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Skycorp announces delivery of the intelligent Space Systems Interface (iSSI) Flight Qualification Experiment (FQE) to the International Space Station

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Skycorp Incorporated is pleased to announce the launch of the "intelligent Space Systems Interface Flight Qualification Experiment (iSSIFQE)" as part of the Northrop Grumman's 17th Commercial Resupply Services mission to the orbiting laboratory, contracted by NASA. This payload is a flight qualification of the intelligent Space System Interface (iSSI) robotic data and power transfer connector, built by iBOSS GmbH of Aachen Germany. This connector can transfer up to 5 kilowatts of power, 1,000 BaseT Ethernet, and medium data rate CANBus serial data. Skycorp is also flight qualifying the "Polarfire" multicore RISC-V System on a Chip (SoC) from Microchip. To accurately characterize the radiation environment for the computers involved and define the radiation environment on the Kibo External Facility, the ARMAS 9 radiation sensor package from Space Environmental Technologies and the Luilin Linear Energy Transfer (LET) sensor are also part of the iSSIFQE.

The iSSIFQE will be installed on the Japanese Kibo External Facility for qualification in the relevant space environment (NASA TRL-7 level). This experiment will operate for 6-9 months and will be returned to the Earth for detailed examination after operations are complete. The long term goal of this flight qualification is the incorporation of the iSSI, the Polarfire SoC, and the ARMAS 9 as standard modular hardware for the Skycorp Orbital Logistics Vehicle (OLV) which won a highly competitive award from the DoD Defense Innovation Unit (DIU) for the Multi-Orbit Logistics Vehicle initiative. Skycorp and iBoss GmbH are also offering the hardware and software qualified for this mission to the spaceflight community to help foster advances in the state of the art in On Orbit Servicing, Assembly, and Manufacturing (OSAM), in space.

The iSSIFQE payload is sponsored under a U.S.C. 2373 agreement with the Defense Innovation Unit for proto-flight qualification of the iSSI hardware. Support for the analysis of the radiation data is provided by NASA Headquarters SMD, Heliophysics Division. The flight opportunity is

provided under an Agreement with the Center for the Advancement of Science in Space, manager of the ISS National Laboratory. Siting and space operations on the Kibo Module is provided by SpaceBD and JAXA.

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