

June 26, 2019

**VIA ELECTRONIC FILING**

Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12th Street S.W.  
Washington, D.C. 20554

**Jeffrey E. Rummel**

Partner  
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Re: Ex Parte Notice  
WT Docket No. 19-39

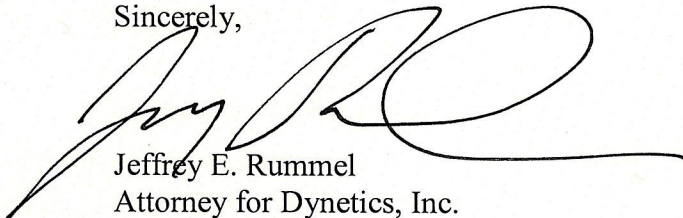
Dear Ms. Dortch:

On June 26, 2019, undersigned counsel for Dynetics, Inc. (Dynetics), along with Allen Wooten (Dynetics' Chief Hardware Engineer), and Mike Stokes (Executive Staff, Dynetics and President, Observation Without Limits, LLC) met with the following:

Rebecca Schwartz, Legal Advisor, Wireless Telecommunications Bureau  
Roger Noel, Chief, Mobility Division, Wireless Telecommunications Bureau  
Mike Regiec, Associate Chief, Mobility Division, Wireless Telecommunications Bureau  
Paul Powell, Assistant Chief, Mobility Division, Wireless Telecommunications Bureau

During the meeting, Dynetics discussed the impact of the 3100-3550 MHz application freeze that has been imposed by the Commission, and Dynetics' "Request For Modification Of Freeze" and "Request for Limited Waiver" filed in this docket. Dynetics used the attached slide deck to guide the conversation.

Sincerely,



Jeffrey E. Rummel  
Attorney for Dynetics, Inc.

cc: w/attachment (via email):

Rebecca Schwartz, Legal Advisor, Wireless Telecommunications Bureau  
Roger Noel, Chief, Mobility Division, Wireless Telecommunications Bureau  
Mike Regiec, Associate Chief, Mobility Division, Wireless Telecommunications Bureau  
Paul Powell, Assistant Chief, Mobility Division, Wireless Telecommunications Bureau

**DYNETICS, INC.**

**REQUEST FOR LIMITED WAIVER**

**REQUEST FOR MODIFICATION OF FREEZE**

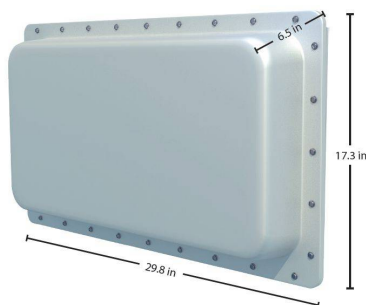
**Ex Parte Presentation**

**WT Docket No. 19-39**



# Dynetics 3.1-3.3 GHz Radar

- **All-Digital, Web-Based, Ground-Based Surveillance Radar Providing Real-Time Situational Awareness of Property Subject to Intrusions by Humans, Vehicles, or Animals**
- **Automatically Provides Actionable Information, Mobile Alerts, and Integrated Live Video to Owner/Operators – All Via a Single Interface**
- **Protection of Critical Infrastructure**
  - Ex. Alabama Power Company; Georgia Power; Denver Int'l Airport**
  - + Nearly 100 Additional Entities**
  - From 15 of the 16 DHS-Defined Critical Infrastructure Sectors**



# Reliable Long Term Licensing Is Required To Comply With US Homeland Security Policy

**--Unique/Unusual Circumstances--**

**Special Temporary Authority  
in Support of Long Term Critical Infrastructure Protection  
is Not Sufficient**

- **U.S. Homeland Security Policy Requires Long Term Planning, Installation and Deployment of Critical Infrastructure Protection Systems**
- **Critical Infrastructure Operators Must – Very Early in the Process – Incorporate State-Of-The-Art Radiolocation Technologies Into Their Long-Term Plans**
- **These Plans Require Continuing/Reliable Availability of Long-Term (Non-Temporary) Commission Licenses To Support Ongoing Deployments**

