



Maintenance Training Organizations

The management of different Type Training approvals

COMMERCIAL AIRCRAFT



Christian DELMAS
H/O Maintenance and Structure Training
10 September 2024

AIRBUS

Same Maintenance Operations Worldwide

Airbus Amber

whatever

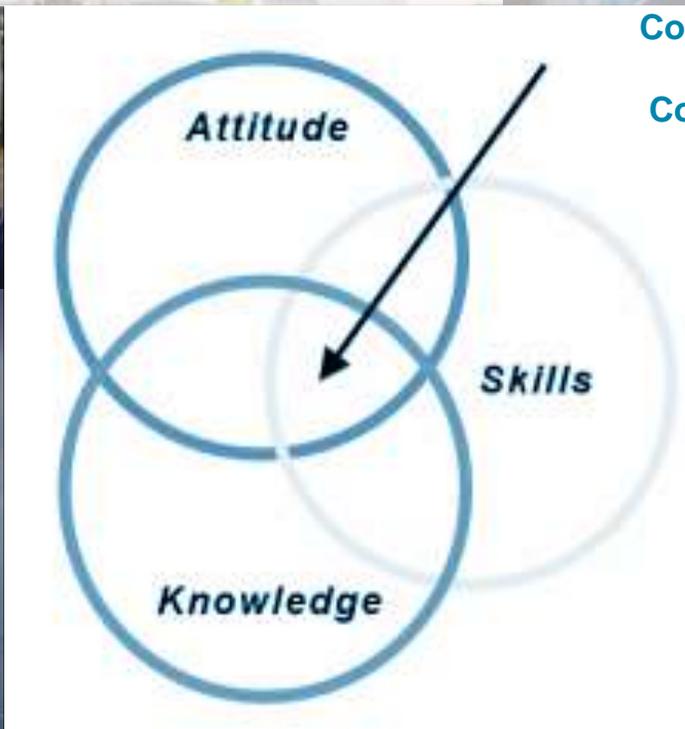
- Location
- Operator / MRO
- Aircraft Operations



A collage of airline logos and three globes. The logos include American Airlines, jetBlue, spirit, DELTA, LATAM AIRLINES, SXY, Aerolíneas Argentinas, Iberia, easyJet, Air France, SAS, KLM, Garuda Indonesia, Thai, Air India, IndiGo, Sri Lankan, Korean Air, Japan Airlines, China Eastern, Juneyao Air, Air China, China Southern Airlines, Qantas, Air New Zealand, Qatar Airways, Emirates, Gulf Air, Etihad Airways, South African Airways, Tunisair, and flynas. The Airbus logo is prominently displayed in the bottom right corner. Three globes are positioned in the center, each surrounded by a cluster of logos.

Same Competency requirements worldwide whatever

- Location
- Operator / MRO
- Aircraft Operations



Expectation?

Similar ways to training and teaching worldwide whatever

- Location
- Operator / MRO
- Aircraft Operations
- NAA



AIRBUS

Different Training Requirements according to NAAs

Training Syllabus

Training Unit	Competence	Level	Time (hours)	Practical Time (hours)	Practical Assessment	Day
UNIT 1	Address Reception	Rel. 1g	120	120	1.30	
UNIT 2	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 3	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 4	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 5	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 6	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 7	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 8	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 9	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 10	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 11	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 12	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 13	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 14	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 15	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 16	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 17	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 18	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 19	Address Handling	Rel. 1g	120	120	1.30	1
UNIT 20	Address Handling	Rel. 1g	120	120	1.30	1



Organization



Inst. Qualification



Documentation

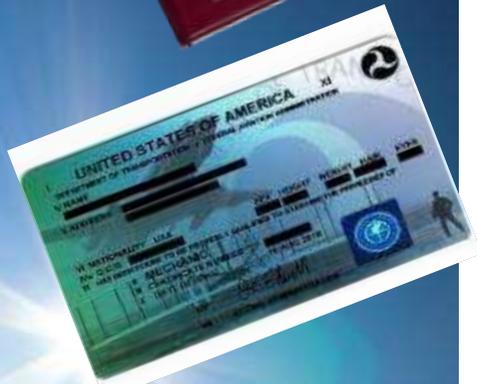


Examination / Assessments



AIRBUS

AME Licence Categories / Type Rating

A form for an Aircraft Maintenance Engineer Licence from the Government of India. It includes fields for name, address, and other personal details, along with a section for type ratings.A form for an Aircraft Maintenance Engineer Licence from the Civil Aviation Authority of China (CAAC). It includes fields for name, address, and other personal details, along with a section for type ratings.

