

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

XT MO

(Class of Station)

WR9XRI

(Call Sign)

0910-EX-ST-2020

(File Number)

NAME University of Kentucky

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

KREPE consists of three non-orbiting, self-contained capsules for testing atmospheric re-entry thermal protection systems.

Station Locations

- (1) MOBILE: KREPE capsules will be deployed from the ISS.
- (2) MOBILE: KREPE capsules will be deployed from the ISS.
- (3) MOBILE: KREPE capsules will be deployed from the ISS.

Frequency Information

MOBILE: KREPE capsules will be deployed from the ISS.

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1618.725-1626.25 MHz	MO	41K7Q2W	22.1 W (ERP)	0.00015 %

This authorization effective July 01, 2021 and
will expire 3:00 A.M. EST January 02, 2022

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Special Conditions:

- (1) Following launch of the satellite, the licensee must notify the FCC through electronic submission to the license file, of the status of the satellite (transmissions commenced, etc.), not later than 7 days after commencement or expected commencement of transmissions, and of termination of transmissions, not later than three months after such termination.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (4) Upon receipt of a conjunction warning from the JSpOC or other source, the licensee must review the warning and take all possible steps to assess and, if necessary, to mitigate collision risk, including, but not limited to: contacting the operator of any active spacecraft involved in such warning; sharing ephemeris data and other appropriate operational information with any such operator; modifying spacecraft attitude and/or operations.
- (5) Approval is contingent upon the proper licensing of the complimentary portion of the requested operations by Iridium Satellite, LLC.
- (6) KREPE operations (including jettison and on-orbit operations) shall be coordinated with the NASA Johnson Space Center Spectrum Management Office (JSC-DL-SPECTRUMMANAGEMENT@MAIL.NASA.GOV) prior to jettison from the NASA International Space Station (ISS). University of Kentucky shall comply with any and all restrictions that may be levied by the NASA JSC Spectrum Management Office to protect NASA ISS operations.