4323100-01-6622	25-35-12	3 (or later)
4323101-01-6622	25-35-12	3 (or later)
4360004-xx-00-18	25-33-49	4 (or later)
72011412	25-31-14	5 (or later)

END



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

**EgyptAir Maintenance and Engineering
Calibration Laboratories**
Cairo International Airport, Airport 1
Cairo, Egypt

Fulfills the requirements of

ISO/IEC 17025:2017

and national standards

ANSI/NCSL Z540-1-1994 (R2002)

and

ANSI/NCSL Z540.3-2006 (R2013)

In the fields of

CALIBRATION and DIMENSIONAL MEASUREMENT

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 29 November 2026

Certificate Number: AC-2096



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory
quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AND

ANSI/NCSL Z540-1-1994 (R2002)

ANSI/NCSL Z540.3-2006 (R2013)

EgyptAir Maintenance and Engineering Calibration Laboratories

Cairo International Airport, Airport 1

Cairo, Egypt

Ahmed M. Adel (+201) 008517733

akerdawy30@gmail.com

www.egyptaire-me.com

CALIBRATION AND DIMENSIONAL MEASUREMENT

Valid to: November 29, 2026

Certificate Number: AC-2096

CALIBRATION

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Voltage – Source ^{1,2}	Up to 220 mV 220 mV to 2.2 V (2.2 to 11) V (11 to 22) V (22 to 220) V 220 V to 1.1 kV	1.9 μ V 6 μ V 38 μ V 39 μ V 0.5 mV 6.9 mV	Fluke 5720A Multifunction Calibrator
AC Voltage – Source ^{1,2}	Up to 2.2 mV Up to 10 Hz 10 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz 300 kHz to 1 MHz	4.6 μ V 4.3 μ V 4.5 μ V 6.1 μ V 12 μ V 23 μ V 25 μ V	Fluke 5720A Multifunction Calibrator
	(2.2 to 22) mV Up to 10 Hz 10 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz 300 kHz to 1 MHz	9.3 μ V 5.9 μ V 8.2 μ V 15 μ V 31 μ V 48 μ V 74 μ V	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage – Source ^{1,2}	(22 to 220) mV		Fluke 5720A Multifunction Calibrator
	Up to 10 Hz	39 μ V	
	10 Hz to 20 kHz	16 μ V	
	(20 to 50) kHz	28 μ V	
	(50 to 100) kHz	63 μ V	
	(100 to 300) kHz	110 μ V	
	(300 to 500) kHz	117 μ V	
	500 kHz to 1 MHz	320 μ V	
	(0.22 to 2.2) V		
	Up to 10 Hz	290 μ V	
	(10 to 40) Hz	60 μ V	
	40 Hz to 20 kHz	54 μ V	
	(20 to 50) kHz	87 μ V	
	(50 to 100) kHz	140 μ V	
	(100 to 300) kHz	510 μ V	
	(300 to 500) kHz	1.2 mV	
	500 kHz to 1 MHz	2 mV	
	(2.2 to 22) V		
	Up to 10 Hz	2.9 mV	
	(10 to 40) Hz	0.6 mV	
	40 Hz to 20 kHz	0.53 mV	
	(20 to 50) kHz	0.87 mV	
	(50 to 100) kHz	1.2 mV	
	(100 to 300) kHz	3.4 mV	
	(300 to 500) kHz	12 mV	
	500 kHz to 1 MHz	25 mV	
	(22 to 220) V		
