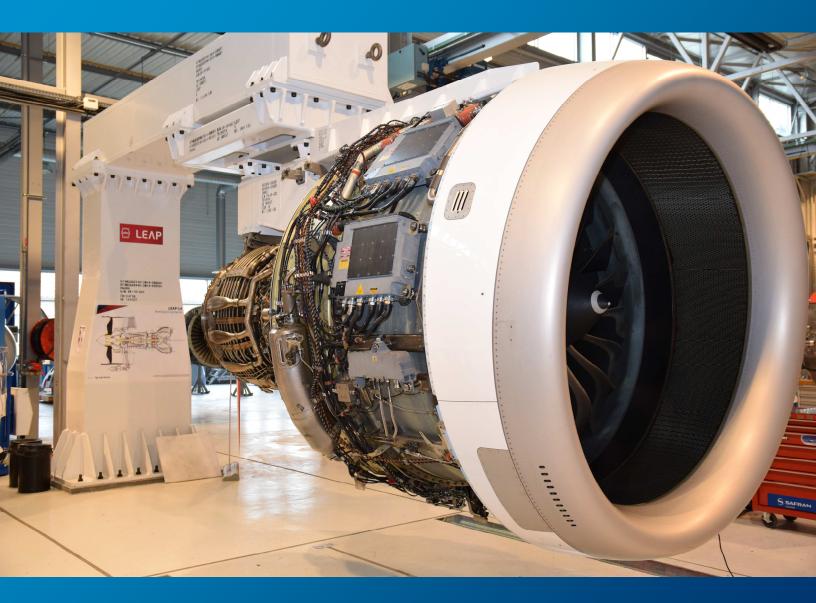


# The Power of Flight



# CFM Technical Training Courses Catalog

2019

# **CFM International**

# CFM56 & LEAP: Product of Advanced Technology

Every component of the advanced CFM56 & LEAP powerplant is the result of millions of dollars in research investment, hundreds of engineering minds, and hours of rigorous testing. CFM's industry leadership is thankful for the support of our two parent companies, Safran Aircraft Engines and GE Aviation.

Both companies are recognized for their technological expertise. Safran Aircraft Engines engineers have accumulated a portfolio of over 5,000 patents. GE employs 27,000 technologists and 2,600 scientists at its four global research centers.

Determined to build on our legacy of technology, CFM is looking to the future as our researchers advance technologies like aerodynamics and combustion for our next-generation engine.

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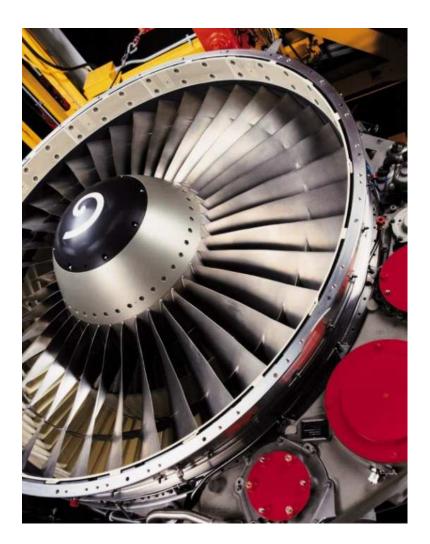
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## **Global Footprint**

# CFM Customer Training Services

CFM's vision and goals focus on fulfilling the training needs of each customer by providing world-class training instructors and facilities to ensure that the most current technical information is available for each of our products. We strive to quickly respond to training needs on time and as expected—all with the end goal of improving engine reliability through state-of-the-art maintenance instruction.

Our promise is to continue to employ the most modern teaching methods using hands-on applications and classroom instruction on products and tooling while offering new and innovative digitized solutions to you—our customer.



### **Global Footprint**



### CTEC

GE Aviation 123 Merchant Street Cincinnati, Ohio 45246 – USA

The Customer Technical Education Center (CTEC), located just outside Cincinnati, Ohio, provides technical training to customer mechanics, powerplant engineers, GE employees and other representatives on a daily basis to help ensure fleet reliability. More than 3,500 customer students pass through the doors of CTEC each year.

