

**PROPRIETARY INFORMATION**  
**National Oceanic and Atmospheric Administration**  
**License to Operate a Private Remote Sensing Space System**



The National Oceanic and Atmospheric Administration (NOAA), an agency of the U.S. Department of Commerce, hereby grants this Tier 1 license authorizing ACME AtronOmatic LLC. d/b/a MyRadar, to operate the Hyperspectral Orbital Remote Imaging Spectrometer (HORIS) Constellation, a private remote-sensing space system comprised of 10 satellites with the following capabilities and described completely in Part D of this license:

Visible Multispectral Imagery (VMSI) (400-800 nm) at 15 m Ground Sample Distance (GSD)  
Near Inferred Hyperspectral Imagery (NIR HSI) (595-860 nm) at 176 m Ground Sample Distance (GSD)  
Thermal Inferred (TIR) (7500-14500 nm) at 133 m Ground Sample Distance (GSD)

Please submit any communications, including all communications required by the regulations at 15 CFR Part 960 and this license to:

Commercial Remote Sensing Regulatory Affairs (CRSRA)  
1335 East-West Highway SSMC-1/G-101  
Silver Spring, MD 20910  
Email: [crsra@noaa.gov](mailto:crsra@noaa.gov)  
Phone: 301-427-2560

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**Part A: Determination and License Grant**

The Assistant Administrator (AA) of the National Environmental Satellite, Data, and Information Service within the National Oceanic and Atmospheric Administration, an agency of the U.S. Department of Commerce, acting pursuant to authority delegated by the Secretary of Commerce (the Secretary), determines that ACME AtronOmatic LLC d/b/a MyRadar, as described in Part C of this license, will comply with the requirements of the Land Remote Sensing Policy Act of 1992, as amended, codified at 51 U.S.C. 60101 et seq., (hereinafter “Act”), the regulations promulgated thereunder, 15 CFR Part 960 (“the regulations”); and the conditions in this license.

Accordingly, the AA hereby grants ACME AtronOmatic LLC d/b/a MyRadar (hereinafter “Licensee”), as described in Part C of this license, this license to operate the HORIS Constellation (hereinafter “the System”), as described in Part D of this license, subject to the terms and conditions of this license. This license is valid until its term ends in accordance with the regulations. The Licensee must request and receive approval for a license modification before taking any action that would contradict a material fact listed in Part C or D of this license.

The AA makes this determination, and grants this license, under the authority delegated to him by the Secretary of Commerce through the Under Secretary of Commerce for Oceans and Atmosphere and Administrator of NOAA. The Secretary's authority is found in the Act and the regulations. This license does not authorize the System's use of spectrum for radio communications or the conduct of any non-remote sensing operations that are proposed to be undertaken by the Licensee. This license is not alienable and creates no property right in the Licensee.

IN WITNESS THEREOF, I hereby grant this License:

\_\_\_\_\_  
Stephen M. Volz Ph. D.  
Assistant Administrator for  
Satellite and Information Services

\_\_\_\_\_  
Date

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**Part B: Tier 1 License Conditions**

The Licensee must, at all times:

1. Comply with the Act, the Regulations, this license, applicable domestic legal obligations, and the international obligations of the United States.
2. Operate the system in such manner as to preserve the national security of the United States and to observe international obligations and policies, as articulated in conditions included in this license.
3. Upon request, offer to the government of any country (including the United States) unenhanced data collected by the system concerning the territory under the jurisdiction of such government without delay and on reasonable terms and conditions, unless doing so would be prohibited by law or license conditions.
4. Upon termination of operations under the license, make disposition of any satellites in space in a manner satisfactory to the President.
5. Notify the Secretary in writing of each of the following events, no later than seven days after the event:
  - i. The launch and deployment of each system component, to include confirmation that the component matches the orbital parameters and data collection characteristics of the system, as described in Part D of the license;
  - ii. Each disposal of an on-orbit component of the system;
  - iii. The detection of an anomaly; and
  - iv. The licensee's financial insolvency or dissolution;
6. Request and receive approval for a license modification before taking any action that would change a material fact in the license.
7. Certify that all material facts in the license remain accurate pursuant to the procedures in § 960.14 no later than October 15th of each year.
8. Cooperate with compliance, monitoring, and enforcement authorities described in the Act and this part, and permit the Secretary to access, at all reasonable times and with no shorter notice than 48 hours, any component of the system for the purpose of ensuring compliance with the Act, this part, and the license.
9. Refrain from disseminating unenhanced data, or processed data or products derived from the licensee's system, of the State of Israel at a resolution finer than the resolution most recently specified by the Secretary in the Federal Register as being available from commercial sources.
  - i. The most recent resolution specified by the Secretary is 0.4 m GSD, please see FR Doc.2020-15770, publish date: July 21, 2020.

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**Part C: Description of Licensee**

Every term below constitutes a material fact. You must request and receive approval of a license modification before taking any action that would contradict a material fact.

