

AIRCRAFT MAINTENANCE TECHNICIANS CERTIFICATING PROCEDURE IN TURKEY

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The air transportation rules are strictly edited worldwide, as in Europe and in Turkey. Turkey has participated several international organizations; such as International Civil Aviation Organization (ICAO), European Civil Aviation Conference (ECAC), Joint Aviation Authorities (JAA), and so on. All of these memberships force Turkey to prepare national aviation legislation as convenient as international rules. These international rules can be updated so they must be followed and if it is necessary national rules also must be updated.

The aim of this paper is to discuss the importance of qualified aircraft maintenance technicians. For that reason; first, international aviation technicians qualification rule (EASA Part 66/JAR 66) is examined then, national legislation is examined. It is found that aircraft maintenance technicians' certification procedure is same as EASA Part 66/JAR 66 requirements. It is also found that EASA Part 66/JAR 66 rule is transferred to Turkey's national legislation as a need of JAA membership. It is obtained that there are no significant differences between international and national legislations. However, both legislations do not cover the old license conversion problem which has a great importance.

It is concluded that qualified aircraft maintenance technicians are the key factor for sustainable air transportation.

Key words: air transportation, aircraft maintenance, aircraft maintenance technician

1 Introduction

There are so many civil aviation organizations in the world. They can be classified as worldwide, local, continental etc. organizations. All of these organizations have different ways of influences on civil aviation sector. Some of them are interested in only air traffic control regulations, the others are interested in maintenance, aircraft production or commercial air transportation and so on. All of the regulations, rules, and requirements are published and distributed worldwide because; civil aviation is a global affair.

The air transportation rules are strictly edited worldwide, as in Europe and in Turkey. Turkey has participated several international organizations; such as International Civil Aviation Organization (ICAO), European Civil Aviation Conference (ECAC), Joint Aviation Authorities (JAA), and so on.

ICAO, a United Nations Specialized Agency, is the global forum for civil aviation. ICAO has been established in 1944, has a role of to secure international co-operation a highest possible degree of uniformity in regulations and standards, procedures and organization regarding civil aviation matters [1]. ICAO rules are published as annexes. Today ICAO has 18 annexes to in different subjects of civil

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aviation. Finally ICAO is the largest civil aviation organisation in the world, the number of the members of ICAO is actually 190, and Turkey is a member ICAO since 1944.

ECAC, an intergovernmental organisation founded in 1955, seeks to harmonise civil aviation policies and practices amongst its member states and, at the same time, promote understanding on policy matters between its member states and other parts of the world. ECAC mission can be summarised as follow promotion of the continued development of a safe, efficient and sustainable European air transportation system. ECAC's long established expertise in aviation matters, pan-European membership and close liaison with the ICAO enable it to serve as a unique European forum for discussion of every major civil aviation topic. It enjoys active co-operation with its sister organisations through Memoranda of Understanding and with the European commission, EUROCONTROL, the Joint Aviation Authorities Training Office and the European Aviation Security Institute. It has particularly valuable links with industry and organisations representing all parts of the air transport industry. ECAC works closely and cooperatively with other regional organisations and individual Contracting States of ICAO, including the United States, on a range of civil aviations issues of common interest, including training activities in the security, safety and environmental fields. [2] Turkey is a member of ECAC since 1955.

The Joint Aviation Authorities Training Organisation (JAA-TO), formerly Joint Aviation Authorities (JAA), is an associated body of ECAC, presently offering training courses in aviation safety with a focus on European rules and regulations. In the past, JAA has published requirements, called Joint Aviation Requirements (JARs), about different subjects of civil aviation. The ECAC Directors General decided at their meeting on 19 March 2008 to dissolve the present system of JAA, including the JAA Liaison Office, by 30 June 2009, and to terminate the Cyprus Arrangements by unilateral acts of all JAA member states. Currently JAA has 43 member states. It is announced that for any queries referring to rulemaking contact European Aviation Safety Agency, for training on how to implement these rules and regulations in daily work contact JAA-TO. [3] Turkey is a member of former JAA since 2001.

All of these memberships force Turkey to prepare national aviation legislation as convenient as international rules. These international rules can be updated so they must be followed and if it is necessary national rules also must be updated.

2 The Need of Qualified Aircraft Technicians

According to international rules aircraft must maintain by qualified aircraft technicians. Qualification of aircraft maintenance technicians is designated by a certificate which is issued by national aviation authority. This certificate is called Aircraft Maintenance Licence (AML), and it is essential to maintain an aircraft. For example, if we have a closer look to ICAO Annex 1 Personnel licensing, which is accepted and applied in 190 countries worldwide, it can be found that aircraft can be maintained only conveniently licensed personnel. Otherwise airworthiness of aircraft will be loosed. Aircraft maintenance technician licence requirements are cited in that annex. It can be seen that 190 national aviation authorities take as a basis ICAO Annex 1 for personnel licensing, by adding other national, regional, local requirements. Then, in ICAO states, they all have their own personnel licensing rules. On the other hand, ECAC and JAA/European Aviation Safety Agency also their certifying procedure for aircraft maintenance technicians. It is called Part 66 Certifying Staff Maintenance. It can be readily drawn by detailed study of Part 66 Certifying Staff Maintenance that minimum ICAO requirements are met.

