

FLYABILITY

SAFE DRONES FOR INACCESSIBLE PLACES

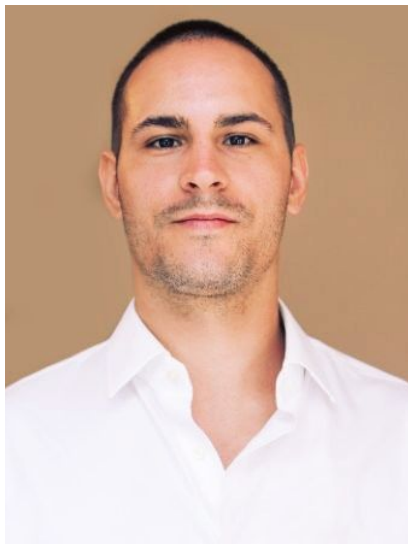
How Country-of-Origin Drone Bans Impact U.S. Companies & Agencies Including Public Safety Agencies Fighting Covid-19

Tuesday, April 14th 2020

05:30 PM - 06:30 PM CEST

11:30 AM - 12:30 AM EST

MODERATOR



Zacc Dukowitz

Content Marketing Manager

—Flyability—

PANELISTS



Jordan Gross

Senior Government Relations
Lead

—DJI—



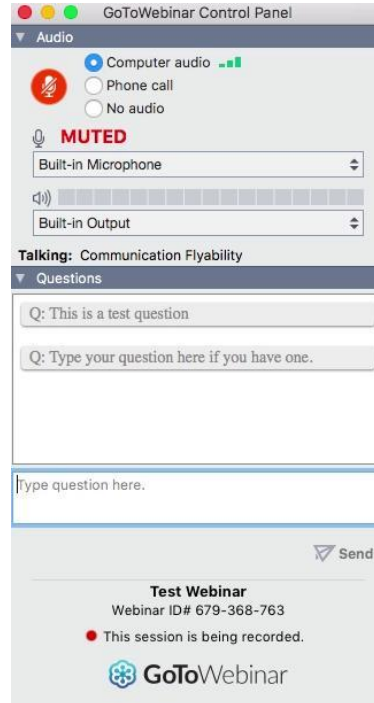
Romeo Durscher

Senior Director of Public
Safety Integration

—DJI—

WEBINAR ENGAGEMENT

Ask questions during the webinar.



The image shows a screenshot of the GoToWebinar Control Panel. The window title is "GoToWebinar Control Panel". It has a "Audio" section with three radio buttons: "Computer audio" (selected), "Phone call", and "No audio". Below these is a microphone icon and the word "MUTED" in red. There is a dropdown menu for "Built-in Microphone" and a volume slider. Below the slider is another dropdown menu for "Built-in Output". The "Talking: Communication Flyability" section is collapsed. The "Questions" section is expanded, showing two text input fields: "Q: This is a test question" and "Q: Type your question here if you have one." Below these is a larger text input field with the placeholder "Type question here." and a "Send" button with a paper plane icon. At the bottom, it says "Test Webinar", "Webinar ID# 679-368-763", and "This session is being recorded." with a red dot icon. The GoToWebinar logo is at the very bottom.



AGENDA

- 1 5' Introduction
- 2 15' Jordan Gross, DJI
How Country-of-Origin Drone Bans Impact U.S. Companies and Agencies
- 3 15' Romeo Durscher, DJI
Drone Bans, Public Safety Agencies & COVID-19
- 4 20' Q&A



How Country-of-Origin Drone Bans Impact U.S. Companies and Agencies

Jordan Gross

Senior Government Relations Lead





HOW COUNTRY-OF-ORIGIN DRONE BANS IMPACT U.S. COMPANIES & AGENCIES

JORDAN GROSS

SENIOR GOVERNMENT RELATIONS LEAD

DJI

DJI TECHNOLOGY

- Founded in 2006
- Today an estimated 70% of the market share
- From consumer products, to enterprise, to government
- But what is DJI most often defined by these days in the media?