	Up to 10 Hz	37 mV	
	(10 to 40) Hz	6 mV	
	40 Hz to 10 kHz	6 mV	
	(10 to 20) kHz	6 mV	
	(20 to 50) kHz	9.4 mV	
	(50 to 100) kHz	18 mV	
	(220 to 1 100) V		
	40 Hz to 1 kHz	91 mV	
AC Voltage – Source ^{1,2}	(220 to 1 100) V		Fluke 5720A Multifunction Calibrator, Fluke 5725A Amplifier
	Up to 1 kHz	0.11 V	
	(1 to 3) kHz	0.18 V	
	(3 to 10) kHz	0.18 V	
	(10 to 30) kHz	0.61 V	
AC Voltage – Source ^{1,2}	(750 to 1 100) V		Fluke 5720A Multifunction Calibrator, Fluke 5725A Amplifier
	(30 to 100) kHz	1.4 V	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current – Source ^{1,2}	Up to 220 μ A 220 μ A to 2.2 mA (2.2 to 22) mA (22 to 220) mA 220 mA to 2.2 A (2.2 to 11) A	10 nA 43 nA 0.39 μ A 7.8 μ A 93 μ A 4.1 mA	Fluke 5720A Multifunction Calibrator
AC Current – Source ^{1,2}	Up to 220 μ A Up to 1 kHz (1 to 5) kHz (5 to 10) kHz (0.22 to 2.2) mA Up to 400 Hz 400 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz (2.2 to 22) mA Up to 1 kHz (1 to 5) kHz (5 to 10) kHz (22 to 220) mA Up to 1 kHz (1 to 5) kHz (5 to 10) kHz (0.22 to 2.2) A Up to 1 kHz (1 to 5) kHz (5 to 10) kHz	25 nA 46 nA 0.19 μ A 0.19 μ A 0.19 μ A 0.36 μ A 1.8 μ A 1.6 μ A 2.7 μ A 16 μ A 15 μ A 24 μ A 0.12 mA 0.3 mA 0.53 mA 7.2 mA	Fluke 5720A Multifunction Calibrator
AC Current – Source ^{1,2}	(2.2 to 11) A Up to 1 kHz (1 to 5) kHz (5 to 10) kHz	4.9 mA 9.9 mA 37 mA	Fluke 5720A Multifunction Calibrator Fluke 5725A Amplifier
DC Resistance ^{1,2} Fixed Points	1.0 Ω 1.9 Ω 10 Ω 19 Ω 100 Ω 190 Ω	99 $\mu\Omega$ 0.2 m Ω 0.24 m Ω 0.48 m Ω 1.1 m Ω 2.3 m Ω	Fluke 5720A Multifunction Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Resistance ^{1,2} Fixed Points	1.0 k Ω 1.9 k Ω 10 k Ω 19 k Ω 100 k Ω 190 k Ω 1 M Ω 1.9 M Ω 10 M Ω 19 M Ω 100 M Ω	9.6 m Ω 18 m Ω 90 m Ω 0.18 Ω 1.2 Ω 2.6 Ω 22 Ω 50 Ω 0.41 k Ω 1 k Ω 11 k Ω	Fluke 5720A Multifunction Calibrator
DC Voltage – Measure ^{1,2}	Up to 200 mV (0.2 to 2) V (2 to 20) V (20 to 200) V (200 to 1000) V	1.7 μ V 4.3 μ V 40 μ V 0.6 mV 6.7 mV	Fluke 8508A Reference Multimeter
AC Voltage – Measure ^{1,2}	Up to 200 mV Up to 20 Hz (20 to 55) Hz (55 to 305) Hz 305 Hz to 1 kHz (1 to 3) kHz (3 to 10) kHz (10 to 30) kHz (30 to 100) kHz 200 mV to 2 V Up to 20 Hz (20 to 55) Hz (55 to 305) Hz 305 Hz to 1 kHz (1 to 3) kHz (3 to 10) kHz (10 to 30) kHz (30 to 60) kHz (60 to 100) kHz 100 kHz to 1 MHz	19 μ V 17 μ V 15 μ V 15 μ V 19 μ V 19 μ V 44 μ V 98 μ V 0.14 mV 0.11 mV 97 μ V 96 μ V 0.13 mV 0.13 mV 0.26 mV 0.77 mV 0.77 mV 30 mV	Fluke 8508A Reference Multimeter

