

Northrop Grumman Systems Corporation
FCC Form 442 Experimental License Request
File No. 0491-EX-CN-2026

EXH. 1 - REQUEST FOR EXPERIMENTAL LICENSE

Northrop Grumman Systems Corporation ("NGSC") hereby requests a conventional FCC experimental license¹ to conduct experimental testing of a ground-based mobile intrusion detection system. One component is the FLIR Ranger R1 radar. The objective is to evaluate the performance of the FLIR Ranger R1 radar over time with various moving targets and through various weather environmental conditions. The system will be located in Pine Bluffs, WY and will be under the operational control of NGSC.

Antenna Information

Manufacturer	FLIR Radars
Model	Ranger R1
Model No.	STS-1400
Lower Freq.	34.7
Upper Freq.	35.25
Freq. Unit	GHz
Power	0.33 W (FastScan) 0.27 W (Doppler)
Pwr. Unit	Watts
ERP	0.8
ERP Unit	Watts
Mean/Peak	P
Freq. Tol.	5 ppm
Emission Designator	500MF3N for channels centered at 34.950 GHz 500MF3N for channels centered at 35.000 GHz, 100MF3N for channel centered at 34.800 GHz 52MF3N for channels centered at 35.026 GHz
Fixed/Mobile	Fixed (Transportable)
Modulating Signal	Frequency modulated continuous wave
Antenna info	Manufacturer: FLIR Radars Number: STS 1400 Nomenclature / Name: Ranger R1; Antenna Type: Dielectric lens fed with waveguide horn; Orientation (Horizontal and Vertical position): Horizontal mechanically scanned

NGSC acknowledges that all experimental operations conducted in the requested bands will be on a non-interference basis and that it will not conduct Jamming, Spoofing, Electronic Attack, and/or Directed Energy Attack under this experimental authorization.

The **stop buzzer contact** for this experimental license will be Allen White, Tele #307-214-1605, E: Charles.White5@ngc.com.

¹ NGSC currently holds FCC Experimental Special Temporary authority for related testing under FCC File No. 1995-EX-ST-2025