The background is a blue gradient. In the corners, there are white line-art illustrations of circuit boards or neural networks, with lines and small circles representing nodes.

WHERE OUR HEADQUARTERS ARE LOCATED

HOW DID WE GET HERE?

2019

2020

Senator Scott (FL)
introduces the American
Security Drone Act (ASDA)

WH's Navarro pens op-ed
which applauds the DOI's
decision and criticizes DJI

Senate Homeland Security
& Government Affairs
passes ASDA out of
Committee

July

November

January

March

September

DOI releases its
Flight Test and
Technical
Evaluation Report
for DJI GE drones

Representative Crenshaw (TX)
introduces the Drone Origin
Security Enhancement Act

DOI grounds their entire drone
fleet

DOI Secretary signs
Order 3379 grounding
Interior's drone fleet for
all non-emergency
operations

White House draft
Executive Order
regarding drones is
leaked

STATE OF THE US DRONE MARKET

“Once upon a time, there were U.S.-based UAS companies that held top positions in the market, but today they do not have a substantial market share or have been met with business failures due to mismanagement or inferior manufacturing designs. Additionally, although these were U.S.-based UAS companies, their UASs were all manufactured in China. Even for the few small U.S.-based companies that manufacture UASs in the U.S., the technical and economic viability of their UAS products relies on electronic components manufactured in China.”

(Idaho National Laboratory- Aviation Cyber Initiative Unmanned Aircraft System Information Security Risks Limited Scope Test & Evaluation- October 2019)

STATE OF THE US DRONE MARKET

“Subsequent OAS market research to identify additional UAS to meet Interior bureaus’ growing demand for inexpensive and highly capable aircraft indicated the remaining UAS available from U.S. based companies were up to 10X less capable for the same price, or up to 10X more costly than similarly capable DJI aircraft.”

(Department of Interior- DJI Unmanned Aircraft System (UAS) Mission Functionality and Data Management Assurance Assessment- July 2019)

COUNTRY OF ORIGIN BAN POLICIES

Agency Actions

Department of Interior (DOI) Secretarial Order 3379

- Prohibits Department funds from being used for “designated UAS”
- Prohibits parties that have “contracts, grants, and cooperative agreements” with the Department from purchasing “designated UAS” using Department funds
- Prohibits parties that have “contracts, grants, and cooperative agreements” from operating “designated UAS” on Department-managed land.

Impacts:

- Entire DOI fleet grounded.
- Companies with assets on DOI land unable to operate.
- Public Safety Impacts

COUNTRY OF ORIGIN BAN POLICIES

Pending Legislative Actions

The American Security Drone Act- S 2502

- Passed out of Senate Committee
- Bans all government agencies from procuring OR operating COTS drones OR drones/ drone components manufactured in China.
- Prohibits any federal funds from being used to purchase COTS drones OR drones manufactured in China

The Drone Origin Security Enhancement Act- HR 4753

- Passed out of the House (no Senate companion bill)
- Bans DHS from using, procuring, providing financial assistance for drones/ drones with components manufactured in China. Also bans devices used for detecting drones manufactured in China.

COUNTRY OF ORIGIN BAN POLICIES

Potential Administration Actions

Draft Executive Order- Sections 3 and 4

- Prohibits Departments and Agencies from using funds to directly or indirectly procure “covered UAS”
- Prohibits use of “covered UAS” by parties operating under federal contract, grant, or agreement on or over federally-managed lands.
- Prohibits any person conducting a UAS operation for compensation or hire from operating on or over federal-managed lands.