Examples of Different Requirements



B1, B2, C License - Type Rating (a/c - eng)
(e.g A319/A320/A321 CFM LEAP 1A)



A&P License - No Type Rating



TA License - Type Rating (a/c)
(e.g TA A320)

MTO Type Training Approval Dedicated / Recognition

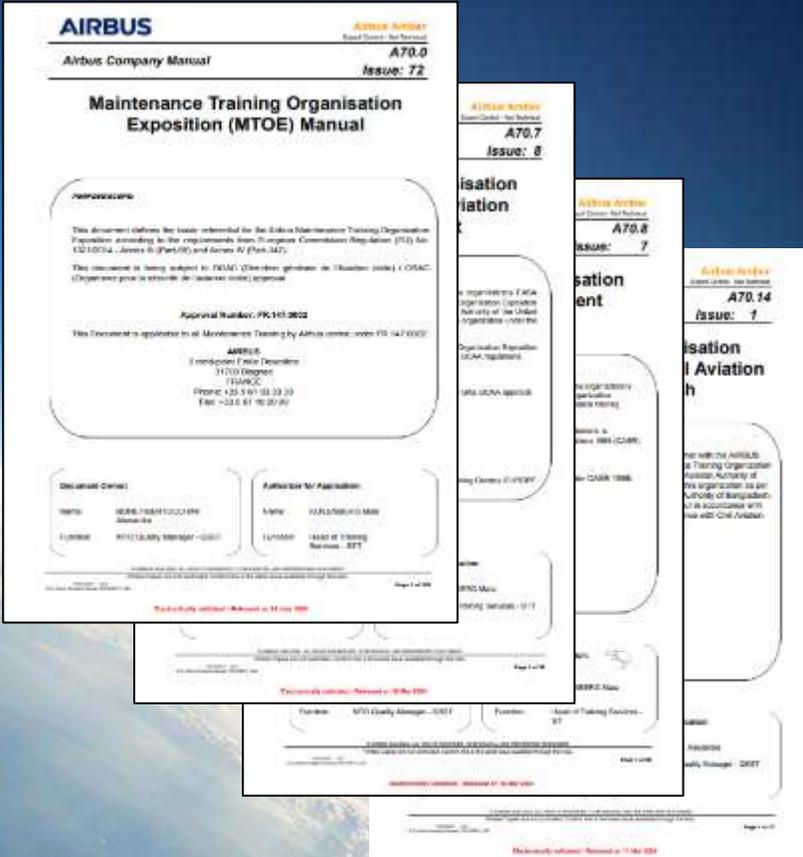


Examples of Different Requirements (Airbus view)

NAA	Direct Approval	Recognition
	✓	✗
	✗	✗
	✓	✗
	✓	✗
	✓	✗
	✓	✗
	✓	✗
	✓	✗
	✓	✗
		✓
		✓
		✓



Documentation MTOE



Examples of Different Requirements (Airbus view)

- Dedicated MTOE



For local sites



- MTOE supplement



As a Foreign Organization



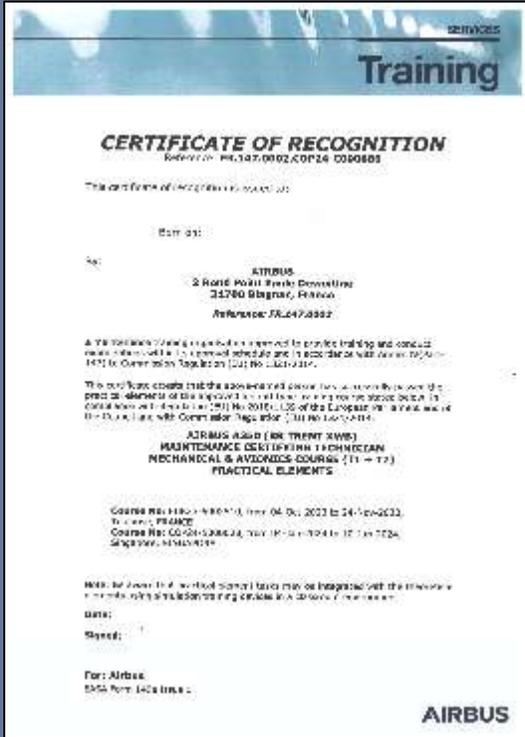
- No need for MTOE



- Acceptation of the “reference MTOE”