# Reliable Long Term Licensing Is Required To Comply With US Homeland Security Policy

**--Unique/Unusual Circumstances--**

**Substantial Current Reliance  
on Continued Long-Term Licensing Within 3.1-3.3 GHz**

**Georgia Power:** At Least 5 More Systems by End of 2019  
6 or 7 Additional Facilities Per Year Over Next 5 Years

**Alabama Power:** 11 Additional Sites by End of 2020

**Nearly 100 Other Entities in 15/16 Critical Infrastructure Sectors:**

**257 Sites Relying on Future Long-Term 3.1-3.3 GHz Licensing**

**200+ Pre-Deployment/Installation**

**50 + Deployment/Installation**



# **The Immediate and Continuing Severe Impact of the Freeze**

**-- Well Beyond “Inequitable” or “Unduly Burdensome” –  
-- Contrary to the Public Interest --**

## **Increased Risk of Devastating Attacks on Critical Infrastructure**

**Within the last year:**

**Georgia Power Detected/Responded to 2 Intrusions  
Alabama Power Detected Intrusions at 3 Facilities**

**This month:**

**Georgia Power Detected/Responded to 2 Intrusions**

## **Increased Risk of Significant Enforcement Action**

**Ex: FERC: Up to \$1M per Violation Per Day  
NERC: January 2019 - \$10M Fine Levied**



# **The Immediate and Continuing Severe Impact of the Freeze**

**-- No Reasonable Alternatives --**

## **For Critical Infrastructure Operators:**

- **Must Comply with Regulations Requiring Long-term Physical Security Plans**
- **Must Carefully Investigate/Select Radiolocation Technology Early in the Process**
- **Must Select Radar Systems with the Best Functionality Such as GroundAware®**
- **Must Select Radar Systems Capable of Long-Term (Non-Temporary) Licensing**
- **Must Be Able to Rely on Continued and Uninterrupted Long-Term Licensing**

## **For Dynetics:**

- **3.1-3.3 GHz = Result of Years of Experimentation/Planning/Implementation**
- **Extensive Design/Algorithm Refinement to Detect/Classify Threats**
- **Years of Technical Prototyping, Evaluation, Experimental Testing**
- **This Optimal Range Results in Fewer Multipath Propagation Problems  
and Fewer Effects of Clutter from Rain/Fog/Snow vs Higher Frequency Bands**
- **Input Directly from Commission Staff**

# **The Very Narrowly-Tailored Relief Requested By Dynetics**

## **Separate and Independent Grounds For Grant of Limited Waiver:**

### **1.925(b)(3)(ii): Unique/Unusual Circumstances**

**Impact of Freeze Well Beyond Inequitable/Unduly Burdensome  
No Reasonable Alternatives for CI Operators and Dynetics**

### **1.925(b)(3)(i): Waiver is In the Public Interest**

- Unique/Unusual Circumstances**
- Impact Well Beyond Inequitable/Unduly Burdensome**
- No Reasonable Alternatives**

**and**

**Underlying purpose of the rule(s) would not be served**

- All Reliable Indications Are That NTIA's "Active Consideration"  
Is Limited to 3450-3550 MHz**



# **The Very Narrowly-Tailored Relief Requested By Dynetics**

## **Limited Waiver Requested Only For Highly-Specific, Limited-Scope Applications**

- **Only for Critical Infrastructure Operators in the 16 DHS-Defined Sectors**
- **Only for the Purpose of Infrastructure Surveillance and Protection**
- **Only Ground-Based Transmissions Originating Within Confines of Property**
- **Only Discrete Carrier Frequencies within 3.1-3.3 GHz**
- **No More Than 6 Discrete Carrier Frequencies Per Licensed Location**

### **+ Additional Oversight Conditions:**

- **Manufacturer Must Inform Purchasers That Radars are Subject to Waiver**
- **Applicants Must Reference Waiver Order and Meet Conditions of Waiver**
- **Devices Must Be Certified and Compliant with Part 90 Radiolocation Rules**
- **Manufacturers Must Notify of Any Known Interference and Remedy**
- **Manufacturers Must Create and Maintain Record of Installations**