WHAT GOVERNMENT STAKEHOLDERS ARE SAYING:

U.S. Department of Agriculture (Letter, September 30, 2019):

“Like many forms of modern technology, over 90 percent of UAS are either manufactured in China or have major China components manufactured there so the effect of this ban would be that sUAS could not be used by USDA or most of the Federal Government...While we appreciate and share the security concerns at the heart of the [draft American Security Drone Act], **the proposal does not address the considerable work done by the U.S. National Aeronautics and Space Administration, Department of Defense, Department of the Interior, and private industry (DJI) to develop secure approaches to using these important tools.**”

WHAT GOVERNMENT STAKEHOLDERS ARE SAYING:

U.S. Department of the Interior (Politico article, September 10, 2019):

“Mark Bathrick, speaking at the Brookings Institution, said he worried that proposals for a federal ban on Chinese drones are rooted in geopolitics and a desire to boost the U.S. economy by turning away from foreign-made products. But that wouldn't be very effective from a security standpoint, he said. **‘Banning products never generated the U.S. industry,’ according to Bathrick. ‘And, frankly, it's not going to solve the security issue.** What's going to solve the security issue is good requirements both in industry and government and then adhering to those requirements, and only buying products that meet those requirements.’”

WHAT GOVERNMENT STAKEHOLDERS ARE SAYING:

White House Office of Management and Budget (Letter, September 30, 2019):

“[M]any small unmanned aircraft systems have cyber security vulnerabilities. Implementing a covered foreign entity ban does not address vulnerabilities from other sources. The American Drone Security Act does not address this critical underlying issue. The Administration urges Congress to use a different approach. The Administration is addressing cyber security vulnerabilities by working with industry to developing [sic] relevant standards. We have confidence that these standards will address Congress’s valid concerns.”

WHAT INDUSTRY STAKEHOLDERS ARE SAYING:

NetChoice- Tech Association (Reason Magazine, January 29, 2020):

“Drone restrictions based on nationality rather than security standards won’t protect our nation from cybersecurity vulnerabilities. Discrimination against foreign-made drones means our country won’t have access to the best technologies,” says Carl Szabo, vice president of NetChoice, which advocates for free markets in technology. “What we really need are cybersecurity standards for drones that apply to all manufacturers, enabling greater competition and security.”

WHAT INDUSTRY STAKEHOLDERS ARE SAYING:

FlyMotion CEO, Ryan English (Florida Daily Op-ed, November 21, 2019):

“As a military veteran and small business owner, I support strong security measures—but a plan based on country of origin does nothing to bolster security. The reality is that nearly all electronics companies rely on parts from the global supply chain. Instead of banning these critical components outright, our representatives need to work with U.S. businesses, public safety agencies, and drone and security experts to develop industry standards that increase safety, provide real security, and, most important, offer a practical solution that won’t cripple small U.S. businesses.”

WHAT INDUSTRY STAKEHOLDERS ARE SAYING:

American Petroleum Institute (Letter to Congress, March 10, 2020):

“The reality of the market is that there are few U.S. made UAS that are as effective and cost competitive as foreign made ones. This new requirements for the federal government to potentially limit purchase of only U.S. made drones and component systems could introduce uncertainty into the market, without specifying the risk or risk mitigations that could be available to the private sector, as well as state and local authorities.”

“As an American National Standards Institute (ANSI) approved standards setting body, API Members support processes that clarify the requirements for any type of operations introduced into complex operating environments. Therefore we suggest a risk and performance-based approach to using any type of drone.”

FOR MORE INFORMATION

- Email me at Jordan.Gross@DJI.com
- Connect with me on LinkedIn for information about future webinars