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage – Measure ^{1,2}	(2 to 20) V		Fluke 8508A Reference Multimeter
	Up to 20 Hz	1.4 mV	
	(20 to 55) Hz	1.1 mV	
	(55 to 305) Hz	0.97 mV	
	305 Hz to 1 kHz	0.97 mV	
	(1 to 3) kHz	1.3 mV	
	(3 to 10) kHz	1.3 mV	
	(10 to 30) kHz	2.7 mV	
	(30 to 60) kHz	7.7 mV	
	(60 to 100) kHz	7.7 mV	
	100 kHz to 1 MHz	0.3 V	
	(20 to 200) V		
	Up to 20 Hz	14 mV	
	(20 to 55) Hz	12 mV	
	(55 to 305) Hz	10 mV	
	305 Hz to 1 kHz	9.9 mV	
	(1 to 3) kHz	13 mV	
	(3 to 10) kHz	13 mV	
	(10 to 30) kHz	27 mV	
	(30 to 100) kHz	77 mV	
	(200 to 1000) V		
	Up to 10 kHz	0.16 V	
	(10 to 30) kHz	0.31 V	
DC Current – Measure ^{1,2}	Up to 200 μ A	1.8 nA	Fluke 8508A Reference Multimeter
	200 μ A to 2 mA	18 nA	
	(2 to 20) mA	0.19 μ A	
	(20 to 200) mA	5.6 μ A	
	200 mA to 2 A	0.2 mA	
	(2 to 20) A	4.4 mA	
AC Current – Measure ^{1,2}	Up to 200 μ A		Fluke 8508A Reference Multimeter
	Up to 10 kHz	81 nA	
	(0.2 to 2) mA		
	Up to 10 kHz	0.51 μ A	
	(2 to 20) mA		
	Up to 10 kHz	5 μ A	
	(20 to 200) mA		
	Up to 10 kHz	50 μ A	
	200 mA to 2A		
	Up to 1 kHz	0.82 mA	
	(1 to 5) kHz	0.94 mA	
	(5 to 10) kHz	0.96 mA	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current – Measure ^{1, 2}	(2 to 20) A Up to 1kHz (1 to 5) kHz (5 to 10) kHz	10 mA 27 mA 27 mA	Fluke 8508A Reference Multimeter
Resistance – Measure ^{1, 2} (4 Wire Measurements)	Up to 2 Ω (2 to 20) Ω (20 to 200) Ω 200 Ω to 2 k Ω (2 to 20) k Ω (20 to 200) k Ω 200 k Ω to 2 M Ω (2 to 20) M Ω (20 to 200) M Ω	21 $\mu\Omega$ 0.28 m Ω 2.5 m Ω 8.9 m Ω 88 m Ω 0.92 Ω 12 Ω 0.32 k Ω 23 k Ω	Fluke 8508A Reference Multimeter
Insulation Resistance ²	(1 to 10) M Ω (10 to 100) M Ω 100 M Ω to 1 G Ω (1 to 2) G Ω	8.2 k Ω 24 k Ω 20 M Ω 310 M Ω	High Resistance, 5kV Decade Substituter
Clamp Meter – DC ²	(10 to 15) A (15 to 100) A (100 to 1 000) A	0.78 % of reading 0.84 % of reading 1.0 % of reading	Fluke 5522A Multifunction Calibrator Coil 5500A
Clamp Meter – AC ² (45 to 65) Hz	(10 to 15) A (15 to 100) A (100 to 1 000) A	0.97 % of reading 0.79 % of reading 0.78 % of reading	Fluke 5522A Multifunction Calibrator Coil 5500A
Clamp Meter – AC ² (65 to 400) Hz	(10 to 15) A (15 to 100) A (100 to 1 000) A	1.4 % of reading 1.2 % of reading 1.2 % of reading	Fluke 5522A Multifunction Calibrator Coil 5500A
Electrical Calibration of Thermocouple Indicators ^{1, 2}	Type E (-150 to -100) °C (-100 to -25) °C (-25 to 125) °C (125 to 1 000) °C Type J (-210 to -100) °C (-100 to -25) °C (-25 to 120) °C (120 to 1 000) °C (1000 to 1 200) °C	0.46 °C 0.28 °C 0.27 °C 0.3 °C 0.33 °C 0.28 °C 0.27 °C 0.3 °C 0.65 °C	Fluke 5522A Multiproduct Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Calibration of Thermocouple Indicators ^{1,2}	Type K		Fluke 5522A Multiproduct Calibrator
	(-200 to -100) °C	0.36 °C	
	(-100 to 120) °C	0.28 °C	
	(120 to 1 000) °C	0.4 °C	
	(1 000 to 1 370) °C	0.7 °C	
	Type T		
	(-200 to -100) °C	0.55 °C	
	(-100 to -25) °C	0.31 °C	
Oscilloscopes ^{1,2}			Fluke 5522A/SC1100 Multiproduct Calibrator
	Voltage Amplitude – Square Wave Signal – 1 MΩ		
	10 Hz to 10 kHz		
	1 mV to 24.999 mV	0.43 mV	
	25 mV to 109.99 mV	0.29 mV	
	110 mV to 2.1999 V	5 mV	
	2.2 V to 10.999 V	35 mV	
	11 V to 130 V	0.26 V	
	Time Markers – 50 Ω		
	10 ns	2.7 E ⁻¹¹ s	
	100 ns	4.2 E ⁻¹¹ s	
	1 μs	6.6 E ⁻⁰⁹ s	
	100 μs	2.1 E ⁻⁰⁷ s	
	20 ms	2.9 E ⁻⁰⁶ s	
	50 ms	2.9 E ⁻⁰⁶ s	
	2 s	2.9 E ⁻⁰⁴ s	
	5 s	2.9 E ⁻⁰⁴ s	
	Leveled Sine Wave Bandwidth – 50 Ω		
	50 kHz to 175 MHz		
	8 mV	1.3 mV	
	50 kHz to 350 MHz		
	16 mV	1.6 mV	
	50 kHz to 500 MHz		
	40 mV	2.7 mV	
	80 mV	4.8 mV	
	800 mV	37 mV	
	50 kHz to 500 MHz		
	5.5 V	220 mV	