CTEC employs a staff of world-class engine training experts who not only deliver technical training, but also real-world application instructions for each of the GE and CFM International engine programs.

CTEC also delivers regular customer tours of the training facility as part of its support for customers. In addition, monthly "Voice of the Customer" lunches are held to better understand customer training and technical needs. Onsite classes are also available to customers who desire a private course with a large number of their mechanics.



# CTC

Safran Aircraft Engines, Melun – France Site de Melun-Montereau Aerodrome de Villaroche 2 chemin de Viercy 77019 Melun

The CFM Customer Training Center (CTC) is a world-class training facility located 50 kilometers southeast of Paris, France. The 2,200 m2 state-of-the-art building consists of administrative offices, eight CFM engine shop bays and seven classrooms.

Adjacent to Safran Product & Customer Support, the CFM Training Center – through its experienced instructors – delivers Maintenance training for LEAP 1A, LEAP 1B, CFM56-5/-7 EASA Part 147 approved, CFM56-3. Our engines are in a configuration suitable for practical training, not in series configuration.

CTC is fully responsible for CFM56-5 & LEAP 1A maintenance and shop training. More than 1,500 students per year, CFM Customers and Safran Aircraft Engines employees, receive ATA 104 technical training which can be also customized to their needs – or delivered at Customer's site in certain conditions.

CTC Subject Matter Experts keep close contact with Safran/CFM Product Support Engineers to enhance training courses with the latest technical upgrades and modifications. CTC courses developers and graphics contribute to high quality Computer Based Training presentations that are shown within classrooms during theoretical sessions.

### **Global Footprint**



### AEMTC

Chengdu, Sichuan - China

The Aero Engine Maintenance Training Center (AEMTC)—a cooperative training institute comprised of Chinese partners, Safran Aircraft Engines, CFM International, and GE Aviation—specializes in maintenance training for GE and CFM commercial aircraft engines.

Since 1996, the center has trained more than 13,000 students from airlines throughout Asia. Located on the campus of the Civil Aviation Flight University of China (CAFUC), AEMTC is a two-story building containing six classrooms and a shop with six training engines. There are four instructors who conduct training classes for CFM56-3, CFM56-5B, CFM56-7B,lline maintenance, borescope inspection, and advanced engine systems. The LEAP engine training will be added to the portofolio starting with LEAP-1B in 2019

AEMTC keeps close ties with the CFM International training facilities at GE Aviation (CTEC) and Safran Aircraft Engines (CTC) by sharing the same training materials, quality control measurements and instructor best practices. AEMTC also keeps close contact with the GE/CFM Field Service team in China in order to tailor special training and seminars to an airline's requirements.



### CFMAESSA

Plot#4, GHIAL Aerospace & Industrial Park Rajiv Gandhi Int'l Airport Shamshabad Hyderabad 500409 Telangana State India

CFMAESSA is the addition to the CFM International initiative for training customers in the Indian Subcontinent, Southeast Asia, Middle East. The training center is located at Rajiv Gandhi International Airport, Hyderabad, India.

The Centre was inaugurated in March 2010 and provides courses on Line and Base Maintenance, General Familiarization, Borescope Inspection, and Trends Monitoring of CFM56-5A/5B and CFM56-7B LEAP 1A & 1B engines. There are four engines available for trainees to experience hands-on engine maintenance. Engines are in a configuration suitable for practical training, not in series configuration.

The facility is approved by DGCA India, and approved by EASA.

This operation keeps close contact with customer training centers in France and the USA. The training material, quality control and best practices are the same as those followed in the USA and France.

### ATA 104 Specifications

All CFM courses comply with ATA 104 Specifications

#### Level I General Familiarization

Personnel must be familiar with current equipment and have a general knowledge of turbine-powered transport aircraft. Level I provides a brief overview of the airframe, systems, and powerplant as outlined in the Systems Description Section of the Aircraft Maintenance Manual.

#### Level II Ramp and Transit

Personnel must be familiar with turbine-powered transport aircraft, digital electronic equipment, and have experience in ramp, transit and turnaround activity. Level II provides a basic system overview, a description of controls, indicators, and principal components, including their locations and practical training on servicing and minor troubleshooting.