Drone Bans, Public Safety Agencies & COVID-19

Romeo Durscher

Senior Director of Public Safety Integration

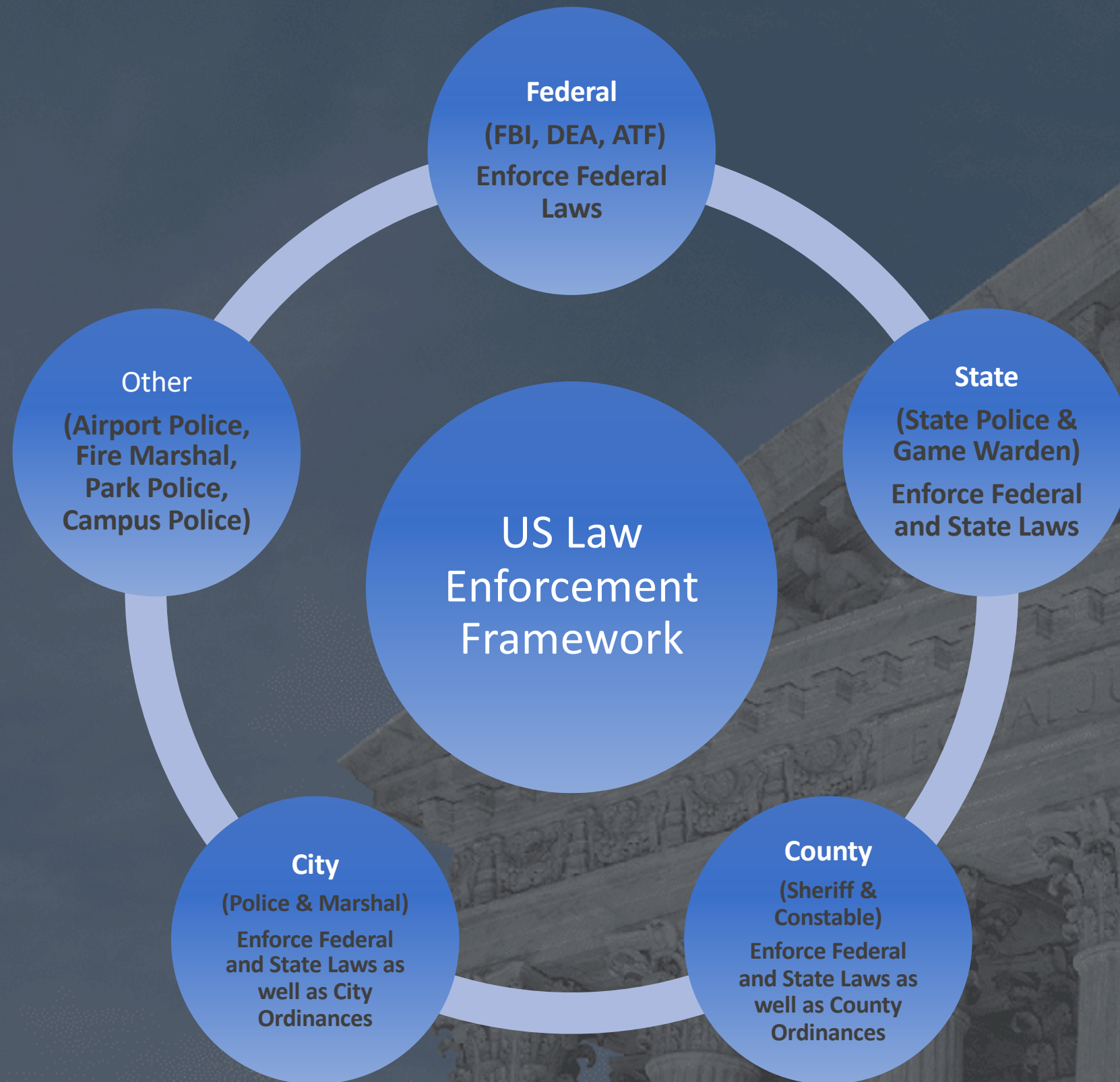


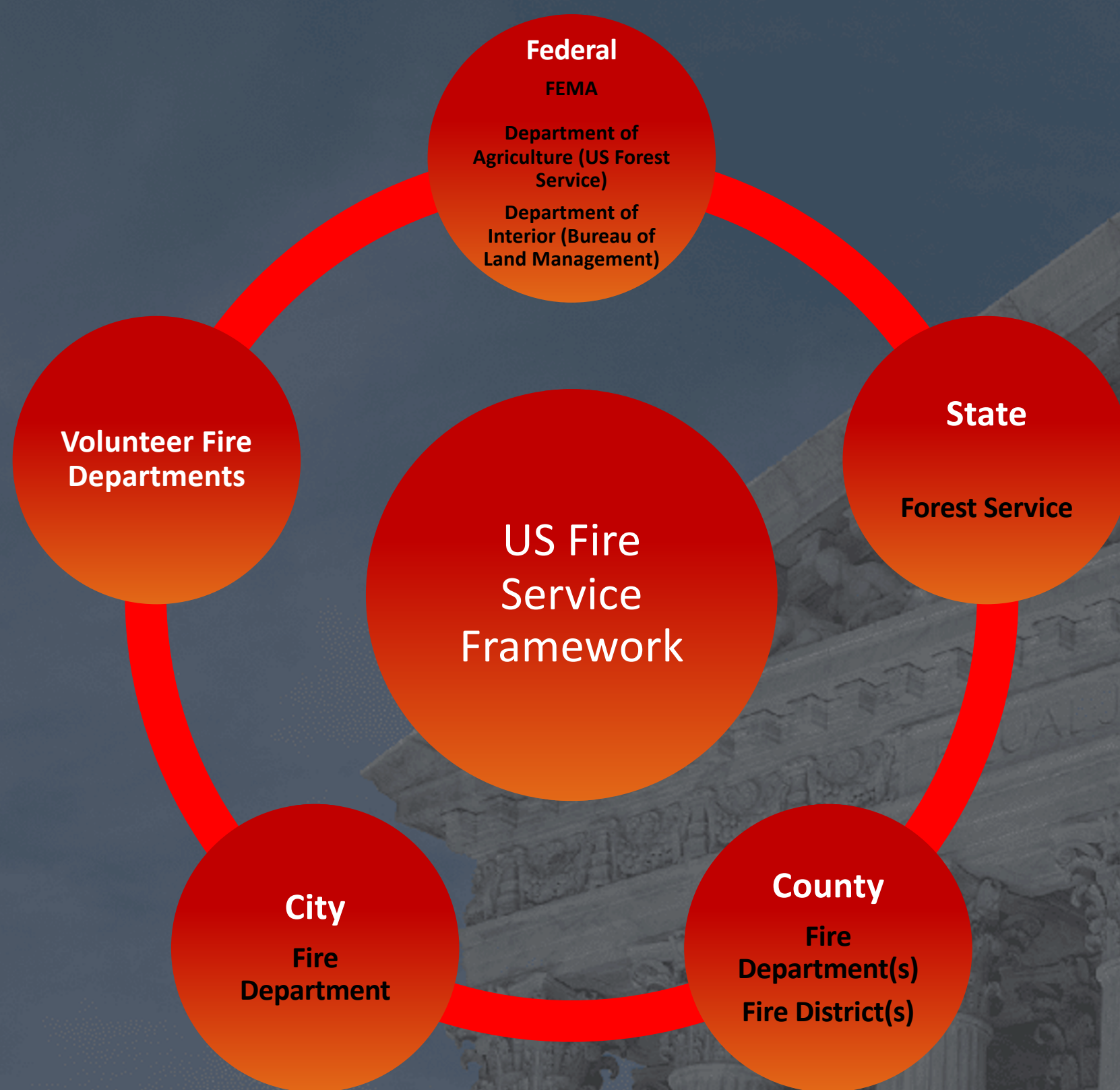