Certificates of Recognition



A combination of Approvals and Licensing systems

Examples of Different Requirements (Airbus view)

Theory and Practical CoR combined or separate



Aircraft Type

- A319/A320/A321 CFM LEAP 1A
- A320

Difference courses

- Inter Family differences not allowed by some regulators

License Type (B1, B2, C, TA)

TNA reference on some CoR

Course Location on some CoR



Instructor Qualification



Examples of Different Requirements (Airbus view)



A valid Maintenance Personnel License (MPL)
with aircraft type endorsement

3 years of relevant experience, including 1 year of
experience, on the relevant A/C type(s) per scope
of qualification



The experience must be representative of the element(s)
to be taught and acquired in an aeronautical environment
(maintenance, engineering, design, etc.).



in accordance with criteria published or in
accordance with a procedure and to a standard
agreed by the competent authority

Limited P66 ICAO license equivalence between NAAs

AIRBUS

Course Content / Duration

Examples of Different Requirements (Airbus view)

Year/Week	Description	Name	Topic Type	Phase	Allocated time per subject (hours)	Test type	Instruction Competence	Day
WELC-M	Welcome Reception	Briefing / Lectures	CF	Theory	1.00			
WELC-W	Welcome Briefing	Briefing / Lectures	CF	Theory	1.00		NS	
ACC-GEN	Accret General	Lecture	CF	Theory	0.50	AV	NS-ACC LEVEL 1	
DOC	Airbus Documentation (Procedures)	Lecture	CF	Theory	0.75	AV	NS-ACC LEVEL 1	
QA 1	Time Limit Maintenance (Theory)	Lecture	CF	Theory	0.25	AV	NS-ACC	

Schedule	Description	Topic Type	Description	Competence
Wednesday 01-10-2023				
08:00	08:40	A	ARRIVAL	ARRIVAL IDENTIFICATION
08:30	09:00	A	WELC C	WELCOME/REGISTRATION
09:00	10:00	A	WELC M	WELCOME & SAFETY BRIEFING
10:15	11:45	A	AVC GE	AIRCRAFT GENERAL INTRODUCTION
14:00	14:15	A	AVC SEC	AVC SECURITY AWARENESS
14:30	15:00	A	AVC SEC	AVC SECURITY AWARENESS
Thursday 02-10-2023				
08:00	10:00	A	AVC SEC	AVC SECURITY AWARENESS
10:15	11:00	A	AVC SEC	AVC SECURITY AWARENESS
13:00	14:15	A	AVC SEC	AVC SECURITY AWARENESS
14:30	15:15	A	AVC SEC	AVC SECURITY AWARENESS
15:15	15:45	A	AVC SEC	AVC SECURITY AWARENESS
16:00	16:00	A	ACT CLASS	ACT CLASSROOM IDENTIFICATION
Friday 03-10-2023				
08:30	09:45	A	ACT CLASS	ACT CLASSROOM IDENTIFICATION
09:00	10:00	A	AVC SEC	AVC SECURITY AWARENESS
09:00	10:00	A	AVC SEC	AVC SECURITY AWARENESS
10:15	12:00	A	AVC SEC	AVC SECURITY AWARENESS

TNA Update:

- From A320 TNA 2016 14-07-2016 to A320 TNA 2022 25-04-2022

1337	117	28
------	-----	----

- TNA
- OSD From 27 Jan 2014 for new Type Certificates



OEM or **CAMAC** MPQS / MTS

From Jan 2023 all CAAC Type Certificates



- Examination question database

x3



x2



AIRBUS

Course Organization (1/2)



Examples of Different Requirements (Airbus view)