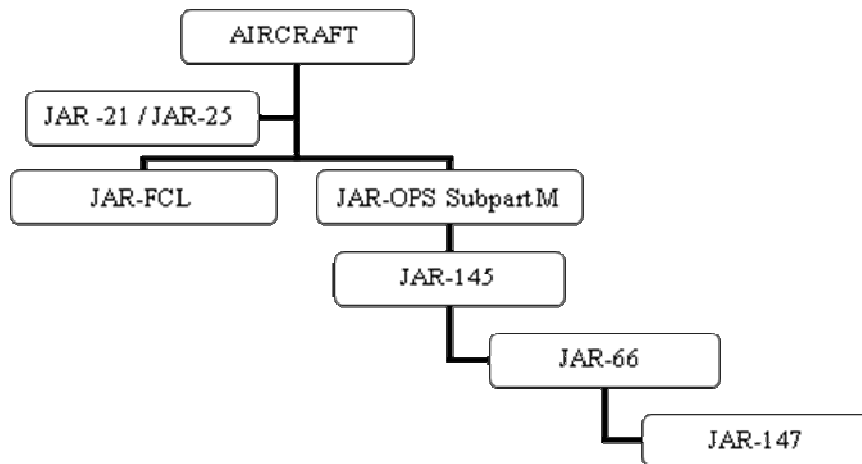


Figure 1. Relationship Among Rules

According to figure 1, if we want to establish an air transportation company we need an aircraft which is certified according to the JAR-21 Certification Procedures for Aircraft and Related Products and Parts and JAR-25 Large Aeroplanes or equivalent. This is the aircraft part however we also need pilots certified as JAR-FCL Flight Crew licensing. As an airline company we must obey JAR-OPS 1/3 Commercial Air Transportation and its subpart M. In that subpart M, we must guarantee that maintenance activities of aircrafts are organised as convenient as aircraft manufacturers and authorities. If we go in detail that subpart, it is clear that all aircrafts maintenance activities must be held in JAR-145 approved organisations. JAR-145 Approved Maintenance Organisations requirement has a necessity for maintenance organisations and it has a direct impact over airworthiness of aircraft. If we go back again fig. 1 JAR-145 approved maintenance organisation needs personnel, to realise maintenance activities, certified as JAR-66 Certifying Staff Maintenance. And these personnel must be trained and examined in training schools, approved as JAR-147 Approved Maintenance Training / Examinations requirement.

Finally, JAR-66 Certifying Maintenance Staff requirement is essential part of that relation. It concerns maintenance personnel certification. It is emphasised that qualified aircraft maintenance technician is vital importance in air transportation.

3 Turkish Maintenance Personnel Certification Procedure

In the case of Turkey, aircraft maintenance technicians certifying procedure (SHY-66) is prepared according to ICAO rules and JAR-66 Certifying Staff Maintenance requirement. Briefly, Turkish procedure consists of below items:

- Scope
- Abbreviations
- Application
- Continued validity of the aircraft maintenance licence
- Licence categories
- Category A
- Category B1
- Category B2

- Category C
- Eligibility
- Basic knowledge requirements
- Experience requirements
- Type/task training and ratings
- Medical conditions
- Penalties

All above items are also covered by JAR 66 Certifying Staff Maintenance. It is found that Turkish aircraft maintenance technicians' certification procedure is same as JAR 66 Certifying Staff Maintenance requirement. It is clear that JAR 66 rule is transferred to Turkey's national legislation as a need of JAA membership. It is obtained that there are no significant differences between international and national legislations.

Finally, Turkey has fulfilled the duties about maintenance personnel certification procedure according to international rules. But old aircraft maintenance license conversion problem “grand father rights” is not so well defined.

4 Conclusion

Although JAA rules are transferred to EASA rules, in this study only JAA rules, i.e. JARs, are considered instead of EASA rules in order to they have same meanings with different expressions. Both national rules and international rules about commercial air transportation price big value of aircraft maintenance of aircraft. Approval maintenance organizations are explained in detail in both legislations (JAR-145 Approved Maintenance Organisations, SHY-145). Especially, maintenance personnel certification has great importance to realize recommended, airworthy maintenance. Turkish or international certifying staff maintenance procedure has the same logic with different steps.

It is concluded that qualified aircraft maintenance technicians are the key factor for sustainable air transportation.

Reference literature

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