#### Level III Line and Base Maintenance Training

In addition to requirements for levels I and II, personnel attending level III training should possess the knowledge and experience required to maintain turbine-powered transport aircraft. Level III provides a detailed description, operation, component location, removal/installation, BITE and troubleshooting procedures to maintenance manual level.

#### Level IV Specialized Training

Personnel must have considerable experience in the field in which training will be received. Level IV provides a detailed description, component location, in-depth troubleshooting, adjustment, test procedures, rigging, engine run-up, in-depth use of wiring diagrams, schematics and engineering data. Entry level is defined by subject matter.

#### Level V Component Overhaul Training

Personnel must meet prerequisites established by the vendor. Specialized maintenance/overhaul training is conducted by airframe/engine/avionics manufacturers and/or their suppliers and/or airlines to a component maintenance manual level. Entry level is defined by subject matter.









# Course and Service Matrix by Training Center Refer to your CFM Contract for course eligibility

		*STANDARD LINE MAINTENANCE COURSES																						
Training Center	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA
Engine Models			ener ariz	al ation		*e-learning General Familiarization				*Powerplant Line Maintenance				Line			*Borescope for Inspectors				*Engine Condition Monitoring / Diagnostics			
LEAP 1A	Х	Х		X	Х	Х		Х	Х	Х		Х	Х	Х		Х	Х	Х		Х	Х	Х		Х
LEAP 1B	Х	Х		Х	Х	Х		Х	Х	Х		Х	Х	Х		Х	Х	Х		Х	Х	Х		Х
LEAP 1C		Х	X																					
CFM56-2/F108	Х	Х			Х				Х	Х			Х				Х				Х	Х		
CFM56-3	Х	Х	X		Х				Х	Х	X		Х	Х	X		Х	Х	Х		Х	Х	Х	
CFM56-5A	Х	Х		Х	Х					Х		Х		Х		Х		Х			Х	Х		
CFM56-5B	Х	Х	X	X	Х					Х	X	Х	Х	Х	X	Х		Х	X	Х	Х	Х	X	Х
CFM56-5C	Х	Х			Х					Х				Х				Х			Х	Х		
CFM56-7	Х	Х	Х	X	Х				Х	Х	X	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х

Training Center	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA
Engine Models		Rem	igin iova illat	ıl &		Тес	gin hnic gen			<sup>-</sup> an Bala					ne	ed nce		Eng	ince gine tem	<del>)</del>
LEAP 1A	Х	Х																		
LEAP 1B	Х																			
CFM56-2/F108																				
CFM56-3							Х													
CFM56-5A										Х										
CFM56-5B							X			Х				Х				Х	X	
CFM56-5C										Х										
CFM56-7	Х						X			Х				Х				Х	X	

Training Center	CTEC	CTC	AEMTC	CFMAESSA	CTEC	CTC	AEMTC	CFMAESSA			
Engine Models	E	Bl	sco ade end		Advanced Borescope for Inspectors						
LEAP 1A	Х	Х		Х		Х					
LEAP 1B	Х	Х		Х		Х					
CFM56-2/F108	Х	Х				Х					
CFM56-3	Х	Х				Х					
CFM56-5A						Х					
CFM56-5B		Х		Х		Х					
CFM56-5C		Х				Х					
CFM56-7	Х	Х		Х		Х					

### CFM Courses - CTEC (Cincinnati, OH, USA)

### Refer to your CFM Contract for course eligibility

#### CFM & LEAP General Familiarization

This ATA 104 level I course is available on USB. This course is an academic training session, designed for personnel who require a general knowledge of the basic engine construction features, airflows, engine systems and accessories.