- **Courses at external locations (not listed in MTOE)**

- Declaration
- Request for Acceptance
- Back up instructor (s)
- Not possible (all sites in MTOE)
- Contract with Aircraft owner for practical



- **Knowledge Examiner vs Instructor**

- Examiner can have been involved as an Instructor
- Examiner cannot have been involved as an Instructor



- **Practical Assessor vs Instructor**

- Assessor can have been involved as an Instructor
- Assessor cannot have been involved as an Instructor



Course Organization (2/2)



Examples of Different Requirements (Airbus view)

- Examination session (KE, INV, Q)
 - INV not allowed
 - 2 Invigilators + 1 quality inspector in examination session. Briefing before remedial.
 - KE, INV briefing session F2F only



- 3rd party instructors
 - Allowed
 - Not allowed
 - Up to an “acceptable” level

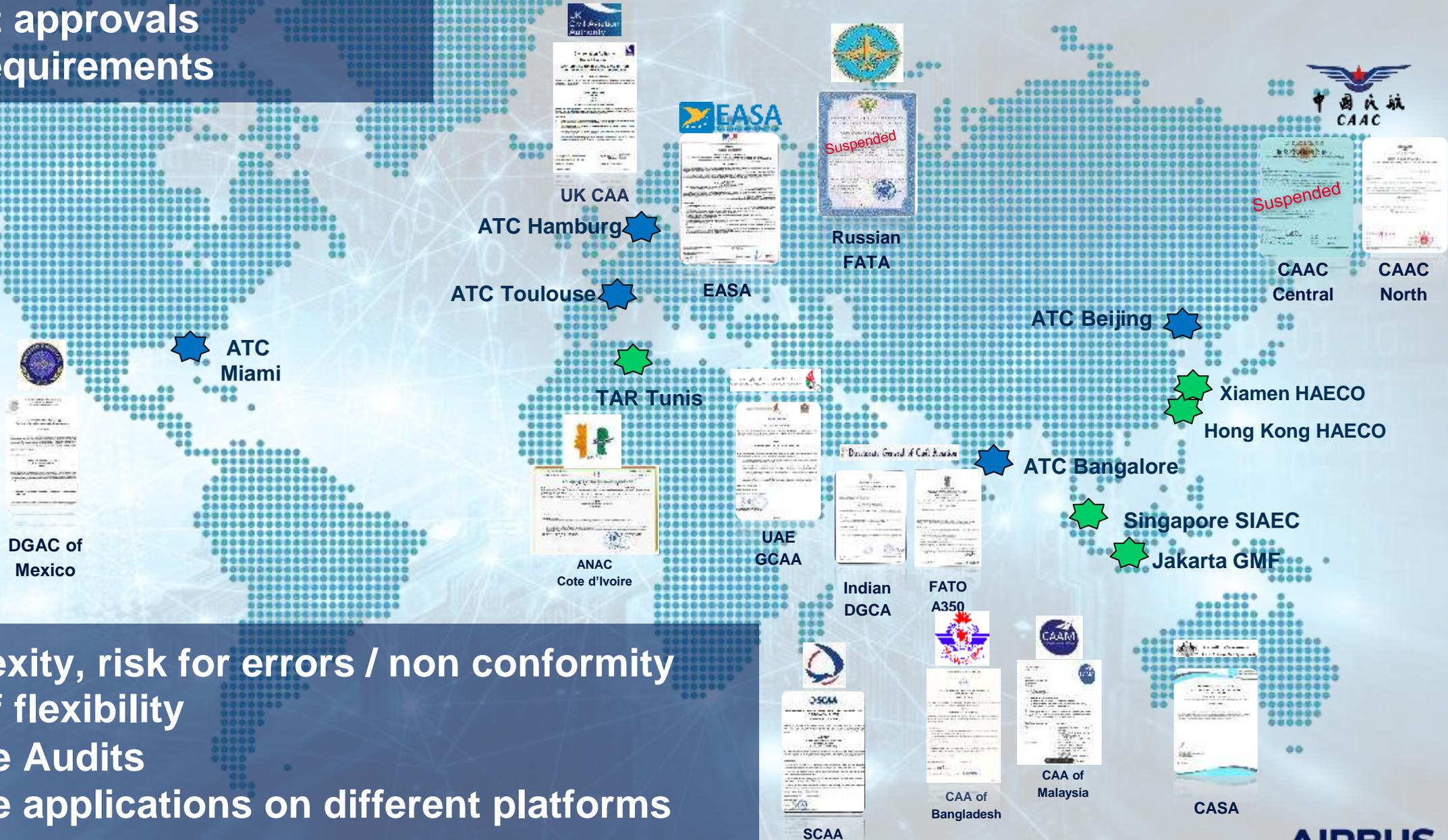
- Distance Learning courses
 - Allowed
 - Allowed under certain conditions
 - Not allowed



