

RECOMMENDATION:

MULTI-ENGINE SKILLS AS PRE-REQUISITE FOR THE ISSUE OF A TYPE RATING ON MULTI-PILOT TURBO-JET TRANSPORT CATEGORY AEROPLANE

CONTEXT

Present (ICAO Annex 1) recommendations do not require any specific training or previous experience on multi-engine aircraft before the issue of type rating Multi-pilot turbo-jet transport category aeroplane. Consequently, the applicant may only hold a CPL on Single Engine before undergoing a type rating course on large aircraft.

PROBLEM STATEMENT

Lack of exposure to ME training & experience could lead to an impact to safe flight operations and the following consequences:

⇒ Consequences: lack of basic knowledge on twin-engine operations, reduced handling skills...

OBJECTIVES (VISION & OBJECTIVES)

Implement ME training & competencies as mandatory prerequisites previous to commercial aircraft Type Rating training in order to develop & train commercial airline pilots according to the following skills (as recommended by ICAO):

- Recognition and management of threats and errors
- Operation of multi-engine aircraft within its limitations **(FPM/FPA)**
- Completion of all manoeuvres with smoothness and accuracy on multi-engine **(FPM/FPA)**
- Exercise of good judgement and airmanship on multi-engine operations **(PSD)**
- Application of aeronautical knowledge on multi-engine operations
- Ability to maintain control of the multi-engine aircraft at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured. **(WLM)**

COMPETENCIES* TARGETED (*ICAO ref 9868)

- FPM
- FPA
- WLM
- PSD
- KNO
- PRO

OEM RECOMMENDATIONS

Set a minimum Type Rating prerequisite to guarantee minimum competencies and therefore allows the correct delivery of the Type Rating content:

⇒ Multi-engine skills before undergoing to rating for the Multi-pilot turbo-jet transport category aeroplane.

Advocate to:

- ⇒ ICAO level: to recommend the acquisition of the ME skills before undergoing the type rating course for the Multi-pilot turbo-jet transport category aeroplane
- ⇒ National Authority level: to ensure that the applicant has demonstrated ME Skills before undergoing the Type Rating course for Multi-pilot turbo-jet transport category aeroplane.



*ICAO competencies: Communication (COM); Aircraft Flight Path Management - Manual Control (FPM); Aircraft Flight Path Management – Automation (FPA); Leadership and teamwork (LTW); Problem solving and decision making (PSD); Application of procedures (PRO); Workload management (WLM); Situational Awareness (SAW); (Knowledge - KNO)

OEM TRANSITION PHASE

The Manufacturer of aircraft certificated for operation with a minimum crew of at least two pilots should recommend an additional training to ensure an acceptable level of ME Skills to ensure safe operations. The additional training should cover at least the following areas:

- Recognition and management of threats and errors
- Operation of multi-engine aircraft within its limitations
- Completion of all manoeuvres with smoothness and accuracy on multi-engine
- Exercise of good judgement and airmanship on multi-engine operations
- Application of aeronautical knowledge on multi-engine operations
- Ability to maintain control of the multi-engine aircraft at all times in a manner such that the successful out-come of a procedure or manoeuvre is assured.

IMPLEMENTATION EXAMPLE

- Implementation of the recommendation as pre-requisites for advanced training by Aircraft Manufacturers Flight Training Association members
- Implementation of upgrade modules for candidates who do not meet the requisites
- Implementation letter to authorities and ICAO to advocate the necessity of such measures

AMFTA MEMBERS SUPPORT RECOMMENDATION

All AMFTA members have decided to implement this pre-requisite as mandatory in the Manufacturer training pre-requisites.

Irrespective of the AMFTA Members decision, AMFTA recommend that this pre-requisite becomes a mandatory and integral part of the National regulations for all FTO and ATOs within your jurisdiction.

For trainees who do not have ME competency, a Multi-Engine module will be incorporated at the beginning of the Type Rating.