

DESCRIPTION OF EXPERIMENT

Caos Capital (“Caos”) was previously granted a two-month Special Temporary Authority (“STA”) to test its developmental radar system in the 230.25-231.287 MHz and 231.313-232.95 MHz bands at two sites in the National Capital Region (“NCR”). *See* ELS File No. 0739-EX-ST-2026, Call Sign WB9XGC (“NCR STA”). In the NCR STA application, Caos originally requested a six-month STA to conduct the full range of testing objectives, but agreed to an initial, shorter duration authorization during coordination with MAG. *See id.* **{{BEGIN CONFIDENTIAL}}** [REDACTED]

[REDACTED] **{{END CONFIDENTIAL}}** Except as specified herein, the technical parameters and proposed operations for the instant STA application are identical to those previously approved in the NCR STA; therefore, the information and exhibits provided in support of the NCR STA are incorporated by reference herein. Caos has completed coordination with MAG for these extended operations in the NCR under MAG Coordination No. 26-027 and has attached the confirming correspondence as Attachment A hereto. All coordination requirements and restrictions applicable to the NCR STA remain unchanged and will continue to apply to the extended operations.

For the good cause affirmed and demonstrated herein, Caos respectfully requests expeditious grant of this application. Pursuant to Sections 1.62 and 5.61 of the Commission’s rules, Caos will continue to operate its experimental radar system consistent with the terms and conditions of the NCR STA until action is taken on this timely filed request for extension of its STA. *See* 47 C.F.R. §§ 1.62, 5.61.

PURPOSE OF EXPERIMENT AND AFFIRMATION OF PUBLIC INTEREST

The Washington, D.C. Special Flight Rules Area (“SFRA”) encompasses some of the most sensitive and security-critical airspace in the United States, overlying the seat of the federal government, critical national security infrastructure, and densely concentrated federal facilities. As Congress, the Departments of Justice and Homeland Security, and the Commission have recognized, increasing unmanned aircraft systems (“UAS”) operating in or near sensitive facilities, infrastructure, and regions—such as the SFRA—pose serious and growing risks to national security, public safety, and the continuity of government operations.

Caos is currently developing a counter-unmanned aircraft systems (“C-UAS”) detection and tracking capability in direct support of the federal and local law enforcement agencies responsible for protecting the NCR. **{{BEGIN CONFIDENTIAL}}** [REDACTED]

[REDACTED] **{{END CONFIDENTIAL}}** All testing will be scheduled with MIDLANT AFC at least seven days in advance, and will be conducted by Caos personnel in coordination with authorized government personnel on site. Caos will also input all testing events into the IFDS during scheduling with MIDLANT AFC. *See* NCR STA, Conditions 5–6.

**REDACTED
FOR PUBLIC INSPECTION**

The Caos radar system is being developed and optimized for ultimate use by federal and local law enforcement agencies. As a result, the system has been designed to operate on the federally allocated frequencies between 228-400 MHz. During coordination of the NCR STA with MAG, approximately 2.7 MHz of spectrum was identified for use during this experiment between 230.25-232.95 MHz, notched at 231.287-231.313 MHz. *See* NCR STA, Condition 4. The testing parameters are unchanged to those described in the NCR STA, except for a reduction in requested power to more accurately reflect testing requirements. An updated radiation hazard report is attached hereto.

Caos accepts that any grant of authority will be on a non-interference, no protection basis. Caos affirms that its operations will not cause harmful interference to Federal or other FCC-authorized co-frequency operations operating in accordance with the Table of Frequency Allocations in proximity to the test sites. Caos will operate in accordance with any agreements entered into with such operators, including advanced scheduling of testing operations with MIDLANT AFC. Caos further affirms that the radar system is designed for detect and warn operations, and the company will not conduct any operations involving directed energy, electromagnetic jamming, electronic attack, spoofing, mimicking, and/or signal emulation under this authorization.

These limited, non-interference operations are designed to **{{BEGIN CONFIDENTIAL}}**

{{END CONFIDENTIAL}} Grant of this application will benefit the public interest by enabling the development, demonstration, and qualification of much needed detect and warn C-UAS technologies that can expand protective coverage within security-critical airspace, such as the SFRA, without causing harmful interference to other authorized spectrum users.

STOP BUZZER

The stop buzzer contacts remain unchanged from the NCR STA. For ease of reference, Caos includes the contact information as an exhibit to this application and reaffirms that the stop buzzer contacts are available 24/7 to immediately cease operations should any reports of harmful interference be received.

CONCLUSION

For the good cause established in the NCR STA and re-affirmed herein, Caos respectfully requests expeditious action on this request for STA.

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