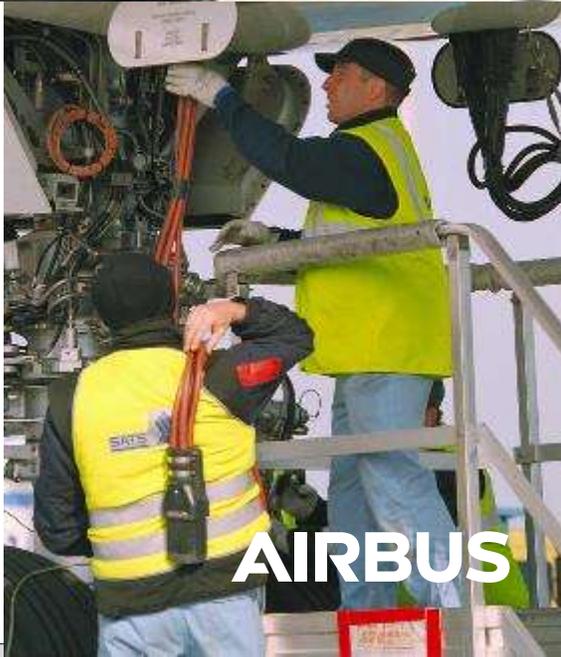
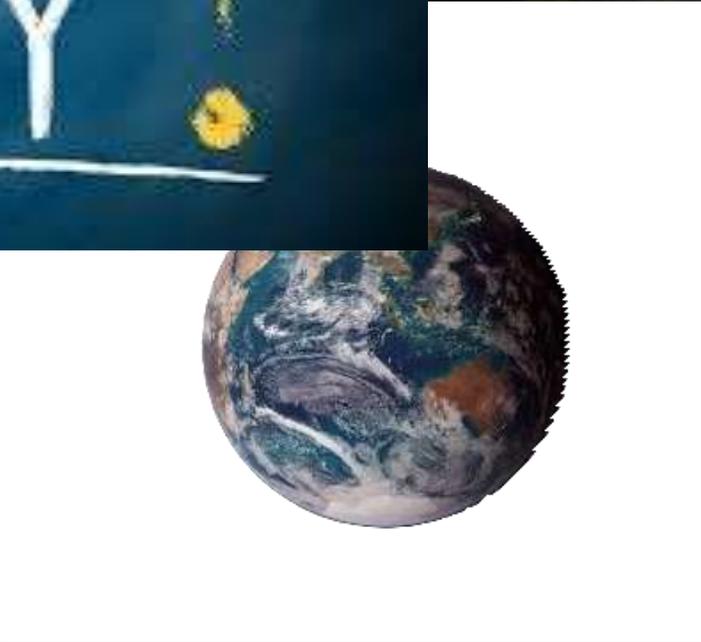
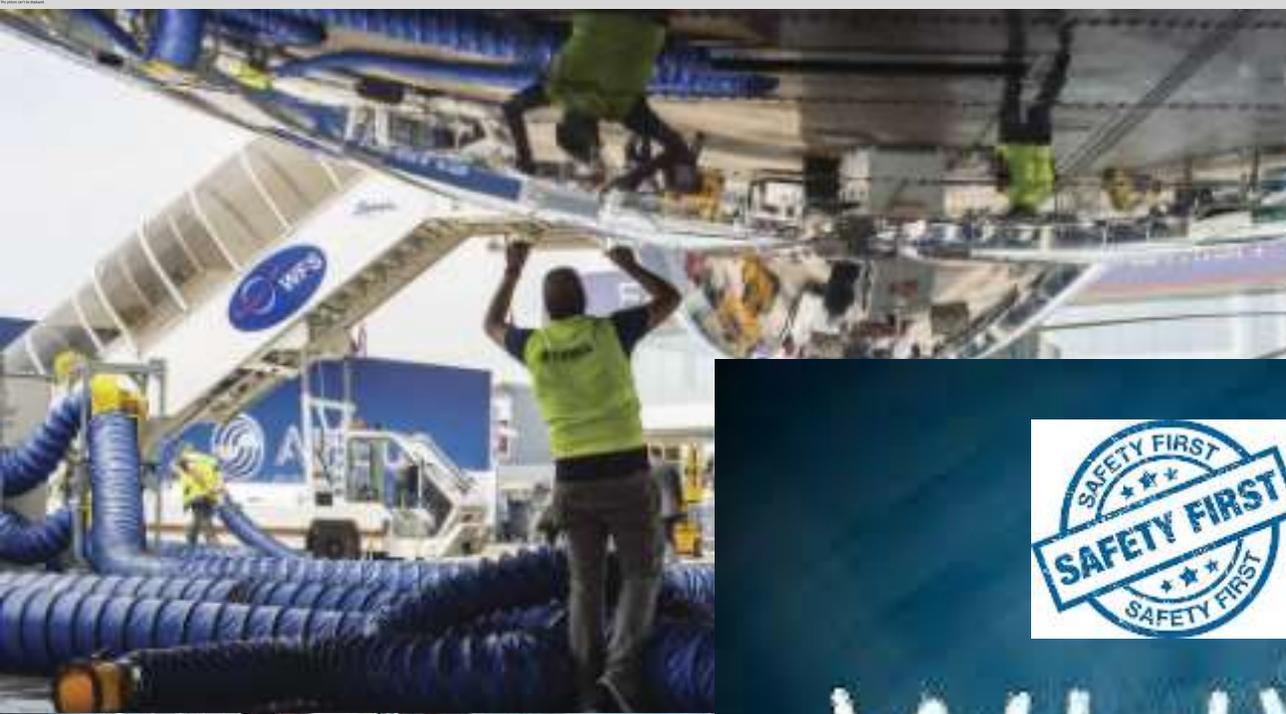
10 approved sites in 9 countries

