

## **Preface**

Unmanned Aircraft Systems (UAS), including drones, are expected to drive the “Aerial Industrial Revolution” and they have already been in use for many purposes, such as aerial photography, spraying of agricultural chemicals, land surveying and infrastructure inspection. With the prospect of expansion of their usage into further areas, such as logistics in urban site and security, to lead a solution of various social challenges, UAS are expected to bring innovation to the industry, economy and society.

With a view to expanding the usage of UAS while maintaining the safety of their flight, the Civil Aeronautics Act was amended and a system to certify the safety of unmanned aircraft by the government (UAS Type Certification/UAS Certification) was newly established, an inspection for which is allowed to be conducted by Registered Unmanned Aircraft Inspection Organization, an inspection body registered by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT).

Nippon Kaiji Kyokai (ClassNK) has been authorized by MLIT to conduct an inspection to certify the safety of aircraft as Registered Unmanned Aircraft Inspection Organization.

UAS Certification is a system to ensure the safety of UAS from a viewpoint of their strength, structure and performance by inspecting their design, manufacturing process and current status for conformity with the Safety Standards.

UAS Type Certification is a system mainly for mass-produced UAS to ensure the safety and uniformity from a viewpoint of their strength, structure and performance for each model by inspecting their design and manufacturing process for conformity with the Safety Standards and the Uniformity Standards. Type-certified UAS are exempted from all or a part of UAS certification inspection each aircraft is subject to.

ClassNK has compiled the comprehensive information into this Guide on how to demonstrate the conformity with the Safety Standards and the Uniformity Standards under UAS Type Certification.

It would be the greatest pleasure for ClassNK if this Guide contributes to deepen the understanding to obtain UAS Type Certification.

# Guide for Type Certificate Inspection of Unmanned Aircraft Systems

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