Normal time to complete the General Familiarization Course is approximately 4.0 hours. USB availability: CFM56-2, CFM56-3, CFM56-7, LEAP 1A and LEAP 1B

#### CFM & LEAP Powerplant Line Maintenance

CFM56 : 4 days Class size: 12 LEAP 1A/1B : 5 days Class size : 12 This ATA 104 level III course provides the information necessary to perform engine line maintenance. The course includes hands-on practice in the removal and installation of Line Replaceable Units at CTEC. *Available for CFM56-2, CFM56-3, CFM56-5* (academic only) and CFM56-7 LEAP 1A and LEAP 1B

CFM & LEAP Basic Borescope for Inspectors 2 days Class size: 6 This ATA 104 level IV course provides the information necessary to understand the engine basic borescope inspection of the CFM56 engine. This course is recommended for non-experienced borescope inspectors and quality personnel. *Available for CFM56-2, CFM56-3 and CFM56-7 LEAP 1A and LEAP 1B* 

#### **Diagnostics** \*

Class size : 10 students 3 days Available for all models

This course provides the customer with hands-on training of Diagnostics tool suite. The class helps the student develop an understanding of trends interpretation principles and the application to the line maintenance troubleshooting.



## CFM Courses – CTEC Refer to your CFM Contract for course eligibility

#### CFM56 & LEAP Borescope Blade Blend\*

CFM56 : 1 day Class size : 4 LEAP : 1 day Class size : 2 This ATA 104 level IV course is an academic and practical training session designed for line maintenance technicians and supervisory personnel. The course consists of blade blend procedure on the CFM56 & LEAP engine. The hands-on portion of this course consists of borescope blend equipment and use of maintenance manuals.

Available for , CFM56-3 and CFM56-7 LEAP 1A and LEAP 1B

Prerequisite: CFM56 or LEAP Borescope Inspection Course or experience with borescope inspection.

#### CFM56 & LEAP Engine Change \*

2 days Class size: 6

This ATA 104 level IV course is an academic and practical training session designed for the information necessary to remove and install a CFM engine. The course also provides hands-on engine removal and installation practice.

Available for the CFM56-7, LEAP 1A and LEAP 1B

\* This course must be purchased at the current training rate



### CFM Courses – CTC (Paris, France)

### Refer to your CFM Contract for course eligibility

CFM56 & LEAP General Familiarization Upon Customer's request, not scheduled, minimum attendance 6 students, max 12 One day Target group: all personnel requiring a general engine knowledge

Available for all CFM56 engine models and LEAP

This ATA 104 level 1 course provides a general overview of the construction, systems operation and the main concept of a CFM56 or LEAP.

USB Key can be a substitute to classroom session before attending a Line Maintenance course

#### E-learning LEAP 1A & 1B General Familiarization

Upon Customer's request. Same content as above, length is approx 4 hours from a computer.

One student day will be deducted.

#### CFM56 & LEAP

**Powerplant Line & Base Maintenance** EASA Part 147 approved Class size : 12 students for all -5 engine family & LEAP, (8 students for CFM56-7B) Five days Target group : Maintenance Mechanics Available for CFM56-5A/5B, -7B, LEAP1A & LEAP 1B This ATA 104 level 3, Part 66 appendix 3, EASA Part 147 approved course provides the information necessary to perform engine maintenance. The course also provides hands-on practice in the removal & installation of Line Replaceable Units. If chosen by trainee, EASA Part 147 test and practical assessment at end of course. Prerequisite recommended: General Familiarization

#### CFM56 Line & Base Maintenance

Class size : 8 students

Four days

Target group : Maintenance Mechanics Available for CFM56-3, CFM56-2A/B This ATA 104 level 3 course provides the information necessary to perform engine maintenance. The course also provides hands-on practice in the removal & installation of Line Replaceable Units. Practice is conducted on CFM56-3 engine. *Prerequisite recommended: General Familiarization* 

#### LEAP Engine Removal & Installation\*

Class size : 6 students maximum , 5 minimum Three days Target group : Maintenance Mechanics Available for LEAP 1A This ATA 104 level 4 course provides the information necessary to perform engine removal & installation. The course provides academic content and hands-on practice.

