August 7, 2023
SKY Perfect JSAT Holdings Inc.

Notice of Successful Launch of the Quantum Cryptography Optical Communication Device

SKY Perfect JSAT Holdings Inc. (Head Office: Minato-ku, Tokyo; Representative Director, President: Eiichi Yonekura) announced that SKY Perfect JSAT Corporation (Head Office: Minato-ku, Tokyo; Representative Director, President & Chief Executive Officer; Eiichi Yonekura), a 100% owned subsidiary, announced the successful launch of the Quantum Cryptography Optical Communication Device, which was built in the "Study and Development of Satellite-based Quantum Key Distribution (QKD) and Cryptography Technology*1 in Satellite Communication"*2 for the Minister of Internal Affairs and Communications (MIC).

*1 Quantum Key Distribution (QKD) and Cryptography Technology: Cryptography technology that has no danger of decoding even when computational technology advances.

*2 "Study and Development of Satellite-based QKD and Cryptography Technology in Satellite Communication" : This study and development was implemented as part of "Research and Development of Quantum Encryption Technology for Satellite Communications" in the MIC's "Research and Development Project for ICT Priority Technology".

August 7, 2023
SKY Perfect JSAT Corporation

Notice of Successful Launch of the Quantum Cryptography Optical Communication Device

SKY Perfect JSAT Corporation (Head Office: Minato-ku, Tokyo; Representative Director, President & Chief Executive Officer: Eiichi Yonekura; SKY Perfect JSAT) announced the successful launch of the Quantum Cryptography Optical Communication Device, which was built in the "Study and Development of Satellite-based Quantum Key Distribution (QKD) and Cryptography Technology[*1] in Satellite Communication"[*2] for the Minister of Internal Affairs and Communications (MIC).

The optical communication device was launched aboard Northrop Grumman's Antares Rocket from NASA Wallops Flight Facility in Wallops Island, Virginia, U.S.A., at 9:30 a.m. on August 2, 2023 Japan Standard Time (JST) and arrived at the International Space Station (ISS) at 9:28 p.m. on August 4, 2023 JST. Moving forward, demonstration experiments between space and ground will begin after the optical communication device is placed outside of the ISS. The experiments will be conducted as an extension of the "Optical Demonstration between Tokyo Skytree to Ground" conducted in December 2022.

SKY Perfect JSAT will continue to contribute to the development of the space industry by leveraging the knowledge and innovativeness accumulated in our Space Business, and strive to realize a secure satellite communication network that has no threat of eavesdropping or decryption, even when computational technology advances.

[*1] Quantum Key Distribution (QKD) and Cryptography Technology: Cryptography technology that has no danger of decoding even when computational technology advances.
[*2] "Study and Development of Satellite-based QKD and Cryptography Technology in Satellite Communication" : This study and development was implemented as part of "Research and Development of Quantum Encryption Technology for Satellite Communications" in the MIC's "Research and Development Project for ICT Priority Technology".

Attachment

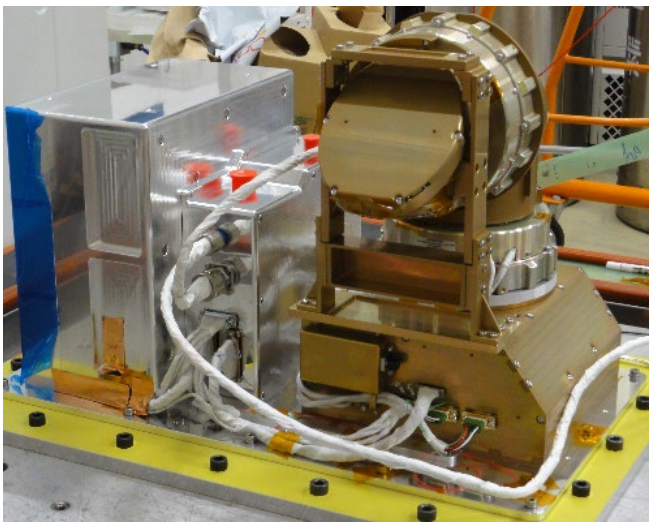

Figure 1: Photograph of the Optical Communication Device

[Credit: National Institute of Information and Communications Technology (NICT), Sony Computer Science Laboratories (Sony CSL), Next generation Space system Technology Research Association (NeSTRA)]

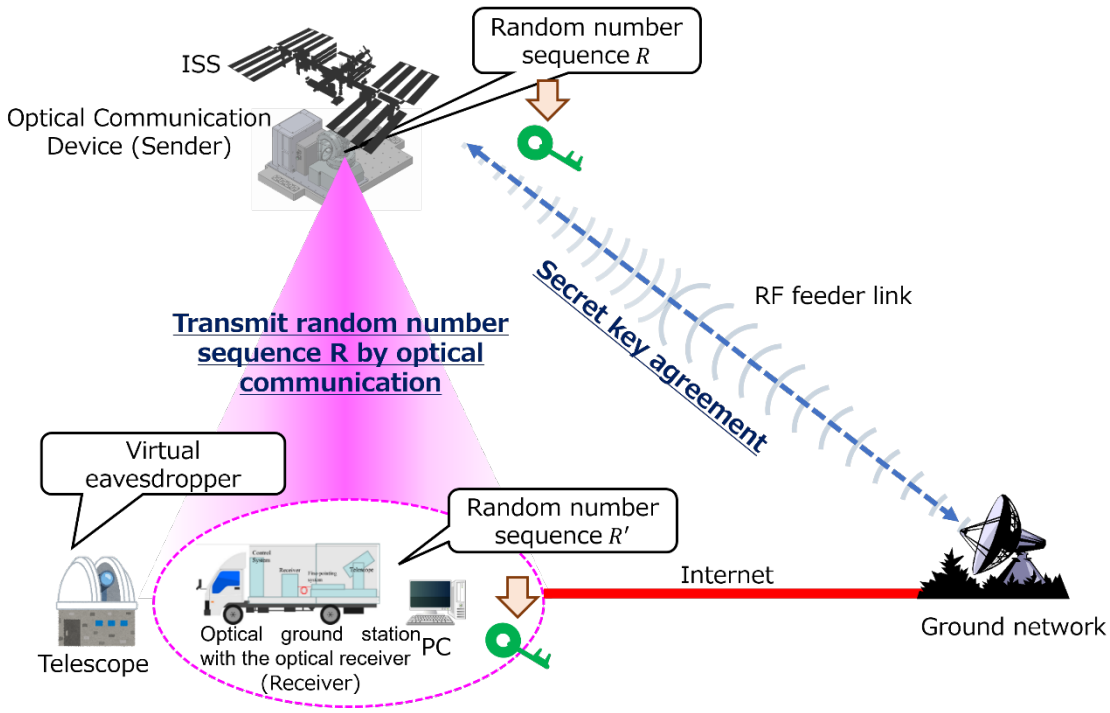

Figure 2: Image of the Experiments between ISS and Ground

[Credit: National Institute of Information and Communications Technology (NICT), SKY Perfect JSAT]