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Dial Indicators	(0 to 2) mm (3 to 5) mm (5 to 25) mm (25 to 100) mm Up to 0.01 in (0.01 to 0.5) in Up to 3 in	0.12 μ m 0.46 μ m 0.95 μ m 1.7 μ m 8 μ in 37 μ in 156 μ in	Gage Blocks
Dial Test Indicators	$\pm 300 \mu$ m (300 to 600) μ m	0.15 μ m 0.47 μ m	Gage Blocks
Caliper – OD/ID ³	Up to 600 mm (600 to 1 000) mm Up to 24 in (24 to 40) in	(5.7 + 0.004 2I) μ m (11 + 0.003 4I) μ m (270 + 3.8L) μ in (536 + 3.1L) μ in	Gage Blocks
Caliper – Depth	Up to 500 mm Up to 20 in	8 μ m 328 μ in	Gage Blocks, Optical Flats, Surface Plate
Micrometer Outside Diameter ³	Up to 25 mm (25 to 150) mm (150 to 500) mm (500 to 800) mm Up to 1 in Up to 4 in (4 to 12) in (12 to 40) in	0.46 μ m 1.6 μ m 2.6 μ m (0.39 + 0.008 5I) μ m 18 μ in 60 μ in 160 μ in 182 μ in	Gage Blocks Optical Flats
Micrometer Internal	Up to 9 in (9 to 16) in (16 to 25) in	102 μ in 124 μ in 170 μ in	Gage Blocks with accessories, Optical Flats
Micrometer Depth / Head	Up to 150 mm (150 to 300) mm Up to 6 in Up to 12 in	3.1 μ m 4.8 μ m 130 μ in 208 μ in	Gage Blocks, Optical Flats, Surface Plate
Height Gages	Up to 15 in 15 to 24 in 24 to 40 in	170 μ in 204 μ in 612 μ in	Gage Blocks, Surface Plate
	Up to 600 mm (600 to 700) mm Up to 1000 mm	5.9 μ m 7.1 μ m 15 μ m	
Pin Gauges	Up to 1 in	38 μ in	Micrometer

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Thread Plug Gage Major Diameter Minor Diameter Effective (Pitch) Diameter Thread Pitch	Up to 3 in	0.0002 in	Profile Projector
Crimping Tool Dies	Up to 1 in	38 μ m	Pin Gages
Levels	Up to 45°	3'	Sin Bar
Angle	Up to 105°	0.63'	Angle Blocks
Protractors	Up to 80°	3.9'	Precision Spirit Level
	Up to 360°	0.12°	Profile Projector