\*this course is not eligible for student days deduction Fully chargeable at CFM pricing



### CFM Courses – CTC Refer to your CFM Contract for course eligibility

#### CFM56 Advanced Line & Base Maintenance

Class size : 8 students Eight days Target group : Instructors, Experienced CFM Mechanics Available for CFM56-5B, -7B This ATA 104 level 4 course provides the information necessary to perform in depth engine line maintenance. The course also provides hands-on practice in the removal & installation of Line Replaceable Units. *Prerequisite: Powerplant Line & Base Maintenance* 

#### CFM56 Advanced Engine Systems

Class size : 12 students Four days Target group : Instructors, Engineering Team Available for CFM56-5B, -7B This ATA 104 level 4 course provides the information necessary to understand in depth engine systems and aircraft interface philosophies. Theory only, No removal & installation of LRUs. *Prerequisite: Powerplant Line & Base Maintenance* 



CFM56 & LEAP Borescope Inspection Class size : 6 students Two days Target group : Non-experienced CFM Borescope Inspectors, Quality personnel Available for CFM56-5A/B, -5C, -7B, -3 LEAP 1A & 1B This ATA 104 level 4 course provides the information necessary to understand the engine basic borescope inspection, describes the skills of borescope manipulation but also specific CFM borescope inspection procedures. *Prerequisite: Knowledge of Borescope Inspection basics* 

CFM56 Proficiency in Borescope Inspection \* Class size : 6 students Five days (Theory 2 days, Practice 3 days) Target group : Borescope Inspectors, NDT Inspectors & Quality personnel with borescope experience Available for all CFM56 This ATA 104 level 4 course contributes to getting Inspectors fully skilled. Based on large range of defects, illustrated with pictures and associated terms, to help with their identification, this course will give a better approach to engine maintenance decisions. *Prerequisite: Knowledge of Borescope Inspection basics* 

\* This course is not eligible for use of training credits allowance. This course must be purchased at the current Safran training rate.

### CFM Courses – CTC Refer to your CFM Contract for course eligibility

#### **CFM Engine Condition Monitoring**

Class size : 12 students One day Target group : Engineering Team, Line Maintenance troubleshooting Team Available for all CFM This course provides knowledge on how to read and interpret trends in order to analyze the interactions of various operating parameters. Root cause analysis can be developed for the shifts noted.

#### CFM Borescope Blade Blend\*

Class size: 2 max

One day, at CFM pricing

This ATA 104 level IV course is an academic and practical training session designed for line maintenance technicians and supervisory personnel. The course consists of blade blend procedure on CFM56 and/or LEAP engine. The hands-on portion of this course consists of borescope blend equipment and use of maintenance manuals.

Available for CFM56, LEAP 1A & 1B

Prerequisite: CFM56 or LEAP Borescope Inspection Course or experience with borescope inspection. \* This course is not eligible for use of training credits allowance. This course must be purchased at the current CFMI training rate.

#### CFM56 Fan Trim Balance

Class size : 12 students One day, Target group : Line Maintenance & Shop Mechanics Available for CFM56-5A/B, -5C,-7B, This ATA 104 level 4 course provides detailed information on tooling and related computerized procedures in order to solve vibration problems. *Prerequisite recommended: Powerplant Line & Base Maintenance* 



## CFM Courses – CTC Refer to your CFM Contract for course eligibility

#### CFM56-5B Three Major Modules Removal & Installation\*

On Customer's request only Class size : 8 students Eight days Target group : Shop mechanics Available for -5B This ATA 104 level 4 course provides practical experience necessary for removal and installation of the Fan, Core, Low Pressure Turbine Major Modules in accordance with the CFM Engine Shop Manual. *Prerequisite recommended: Powerplant Line & Base Maintenance course*  \* This course is not eligible for use of training credits allowance. This course must be purchased at the current CFMI training rate.

CFM56-5B Ten Minor Modules Removal & Installation\* On Customer's request only Class size : 8 students Fifteen days Target group : Shop mechanics Available for -5B

This ATA 104 level 4 course provides practical experience necessary to perform horizontal removal and installation of Ten of the seventeen engine modules in accordance with the CFM56 Engine Shop Manual *Prerequisite recommended: Powerplant Line & Base Maintenance course* 

\* This course is not eligible for use of training credits allowance. This course must be purchased at the current CFMI training rate.



