

# Comparison of engineering licensing system

[Engineering](#)



Furthermore, there will be a discussion about the impacts and implications should the local authorities of Singapore were to adopt any of the aforementioned systems instead of the SARA-66 which is currently being employed. The governing regulations for all aviation activities in the USA are consolidated into the Federal Aviation Regulations (FAR). These are set under the direction of the Federal Aviation Authority (FAA). However, we will only be looking into the part 66 subpart D of FAR which concerns the mechanics and the licensing requirements necessary for the issue of an Aircraft Maintenance License in the USA.

This is under FAR part 65 - Certification: Airmen and Other Flight Crewmembers. In the United Kingdom the governing authority which oversees all administration and regulations regarding all aspects of aviation is the Civil Aviation Authority (CAA) which is a public corporation established under the terms of the Civil Aviation Act. We will be going into details of the CAA I-J part 66 which includes all the requirements which are necessary for the issue of an Aircraft Maintenance License. We will proceed to the comparing of these two licensing systems and identifying the similarities and the differences of both systems.

Comparison between CAA I-J part 66 and FAR part 65 We'll start off with some of the similarities between the two systems. According to both CAA I-J part 66 and SARA part 65 subsection D, the applicant must at least be 18 years old, must be literate and must be familiar with the English language. In both licensing systems applicant may obtain a license through an approved 147 maintenance training organization or school, by taking the respective

modules and passing the exams. As we can see, the similarities are only a handful.

We will intention onto the differences between the two systems. The minimum age requirement for an applicant to possess a CA I-J license is 21 years and for FAA the minimum age is 18 years. Starting off let us look in to the categories of licenses which can be obtained under both systems. In CA I-J the license categories are A, 81, 82 and C. Category A: Certifying Technician. Category Bal : Line maintenance certifying engineer-mechanical. Category 82: Line maintenance certifying engineer-Avionic. Category C: Base maintenance certifying engineer.

There are several subcategories under the above mention categories which are AY (rare planes turbine engines), AY (rare planes piston engines), AY (helicopters turbine engines), AY (helicopters piston engines), Bal . 1 (rare planes turbine engines), Bal . 2 (rare planes piston engines), Bal . 3 (helicopters turbine engines), and Bal . 4 (helicopters piston engines). In FAR part 65 subsection D the categories of license obtainable to hold the mechanic certification are Airframe, Power plant or both. According to the CA I-J the license is valid for only 5 years from the date of issue.

Whereas under the FAA system the license is valid till it has been suspended, surrendered or revoked. There are a few numbers of ways an applicant may gain the experience required to qualify for a certified airframe or power plant mechanic. One of the ways is to attend one of the 170 FAR part 147 aviation maintenance technician where the applicant has to sit the exams for the

appropriate modules which will offer the mechanics certificate the applicant desires. Once you graduate you are eligible to sit the exams set by the FAA.

Another road to get certified is by working at a FAA approved repair station under the supervision of a certified mechanic. The duration is 18 months for each certificate or total of 30 months for both. The third and final way of obtaining a certificate is to join the army and to get training and experience in aircraft maintenance. The military occupational specialty you are in must be one that FAA gives credit for. The times spend for training is excluded. Under the CA I-J system there are a few ways an applicant can choose to obtain a license.

For category A licenses, the applicant can go through a Part 147 approved basic training organization where the course consists of theory exams and practical skills assessment. Following the course the applicant must spend a minimum of 1 year experiencing practical line maintenance before he/she is able to apply for the license. For the category Bal and 82 license the applicant must undertake a training course through a part 147 approved basic training organization. Followed by either 1 year or 2 years practical maintenance experience according to the sub category you are specialized in.

Another road to certification without going through a part 147 organization is to obtain the required amount of practical experience in the practical maintenance field on operating on aircraft according to the amount of skill the applicant has. The number of years of practical experiences will vary according to the license category he/she is applying to. To become a

Category C license holder or senior engineer one must have a specified number of hours in the field of aircraft maintenance. There are two ways a Category C license can be obtained.

By gaining experience by holding a Category Bal or 82 license. Another way is by completing a degree acceptable by the CA. A minimum of 3 years of experience holding a Bal or 82 license is required for one to become a holder of a Category C license. Under the FAA system, to become a senior engineer or mechanic one must obtain the inspection authorization (IA). This is obtainable by having a FAA Airframe and Power plant rating for 3 years and being in the field of maintaining aircraft prior to application for IA. He/she must also have a fixed base of operation.

Under the CA I-J system the Category B or C license engineers are the only one with the authority to issue the certificate of release of an aircraft to service after heavy maintenance or work. On the other hand under the FAA system the mechanic is authorized to sign off any work he/ she has performed. The examination methods under both systems are considerably different. Under the CA I-J system the exams are written exams and skill assessment, whereas under FAA system oral exams written exams and practical assessments are conducted.