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Torque Wrench	Up to 600 lbf·ft (600 to 800) lbf·ft (800 to 1 000) lbf·ft	3.6 lbf·ft CW 4 lbf·ft CW 5.2 lbf·ft CW	Snap-on TTC 2000 Torque Tester / Calibrator Snap-on TTC 13 Torque Transducer
Torque Wrench	Up to 120 lbf·ft (120 to 360) lbf·ft (360 to 600) lbf·ft	0.72 lbf·ft CW 1.7 lbf·ft CCW 0.82 lbf·ft CW 2.3 lbf·ft CCW 0.91 lbf·ft CW 3 lbf·ft CCW	Snap-on TTC 2800 Torque Tester / Calibrator Snap-on TTC 12 Torque Transducer
Torque Wrench	Up to 50 lbf·ft (50 to 100) lbf·ft (100 to 150) lbf·ft (150 to 250) lbf·ft	0.09 lbf·ft CW 0.13 lbf·ft CCW 0.12 lbf·ft CW 0.17 lbf·ft CCW 0.42 lbf·ft CW 0.38 lbf·ft CCW 0.53 lbf·ft CW 0.56 lbf·ft CCW	Snap-on TTC 2800 Torque Tester / Calibrator Snap-on TTC 400 Torque Transducer

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Torque Wrench	Up to 200 lbf·in (200 to 600) lbf·in (600 to 1 000) lbf·in	1.1 lbf·in CW 1.5 lbf·in CCW 1.2 lbf·in CW 1.7 lbf·in CCW 2.2 lbf·in CW 2.0 lbf·in CCW	Snap-on TTC 2800 Torque Tester / Calibrator Snap-on TTC 400 Torque Transducer
Torque Wrench	Up to 40 lbf·in (40 to 120) lbf·in (120 to 400) lbf·in	0.71 lbf·in CW 0.44 lbf·in CCW 0.74 lbf·in CW 0.47 lbf·in CCW 0.82 lbf·in CW 0.53 lbf·in CCW	Snap-on TTC 2800 Torque Tester / Calibrator Snap-on TTC 400 Torque Transducer
Torque Wrench	Up to 10 lbf·in (10 to 30) lbf·in (30 to 50) lbf·in	0.08 lbf·in CW 0.23 lbf·in CCW 0.09 lbf·in CW 0.25 lbf·in CCW 0.11 lbf·in CW 0.26 lbf·in CCW	Snap-on TTC 2800 Torque Tester / Calibrator Snap-on TTC 400 Torque Transducer
Torque Wrench	Up to 20 ozf·in (20 to 60) ozf·in (60 to 100) ozf·in (100 to 200) ozf·in	0.23ozf·in CW 0.21ozf·in CCW 0.18 ozf·in CW 0.23 ozf·in CCW 0.26 ozf·in CW 0.27 ozf·in CCW 1.3 ozf·in CW 1.9 ozf·in CCW	Snap-on TTC 2000 Torque Tester / Calibrator, Snap-on TTC 5 Torque Transducer
Torque Transducer	(>0 to 100) lbf·ft (100 to 400) lbf·ft (400 to 600) lbf·ft (600 to 800) lbf·ft (800 to 1 000) lbf·ft	0.18 % of reading CW 0.18 % of reading CCW 0.08 % of reading CW 0.08 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW 0.07 % of reading CW 0.08 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap- on Arms

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Torque Transducer	(>0 to 60) lbf·ft (60 to 240) lbf·ft (240 to 360) lbf·ft (360 to 480) lbf·ft (480 to 600) lbf·ft	0.2 % of reading CW 0.2 % of reading CCW 0.09 % of reading CW 0.09 % of reading CCW 0.1 % of reading CW 0.1 % of reading CCW 0.09 % of reading CW 0.09 % of reading CCW 0.09 % of reading CW 0.13 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap-on Arms
Torque Transducer	(>0 to 25) lbf·ft (25 to 100) lbf·ft (100 to 150) lbf·ft (150 to 200) lbf·ft	0.09 % of reading CW 0.09 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap-on Arms
Torque Transducer	(200 to 250) lbf·ft	0.07 % of reading CW 0.07 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap-on Arms
Torque Transducer	(>0 to 100) lbf·in (100 to 400) lbf·in (400 to 600) lbf·in (600to 800) lbf·in (800 to 1 000) lbf·in	0.11 % of reading CW 0.11 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW 0.07 % of reading CW 0.07 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap-on Arms
Torque Transducer	(>0 to 40) lbf·in (40 to 160) lbf·in (160 to 240) lbf·in (240to 320) lbf·in (320 to 400) lbf·in	0.16 % of reading CW 0.14 % of reading CCW 0.22 % of reading CW 0.14 % of reading CCW 0.17 % of reading CW 0.16 % of reading CCW 0.17 % of reading CW 0.16 % of reading CCW 0.18 % of reading CW 0.18 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap-on Arms