### Refer to your CFM Contract for course eligibility

CFM56 Engine Familiarization ATA Level: 1 Instructors: AEMTC Class Size: 3-18 students Duration: 3 Days (Upon Customer's request, not scheduled)

This ATA 104 level 1 is available in classroom or on USB. This course is an academic training session, designed for personnel who require a general knowledge of the basic engine construction features, airflows, engine systems and accessories. Normal time to complete the General Familiarization course is approx. 4.0 hours Note: Engine Familiarization training is offered as part of the level 3 line maintenance class, or as a e-Learning course CFM56-3/-7B General Familiarization Course is now available on USB. In either case, an Engine

Familiarization certificate will be issued.

**CFM56** Line Maintenance ATA Level: 3 Instructors: AEMTC Class Size: 6-18 students Course Duration: 5 days A CFM56 series engine course that provides academic and hands-on maintenance training. The course is for Aviation Maintenance Technicians, and supervisors. The course is adaptable to a specific engine model or to a generic MEC, FADEC or Non FADEC engines. The course uses the Airplane Maintenance Manual to remove and install engine system components. The course includes: Engine and systems familiarization, component identification exercise, LRU replacement, fan trim balance, nacelle, fault isolation overview and test & adjustments.

CFM56 Borescope Inspection ATA Level: 3 Instructors: AEMTC Class Size: 4 – 10 students Course Duration: 2 Days

A CFM56 series engine course that provides academic and hands-on maintenance training. The course provides Inspectors, Aviation Maintenance Technicians, and supervisors with engine borescope and inspection methods. The course is adaptable to a specific CFM56 engine model. The course includes: borescope of an engine using the Airplane Maintenance Manual, inspection of engine internal hardware and the use of borescope equipment.



### CFM Courses – AEMTC Refer to your CFM Contract for course eligibility

CFM56 Advanced Engine Systems \*\* ATA Level: 4 Instructors: CTEC, CTC, AEMTC Class Size: 12-50 students Course Duration: 4 Days CFM56-5 & -7 course that provides academic and maintenance training. The course includes a level 4 explanation of basic engine and systems, fault detection, annunciation and troubleshooting. Who should attend : Lead mechanics, instructors and Powerplant engineers or other personnel needing indepth engine knowledge.

#### **Engine Technical Management**

ATA Level: N/A Instructors: GE Class Size: 12-50 students Course Duration: 2 days A two-day course focusing on modern management techniques of aircraft engines. The course includes discussions and sample problems/scenarios commonly encountered managing the technical challenges of aircraft engines.

Who Should Attend: Powerplant Engineer, Managers and supervisors.

#### **Diagnostics\***

ATA Level: N/A Instructors: GE Class Size: 12-25 students Course Durations: 3 days This three- day course provides the customer with hands-on training of the Diagnostics tool suite. The class also helps the student develop an understanding of trends interpretation principles and the application of line maintenance troubleshooting.. Who should Attend: Engineering Team, Line Maintenance troubleshooting Team Available for all CFM56.

Note: This course is conducted in English with Chinese translation.

\*\*This course is not eligible for use of training credits allowance. This course must be purchased at the current training rate.

\* This course must be purchased at the current training rate, or training entitlements may be used at a three times (3X) rate if training entitlements are available to the customer.



### CFM Courses – CFMAESSA (Hyderabad, India)

### Refer to your CFM Contract for course eligibility

CFM56 & LEAP General Familiarization Upon Customer's request, not scheduled, minimum attendance 3 students, max 15 One day Target group : all personnel requiring a general engine knowledge Available for CFM56-5A/5B, -7B, LEAP 1A & 1B This ATA 104 level 1 course provides a general overview of the construction, systems operation and the main concept of a CFM56 or LEAP Engines. USB key can be a substitute to classroom session before attending a Line Maintenance course

#### **E-Learning General Familiarization LEAP**

session can also be requested. Length is 4 hours from a computer. One student day will be deducted