14 different approvals

Evolving requirements



- Complexity, risk for errors / non conformity
- Loss of flexibility
- Multiple Audits
- Multiple applications on different platforms
- Costs



AIRBUS



Risk for additional complexity

- New / NAA Additional Requirements
- CBTA
- ...



AIRBUS

1 MTOE that meets all the NAA requirements



- Flexibility
- Simplification



- Conservatism
- Costs
- Competitiveness

AIRBUS

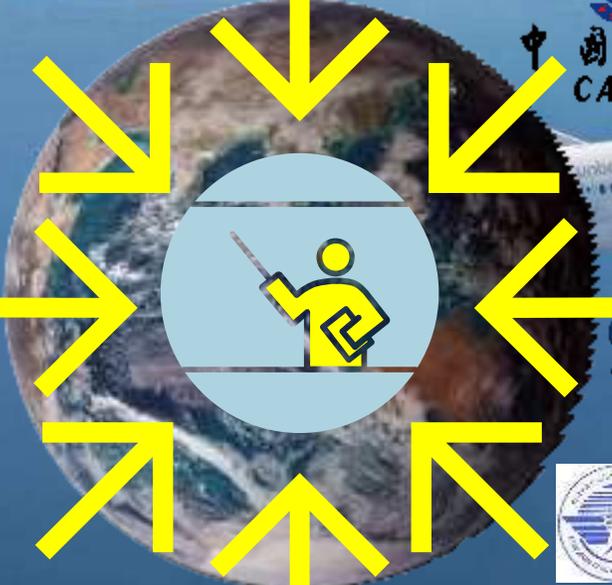
DREAMI

Same Maintenance Training Requirements Worldwide

Thank you!

Mutual Recognition of Licenses and P147 organizations

eamtc



81st European Aviation Maintenance Training Committee
Toulouse 29-30 October 2021
Invitation AIRBUS



Logos of various aviation authorities including EASA, CAAC, CAAS, DGAC, and others, arranged around the central globe diagram.

AIRBUS