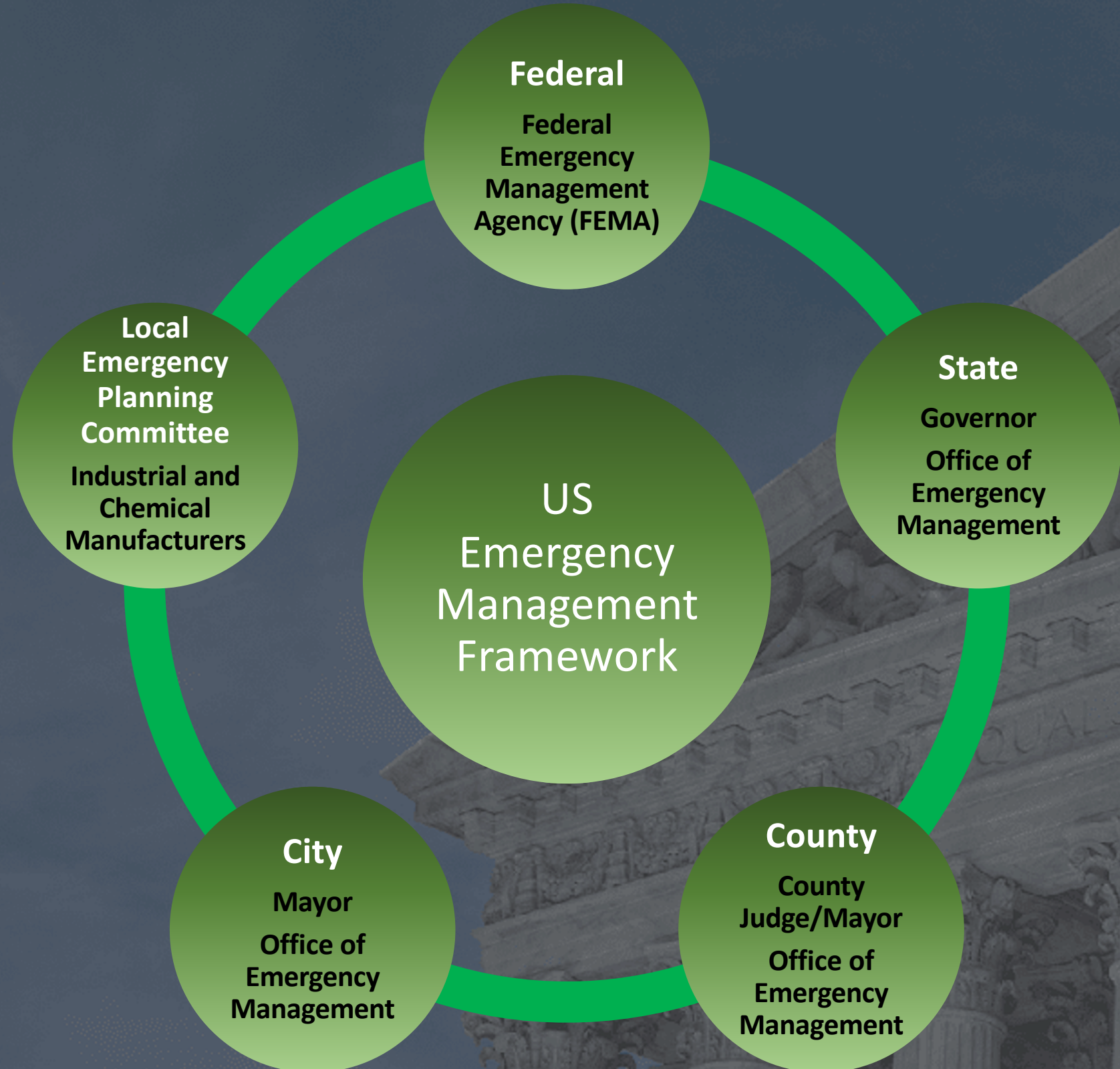
ROMEO DURSCHER

SENIOR DIRECTOR OF PUBLIC SAFETY INTEGRATION









PUBLIC SAFETY IN THE US

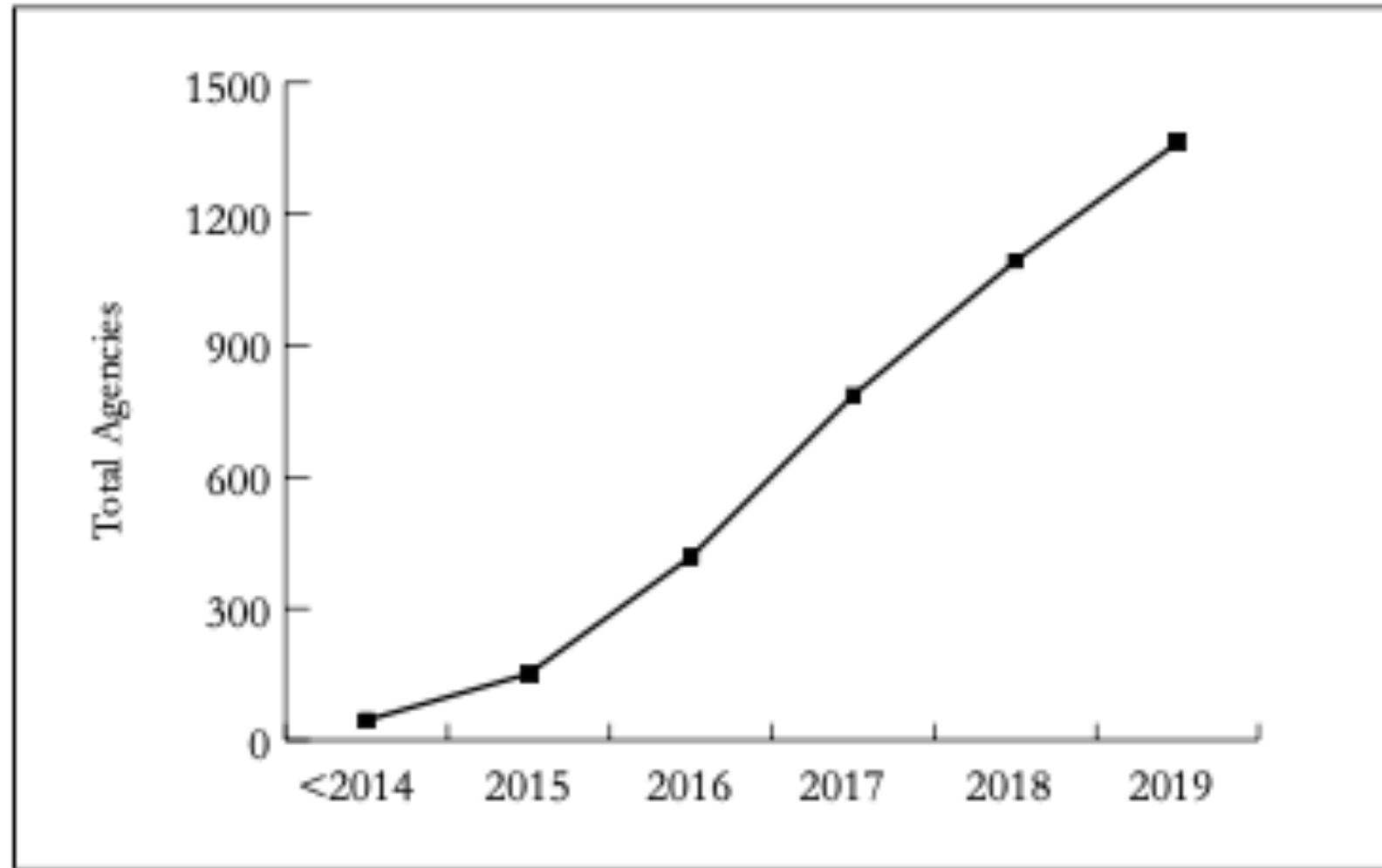