# **The Very Narrowly-Tailored Relief Requested By Dynetics**

## **Request for Modification of Freeze:**

**Modify Freeze to Apply Only to 3450-3550 MHz Range**

### **Factors:**

- Insufficiency of Short Term Licensing**
- Requirements for Long Term Critical Infrastructure Protection**
- Reliance on Continued Availability of Long-Term 3.1-3.3 GHz Licenses**
- Risk of Devastating Attacks on Critical Infrastructure**
- Significant Enforcement Action**
- No Reasonable Alternatives for Operators/Dynetics**

### **And:**

- All Reliable Indications Are That NTIA's "Active Consideration" Is Limited to 3450-3550 MHz**



# **Grant of the Very Narrowly-Tailored Relief Will Not Impede Commercial Deployment Or Impact Spectral Stability**

- **Limited Scope Licensing Would Apply To Only Select Eligible Critical Infrastructure Applicants With Demonstrated Need, Operating Solely Within the Confines of Their Property, On Discrete Carrier Frequencies the Number of Which Would be Limited to 6 Per Location on Such Applications, and Subject to Additional Stringent Oversight Conditions**
- **The Specific Technical Characteristics of this Pulsed, Non-Scanning, Ground-Based Surveillance Radar Mitigates Impact to the Spectrum Environment**
- **Applicable Precedent Supports Grant of Relief:**
  - **Protection of Critical Infrastructure/Public Safety Operations**
  - **Waiver/Modification of Freeze in Appropriate Circumstances**
- **NTIA's "Active Consideration"**  
**All Reliable Indications - Limited to 3450-3550 MHz**

# **Grant of the Very Narrowly-Tailored Relief is Overwhelmingly Supported By the Comments**

**Grant of the Very Narrowly-Tailored Relief Is  
Consistent With the Leadership's Strong  
Support for the Safeguarding of Public Safety  
and Critical Infrastructure Facilities**

**and**

**the Underlying Purposes  
of the Commission Itself**

# Safeguarding Public Safety and Critical Infrastructure Networks/Facilities

## Chairman Pai:

“When it comes to our national security, we cannot afford to make risky choices and just hope for the best. We must have a clear-eyed view of the threats that we face and be prepared to do what is necessary to counter those threats.”

*Chairman Pai Statement on Executive Order to Protect America’s Communications Networks – 5/15/19*

Accessed at: <https://docs.fcc.gov/public/attachments/DOC-357486A1.pdf>

“The American people want, expect, and deserve the best possible public safety services...” – 2/6/19

*Chairman Pai Calls for Continued Progress in Improving Accuracy of Wireless Emergency Alerts*

Accessed at: <https://docs.fcc.gov/public/attachments/DOC-356092A1.pdf>

“...it goes without saying that public safety, rather than temporal bright-line rules, must be our paramount goal.”

*Statement of Commissioner Ajit Pai Approving in Part and Concurring in Part RE: Implementing Public Safety Broadband Provisions of the Middle Class Tax Relief and Job Creation Act of 2012... - 7/31/12*

Accessed at: <https://docs.fcc.gov/public/attachments/FCC-12-85A6.pdf>

# Safeguarding Public Safety and Critical Infrastructure Networks/Facilities

## Commissioner O’Rielly:

“To help frame the discussion, it seems appropriate to touch on why we expend so much energy protecting our national security. Of course, we do so foremost to prevent immediate threats and attacks on our homeland. And, our efforts can certainly reinforce unity and civic pride. Yet preservation of national security involves so much more. I see it as a mechanism and tool to ensure that America’s preeminent value—individual freedom—is not jeopardized or surrendered at the hands of some other nation state or rogue group. Founding father John Adams wrote to his beloved wife, “Posterity! You will never know how much it cost my generation to preserve your freedom. I hope you will make good use of it.” That ominous reminder reaffirms the underlying reasons for investing so much time, money, effort, and precious American lives to protect our national security. America serves as a unique experiment in the history of the world and freedom is at the epicenter of that creative effort.”

