

New Japanese Regulatory Systems for Components and Parts

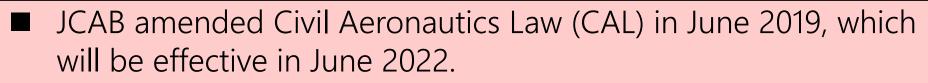
Airworthiness Division Aviation Safety and Security Department Japan Civil Aviation Bureau (JCAB)



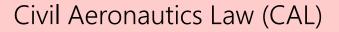
Ministry of Land, Infrastructure, Transport and Tourism

JCAB Regulatory Structure





The amendment includes major revisions regarding "Regulatory Systems for Components and Parts".



Civil Aeronautics Cabinet Order (An order for the implementation of the CAL)

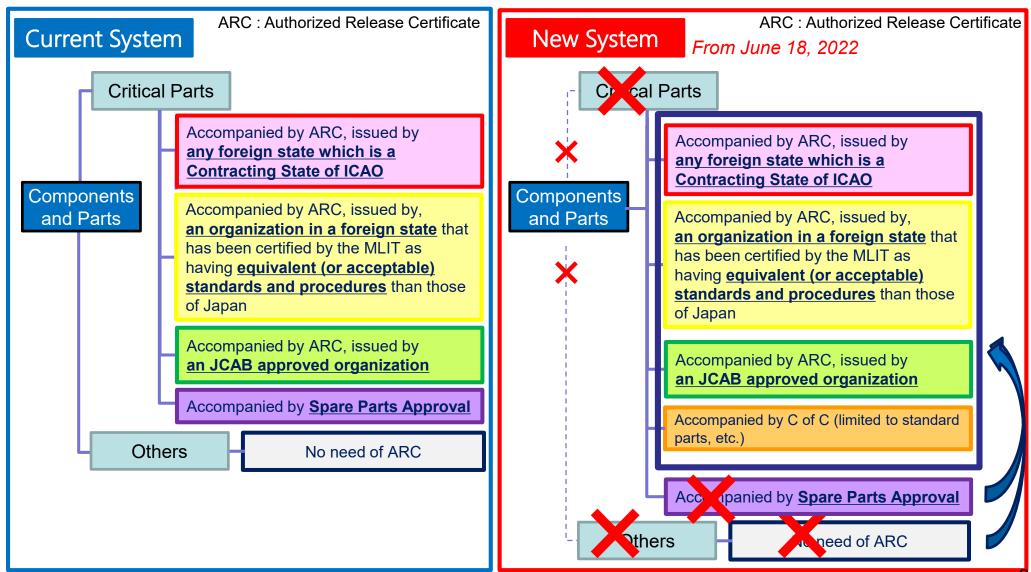
Civil Aeronautics Regulations (CAR) (Detailed regulations for the implementation of the CAL)

Circulars, Airworthiness Inspection Manual(AIM), Airworthiness Directives (TCD), etc.



Background of this amendment

■ The current Japanese Spare Parts Approval system is different from other foreign regulatory systems.



Current Japanese Regulatory Systems



Only "<u>critical parts</u>*" are required to have <u>Spare Parts</u> <u>Approvals</u> for installation to aircraft ("Spare Parts Approvals system").

Details

 As written at the Law/Regulation level, JCAB issues Spare Parts Approval only for critical parts* to approve the design and production.

Note) JCAB regulates other aircraft parts at the Circular level.

- Critical parts released to service by following organizations or authorities are regarded and treated same as parts with Spare Parts Approvals, and may be used without further inspection or certification by JCAB.
 - 1. JCAB Approved Production/ Maintenance Organizations (-> released by <u>Authorized Release</u> <u>Certificate (JCAB Form 18)</u>);
 - 2. Authorities of ICAO Contracted States (-> released by Export Certificate of Airworthiness); or
 - 3. Approved Organizations of the States which have standards and procedures equivalent to Japan (-> <u>Bilateral Aviation Safety Agreement</u>).

* Critical parts

- JCAB defines "Critical Parts," as parts which are essential to maintain the airworthiness of the aircraft.
- e.g. engines, propellers, rotor wings, transmissions, instruments, starters, generators, fuel pumps, hydraulic pumps, landing gears, rudder, elevator, aileron, flap, ... etc.



from June 18, 2022 ~

The <u>Spare Parts Approval system will be abolished</u>.
 Instead, <u>all components and parts</u> will be required to have an <u>Authorized Release Certificate (ARC)</u> for installation onto aircraft.
 The JCAB issued new Circulars in July 2021, which clarify what certificate will be required for components.

Details

Except some parts, such as standard parts and commercial parts,

 <u>All components and parts</u> need to be accompanied by <u>Authorized Release Certificate (JCAB</u> Form 18) issued by JCAB <u>Approved Production</u>/<u>Maintenance Organizations</u>.

Or...

- Components and parts released to service by followings are regarded and treated same as parts with JCAB Form 18.
 - 1. Authorities of ICAO Contracted States (-> released by Export Certificate of Airworthiness); or
 - 2. Approved Organizations of the States which have standards and procedures equivalent to Japan (-> Bilateral Aviation Safety Agreement).

Standard parts

- A part that is manufactured in compliance with an established industry, competent authority specification which include design, manufacturing, test and acceptance criteria, and identification requirements.
- The specification include information necessary to produce and verify conformity of the part.
- The specification is published so that any party may manufacture the part. [example specification]

Japanese Industrial Standards (JIS), National Aerospace Standards (NAS), Army-Navy Aeronautical Standard (AN), Society of Automotive Engineers (SAE), EN Specifications, Military Standard (MS)

Commercial parts

- A part:
 - (i) That is not specifically designed or produced for use as aircraft parts.
 - (ii) Whose failure does not degrade the level of safety of the aircraft; and
 - (iii) That is produced under the manufacturer's specification and marked with the manufacturer's markings
- JCAB designate a part as commercial part under TC, STC, Repair and Alteration Design Approval, Inspection of Repair or Alteration process.