### CFM56 & LEAP Powerplant Line & Base

Maintenance EASA Part 147 approved Class size : 12 Five days Target group : Maintenance Mechanics Available for CFM56-5A/5B, -7B, LEAP 1A & 1B This ATA 104 level 3, Part 66 appendix 3, EASA Part 147 approved course provides the information necessary to perform engine maintenance. The course also provides handson practice in the removal & installation of Line Replaceable Units. EASA Part 147 test at end of course if requested. *Prerequisite recommended: General* 

Familiarization

CFM56 & LEAP Academic Powerplant Line & Base Maintenance (Theory Only) Class size : 15 students Three days (Theory only) Target group : Maintenance Mechanics Available for CFM56-5A/5B, -7, LEAP 1A & 1B This ATA 104 level 3 course provides the information necessary to perform engine maintenance. No hands-on practice in the removal & installation of Line Replaceable Units. Course usually given at Customer's site. *Prerequisite recommended: General Familiarization* 

### CFM56 Advanced Line & Base Maintenance Class size : 8 students Eight days Target group : Instructors, Experienced CFM Mechanics

Available for CFM56-5B, -7

This ATA 104 level 4 course provides the information necessary to perform in depth engine line maintenance. The course also provides handson practice in the removal & installation of Line Replaceable Units.

Prerequisite: Powerplant Line & Base Maintenance Note: Course conducted using CTC instructors. Customer required to cover all T&L costs.

### CFM Courses – CFMAESSA Refer to your CFM Contract for course eligibility

#### CFM56 & LEAP Borescope Inspection

Class size : 6 students Two days Target group : Non-experienced CFM borescope Inspectors, Quality personnel Available for CFM56-5A/B, -7, LEAP 1A, LEAP 1B This ATA 104 level 4 course provides the information necessary to understand the engine basic borescope inspection, describes the skills of borescope manipulation but also specific CFM borescope inspection procedures. *Prerequisite: Knowledge of Borescope Inspection* 

#### **CFM Engine Condition Monitoring**

Class size : 8 students One day Target group : Engineering Team, Line Maintenance troubleshooting Team Available for all CFM This course provides knowledge on how to read and interpret trends in order to analyze the interactions of various operating parameters. Root cause analysis can be developed for the shifts noted

#### CFM Borescope Blade Blend\*

Class size: 2 students max One day, at CFM pricing This ATA 104 level IV course is an academic and practical training session designed for line maintenance technicians and supervisory personnel. The course consists of blade blend procedure on CFM56 and/or LEAP engine. The hands-on portion of this course consists of borescope blend equipment and use of maintenance manuals. *Available for CFM56, LEAP 1A & 1B* 

Prerequisite: CFM56 or LEAP Borescope Inspection Course or experience with borescope inspection . \* This course is not eligible for use of training credits allowance. This course must be purchased at the current CFMI training rate.



### E-learning/Digital Training

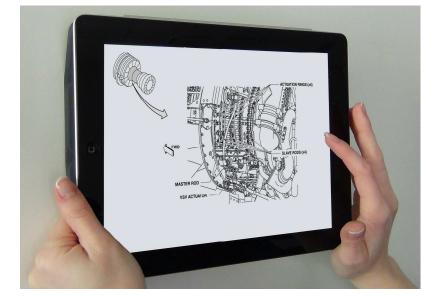
To meet the increasing customer demand for training and to help customers reduce engine cost of ownership, GE has developed new on-demand digital training products to deliver vital maintenance information directly to the maintainer. Contact your GE Customer Service Manager to place an order.

#### E-learning/Digital Training Course eFAM\*

These electronic familiarization courses (eFam) provide classroom content on engine architecture and systems via the Web. This enables CFM to provide genuine OEM training to eligible customers who don't have the opportunity to come to our Training Centers. For most product lines, these courses are now prerequisites for any subsequent training at training centers.

#### Maintenance Minute Videos

Maintenance minute videos are designated to prevent maintenance related errors. Each video focuses on elimating human factor errors from a maintenance task where errors have led to actual aircraft disruptions. These videos do not contain technical or proprietary information and are available from myCFMportal, YouTube and WeChat as well as iOS and Android apps.