*Remarks of FCC Commissioner Michael O’Rielly Before the Daniel Morgan Graduate School of National Security – 5/16/19*

Accessed at: <https://www.fcc.gov/document/orielly-remarks-daniel-morgan-graduate-school-natl-security>



# Safeguarding Public Safety and Critical Infrastructure Networks/Facilities

## Commissioner Carr:

“...unleashing the private sector to build and operate networks means that private companies are also charged with defending critical infrastructure....Strengthening our national security will continue to be a top priority for the FCC. Doing so requires timely, accurate information concerning the threats we face and a holistic discussion of potential responses”

*Statement of Commissioner Brendan Carr - Re: Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs - WC Docket No. 18-89 – 4/18/18*

*Accessed at: <https://docs.fcc.gov/public/attachments/FCC-18-42A1.pdf>*

“The FAA's NextGen initiative will modernize air travel. But one element, known as ADS-B, could undermine law enforcement & national security by letting criminals track border patrol and military aircraft in real-time, exposing their operations and evading their reach.”

*Twitter - [@BrendanCarrFCC](#) – 6/16/19*

# Safeguarding Public Safety and Critical Infrastructure Networks/Facilities

## Commissioner Rosenworcel:

“I believe budgets are not just about accounting. They are a statement of values. And I believe this budget falls short of what is needed to uphold essential values in our communications laws. I believe the most basic values in our laws—consumer protection, universal service, competition, and public safety—need refocus and attention.... Finally, public safety is paramount. In the very first sentence of the Communications Act, Congress instructed the Commission to make available, “to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide radio and communication service” in order to promote the “safety of life and property.”

*Statement of Jessica Rosenworcel Commissioner Federal Communications Commission Before the Subcommittee on Financial Services and General Government Committee on Appropriations, United States House of Representatives, Washington, DC, 4/3/2019*

Accessed at: <https://docs.fcc.gov/public/attachments/DOC-356850A1.pdf>

# Safeguarding Public Safety and Critical Infrastructure Networks/Facilities

## Commissioner Starks:

“Given our growing reliance on communications networks to support our critical infrastructure, transportation, health care and financial sector, the need for strong Commission action to address these security vulnerabilities has never been greater. Our authority is clear, beginning with Congress’s explanation in Section 1 of the Communications Act of 1934 that it created the FCC both “for the purpose of the national defense” and “for the purpose of promoting safety of life and property.” While some have suggested that Section 1 is merely a “policy statement,” the Commission has long relied upon it as informing the public interest analyses performed in numerous circumstances under both Democratic and Republican leadership....”

Nor does our authority stop there. The Act expressly gives the Commission the authority to “perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions,” and to “make such rules and regulations . . . as may be necessary in the execution of its functions.” Protecting our networks from persistent and potentially catastrophic security threats is the essence of “necessary.”

I therefore will approach any matters raising national security concerns with this authority in mind. In any such proceeding, I will review the record before me and independently assess whether the proposed outcome protects the national defense and the safety of life and property”

*Statement of Commissioner Geoffrey Starks Re: China Mobile International (USA) Inc. Application for Global Facilities-Based and Global Resale International Telecommunications Authority Pursuant to Section 214 of the Communications Act of 1934, as Amended - 5/10/19*

Accessed at: <https://docs.fcc.gov/public/attachments/DOC-357372A6.pdf>

# Safeguarding Public Safety and Critical Infrastructure Networks/Facilities

## **47 U.S.C. § 151. Purposes of chapter; Federal Communications Commission created**

For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, **for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communications**, and for the purpose of securing a more effective execution of this policy by centralizing authority heretofore granted by law to several agencies and by granting additional authority with respect to interstate and foreign commerce in wire and radio communication, there is created a commission to be known as the "Federal Communications Commission", which shall be constituted as hereinafter provided, and which shall execute and enforce the provisions of this chapter.

# Thank you