1. General Licensee Information:

a. Name of Licensee:

ACME AtronOmatic LLC d/b/a MyRadar

b. Location and address of Licensee:

111 W Jefferson Street #200  
Orlando, FL 32801

c. Licensee contact information:

Andrew Green  
111 W Jefferson Street #200  
Orlando, FL 32801  
andy@acmeaom.com  
407-242-3438  
321-230-8099

d. Contact information for a specific individual to serve as the point of contact with Commerce:

Same as (c)

e. Place of incorporation and, if incorporated outside the United States, confirmation that the Licensee acknowledged as part of the application that the Licensee will operate its system within the United States and is therefore subject to the Secretary's jurisdiction under 15 CFR Part 960:

Florida, United States

2. Identity of any subsidiaries and affiliates playing a role in the operation of the System, including a brief description of that role: N/A

**Part D: Description of System**

Name of System: HORIS Constellation

1. Brief mission description:

HORIS will collect passive hyperspectral Earth imagery (no non-Earth imaging) from Low Earth Orbit (LEO), observing in the nadir direction in visible, near IR, and thermal IR wavelengths with different spatial and spectral resolutions, depending on the wavelength range. Raw, encrypted data and AI-detected feature of interest data will be downlinked at commercial ground stations for generation of

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value-added data products for research and commercial applications.

2. Remote Sensing Instrument(s) parameters (for each sensor):

Sensor type	Imaging/frame rate (FPS)	Spatial resolution (m)	Spectral range (nm)	Collection volume (km/unit of time)
VMSI	17	15	400-800	~ 600 km <sup>2</sup> /s
NIR HSI	17	176	595-860	~ 600 km <sup>2</sup> /s
TIR	17	133	7500-14500	~ 600 km <sup>2</sup> /s

- a. Ability of the remote sensing instrument to slew, point, or digitally look off-axis from the x, y, and z axes of travel:  
 N/A

3. If any entity or individual other than the Licensee will own, control, or manage any *remote sensing instrument* in the System:

Name	Address	Number	Relationship
N/A	N/A	N/A	N/A

4. Spacecraft Upon Which the Remote Sensing Instrument(s) is (are) carried

- a. Description:  
 The HORIS Constellation comprises Ten “1U” form factor CubeSats with radio communication, onboard computing, and attitude control capabilities in addition to the remote sensing payload. There is no propulsion
- b. Estimated launch date(s) in calendar quarter:  
 Q4 2021
- c. Number of spacecraft (system total and maximum in-orbit at one time):  
 10/10
- d. For each spacecraft, provide the following (or if an entire constellation will have substantially the same orbital characteristics, provide these values for the entire constellation and note whether or not all spacecraft will be evenly spaced):

Spacecraft or Constellation Characteristics			
Altitude (km)	Inclination (°)	Orbital Period (min)	Longitude (°)
450-550 km	95-99	~93	+30 for first satellite
Eccentricity	Argument of perigee (°)	Propulsion	
~0	~0	No	

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- e. Ability of the spacecraft to slew, point, or digitally look off-axis from the x, y, and z axes of travel:  
None; nadir pointing only

- 5. If any entity or individual other than the Licensee will own, control, or manage any *spacecraft* in the System

Name	Address	Number	Relationship	Citizenship Status
N/A	N/A	N/A	N/A	N/A

- 6. Ground Components: See Ground Station Appendix

- 7. If any entity or individual other than the Licensee will own, control, or manage any *mission control center(s)* with the ability to operate the System

Name	Address	Number	Relationship
N/A	N/A	N/A	N/A

- 8. Information Applicable to Multi-Spectral Imaging (MSI) and/or Hyper-Spectral Imaging (HSI).

Visible MSI: B: 400 – 550 nm, G: 500 – 625 nm, R: 550 – 800 nm

Thermal IR: 1 band, 7500 – 14500 nm

Near IR HSI: 16 bands with the following FWHM bounds:

<b>Band #</b>	<b>Lower Bound (nm)</b>	<b>Upper Bound (nm)</b>
0	605.5	612.7
1	622.3	629.5
2	644.9	650.2
3	662.8	669.4
4	679.6	688.4
5	696.9	705.2
6	713.6	724.4
7	732.9	741.2
8	747.9	759.2
9	765.0	773.2
10	780.4	790.6
11	796.1	806.8
12	794.7	809.0
13	811.6	822.9
14	826.2	839.9
15	841.1	855.9

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**Ground Station Appendix**

**NOAA must approve any Ground Station prior to the commencement of operations.**

<b>Type</b>	<b>Location</b>	<b>Coordinates</b>
MCC	ACME AtronOmatic LLC 111 W Jefferson Street #200 Orlando, FL 32801	
<b>Domestic</b>		
RGT	KSAT 4022 E. Conant St. Long Beach, CA 90808	
<b>Foreign</b>		
RGT	KSAT Plataberget 9171 Longyearbyen, Svalsat, Norway	
RGT	KSAT El Vergel 2850, Depto 503, Providencia Sanntigo, Punta Arenas, Chile	

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**Administrative Record Appendix**

	<b><u>Date</u></b>	<b><u>Description of Administrative Action Taken</u></b>
1.	6/14/21	Issuance of new License