#### Digital Training Aids (DTAs)\*

Digital Training Aids are designed to provide the mechanic with information about specific maintenance procedures that have been linked to critical errors. This interactive learning allows the user to view procedures step-by-step or as a continuous video. The cautions surrounding critical steps are highlighted and summarized and the user is tested on these critical steps upon completion. The DTA's are available from myCFMportal and is intended to be loaded on the Customer's internal intranet for the training of employees in support of CFM engine lines. DTAs include technical content such as the step by step maintenance procedure, AMM references or detailed dimensional data whereas a Maintenance Minute video does not have this information.

#### Customer Learning Management Toolkit \*(CLMT)

Contact your CFM Customer Service Manager for access to CLMT. This program allows direct access to GE training information, so that the customer training coordinator can register students for instructor-led classes, and permits customer personnel to undertake online training with online access to the entire CFM Library of Digital Training Solutions.

# Using the CLMT\*, the customer training coordinator can:

- Access training schedules
- Register students for classes
- Review training records and entitlements (if applicable)

## **Class Costs and Course Eligibility**

Our primary training mission is to provide classroom and hands-on instruction to Airline Customers who own and operate CFM International Products. Customers must have a General Terms Agreement (GTA) or other service support contracts allowing them to be eligible to attend training courses.

The GTA or other support agreements will specify if a customer is eligible to receive identified training at no cost and, if so, assign a number of training credits. These credits are usually in units of student days and are deducted based on the length of the course and number of students attending. For example, two students attending a five-day course would deduct 10 student day credits from the customer's training entitlements.

Customers who have used all of their training entitlements, or those whose contract allows for receipt of training but does not provide training credits, may purchase courses at the current training rate.

Some selected courses are not eligible for training credit use. All customers must purchase such courses at the current training rate. Only Standard Line Maintenance courses are eligible for training credit use. Your contract with CFM is the reference.

For information regarding training eligibility, training credits, or current training rate, please contact your CFM Customer Support Manager (CSM). If you do not have a CSM, please contact the Customer Support Center at 877.GEAE.CSC (432.3272).

CTC (France), contact: training.center@safrangroup.com



# **Course Cancellation**

### Dear CFM Customer,

The following table depicts CFM Training Centers course cancellation policy and associated fees for customers that schedule *classes* and provide inadequate notification of cancellation. This policy is being established to ensure "CFM Training Centers" have adequate time provided to backfill lost capacity due to customer cancellations.

Cancellation timing	Long form GTA (First Tier GTA)	Short form GTA (Non-Tier 1)
> 21 days	No penalty	No penalty
=< 20 days	100% of course entitlements will be deducted	100% of regular course fees will be billed

#### Exclusions

- Customer-dedicated classes that are backfilled regardless of timing will have no fees/penalties applied
- This policy is in effect and will be provided to all customer-dedicated classes scheduled on or after
- January 01, 2012
- This policy applies to courses held at all CFM Training Centers.

As a valued customer, should you have questions or feel the charges have been made in error, please contact appropriate "CFM Training Center" via email or phone as listed below.

"CTEC" Cincinnati, Ohio E-mail: cts.scheduling@ae.ge.com Phone: 513-552-3418

"CTC" SAFRAN AIRCRAFT ENGINES, France E-mail: training.center@safrangroup.com Phone: 33 1 64 14 80 35

# **Innovative Global Customer Training Solutions**



### Hands-On

• Direct engagement with engine components and systems



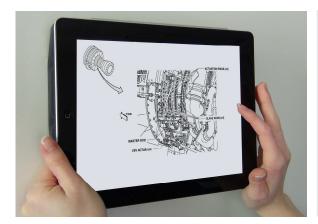
### Technical

- ATA level 1-4 training
  available
- Line Maintenance, Module, Troubleshooting & Inspection procedures offered



### Support

- At the customer filed training available
- OEM Subject Matter Experts accessible online or by phone



### Digital

- Computer based and multimedia training available
- Online class registration and catalog





### Global

- Training locations in the United States, France, India and China
- On-site and field training
  available

### Value

- Digital and streamlined learning for higher retention
- Customized offerings
- Technical training newsletters
- Emphasis on product reliability





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