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Torque Transducer	(>0 to 5) lbf·in (5 to 20) lbf·in (20 to 30) lbf·in (30 to 40) lbf·in (40 to 50) lbf·in	0.2 % of reading CW 0.2 % of reading CCW 0.15 % of reading CW 0.15 % of reading CCW 0.13 % of reading CW 0.13 % of reading CCW 0.14 % of reading CW 0.14 % of reading CCW 0.14 % of reading CW 0.14 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap-on Arms
Torque Transducer	(>0 to 20) ozf·in (20 to 80) ozf·in (80 to 120) ozf·in (120 to 160) ozf·in	0.07 % of reading CW 0.1 % of reading CCW 0.13 % of reading CW 0.13 % of reading CCW 0.14 % of reading CW 0.14 % of reading CCW 0.15 % of reading CW 0.16 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap-on Arms
Torque Transducer	(160 to 200) ozf·in	0.16 % of reading CW 0.16 % of reading CCW	TTC Series Snap-on Weights, TTC Series Snap-on Arms
Balances and Scales ^{1,4}	Up to 210 g (210 to 1 500) g 1500 g to 6 kg (6 to 10) kg (10 to 30) kg (30 to 50) kg	0.7 mg 0.05 g 0.03 g 0.06 g 1.8 g 6 g	Mass Standards
Pressure ¹ Pneumatic	(-14 to 100) psi (100 to 300) psi (300 to 900) psi (900 to 1 100) psi (1 100 to 1 300) psi (1 300 to 1 500) psi	0.01 psi 0.06 psi 0.07 psi 0.08 psi 0.09 psi 0.1 psi	DHI PPC3 Pressure Controller

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pressure ¹ Hydraulic	Up to 200 psi (200 to 800) psi (800 to 1 200) psi (1 200 to 1 400) psi (1 400 to 2 000) psi (2 000 to 4 000) psi (4 000 to 7 000) psi (7 000 to 8 000) psi (8 000 to 9 000) psi (9 000 to 10 000) psi	0.12 psi 0.13 psi 0.18 psi 0.19 psi 0.17 psi 0.22 psi 0.22 psi 0.74 psi 0.9 psi 0.77 psi	DHI PPCH Pressure Controller
Force – High Compression	(>0 to 100 000) lbf	0.02 % of reading	Interface Precision Load Cell with GEC MD8060-00000-9 Automated calibration press
	(>0 to 1 600) kN	0.34 % of reading	Load Cell C6A/2MN with Measuring Amplifier
Force - High Tension	(>0 to 100) kN	0.5 % of reading	Load Cell C6A/2MN with Measuring Amplifier
Force - Low Tension ¹	(>0 to 10) lbf (10 to 20) lbf (20 to 30) lbf (30 to 40) lbf (40 to 50) lbf (50 to 100) lbf (100 to 150) lbf (150 to 200) lbf (200 to 250) lbf (250 to 300) lbf (300 to 350) lbf (350 to 400) lbf (400 to 450) lbf (450 to 500) lbf	0.2 % of reading 0.03 % of reading 0.03 % of reading 0.03 % of reading 0.03 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading	UPC-500 With Indicator HADI

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Force - Low Compression ¹	(>0 to 10) lbf (10 to 20) lbf (20 to 30) lbf (30 to 40) lbf (40 to 50) lbf (50 to 100) lbf (100 to 150) lbf (150 to 200) lbf (200 to 250) lbf (250 to 300) lbf (300 to 350) lbf (350 to 400) lbf (400 to 450) lbf (450 to 500) lbf	0.09 % of reading 0.1 % of reading 0.03 % of reading 0.03 % of reading 0.03 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading 0.02 % of reading	UPC-500 With Indicator HADI
Force - Low Tension ¹	(>0 to 200) lbf (201 to 400) lbf (401 to 600) lbf (601 to 800) lbf (801 to 1000) lbf (1001 to 1200) lbf (1201 to 1400) lbf (1401 to 1600) lbf (1601 to 1800) lbf (1801 to 2000) lbf	0.10 % of reading 0.07 % of reading 0.07 % of reading 0.06 % of reading 0.06 % of reading 0.06 % of reading 0.06 % of reading 0.06 % of reading 0.06 % of reading 0.06 % of reading	UPC-2K With Indicator HADI
Force - Low Compression ¹	(>0 to 200) lbf (201 to 400) lbf (401 to 600) lbf (601 to 800) lbf (801 to 1000) lbf (1001 to 1200) lbf (1201 to 1400) lbf (1401 to 1600) lbf (1601 to 1800) lbf (1801 to 2000) lbf	0.21 % of reading 0.12 % of reading 0.09 % of reading 0.08 % of reading 0.07 % of reading 0.07 % of reading 0.07 % of reading 0.07 % of reading 0.06 % of reading 0.06 % of reading	UPC-2K With Indicator HADI

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Force – Low Compression ¹	(>0 to 5) kN (5 to 10) kN (10 to 15) kN (15 to 20) kN (20 to 25) kN (25 to 30) kN (30 to 35) kN (35 to 40) kN (40 to 44.5) kN	0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading	UPC-10K With Indicator HADI
Force – Low Tension ¹	(>0 to 1 000) lbf (1 000 to 2 000) lbf (2 000 to 3 000) lbf (3 000 to 4 000) lbf (4 000 to 5 000) lbf (5 000 to 6 000) lbf (6 000 to 7 000) lbf (7 000 to 8 000) lbf (8 000 to 9 000) lbf (9 000 to 10 000) lbf	0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading 0.04 % of reading	UPC-10K With Indicator HADI

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Temperature – Measuring Equipment ¹	(-45 to 130) °C (130 to 155) °C	0.14 °C 0.23 °C	Ametek Dry Well Model RTC-157B
Temperature – Measure ¹	(-40 to 300) °C (300 to 500) °C (500 to 700) °C (700 to 900) °C (900 to 1000) °C	1.7 °C 2.6 °C 3.6 °C 4.6 °C 5.3 °C	Fluke Thermometer model 52 II and type K Thermocouple
Temperature Indicators and probe systems	(-50 to 180) °C	1.1 °C	THERMOTRON Temperature Chamber S-8- 3800 with Fluke Thermometer model 52 II and type K Thermocouple

Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Time Base Oscillators ^{1,2}	10 MHz	5.4×10^{-9} Hz/Hz	Fluke PM6681R Rubidium Time Base Reference Standard
Frequency Measure ^{1,2}	Up to 8 GHz	29×10^{-9} Hz/Hz	Fluke PM6681R Rubidium Time Base Reference Standard
Timers and Stop Watches ^{1,2}	10 s to 24 h	38 ms	HP 53131A Universal Frequency Counter
RPM for Non-Contact Tachometer ^{1,2}	Up to 100 000 rpm	0.8 rpm	HP 53131A Universal Frequency Counter

DIMENSIONAL MEASUREMENT

1 Dimensional

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Dimensional Measurement 1D	Up to 180 mm (180 to 2 100) mm	6 μ m 0.3 mm	Gage Blocks, Surface Plate
	Up to 50 mm	5 μ m	Profile Projector
Dimensional Measurement 1D	Up to 600 mm	6 μ m	Linear height gauge
	Up to 25 mm	2 μ m	High accuracy micrometer, MDH-1

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

- On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
- Both manual and automatic calibrations processes are available.
- L = length in inches, l = length in millimeters.
- The CMC for scales and balances are highly dependent upon the resolution of the unit under test. The uncertainty presented here does not include the resolution of the unit under test. The resolution will be included in the reported measurement uncertainty at the time of calibration.
- This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2096.



Jason Stine, Vice President