Police Agencies: ~18,000

Fire Departments: ~30,000

Departments with Crewed Aircrafts: ~500



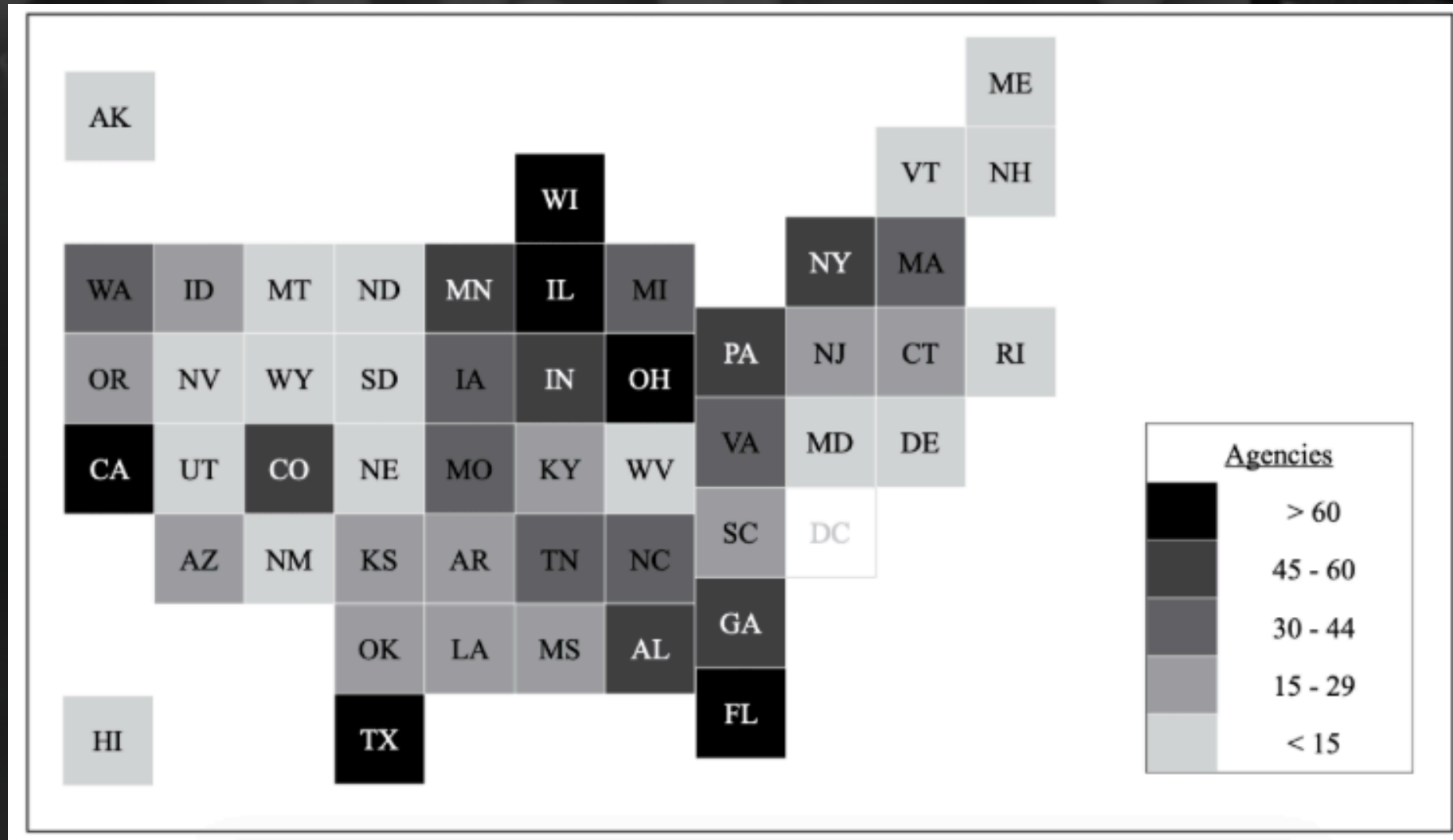
UAVs IN PUBLIC SAFETY IN THE US



Bard College's Center of the
Study of the Drone, 2020



UAVs IN PUBLIC SAFETY IN THE US



Bard College's Center of the
Study of the Drone, 2020



UAVs IN PUBLIC SAFETY IN THE US

Manufacturer	Model	Agency Count*
DJI	Phantom	336
DJI	Inspire	291
DJI	Mavic	246
DJI	Matrice	226
Yuneec	Typhoon	34
Physical Sciences	InstantEye	17
Autel	X-Star Premium	12
Yuneec	H520	12
Draganfly Innovations	Draganflyer	11
Autel	Evo	9



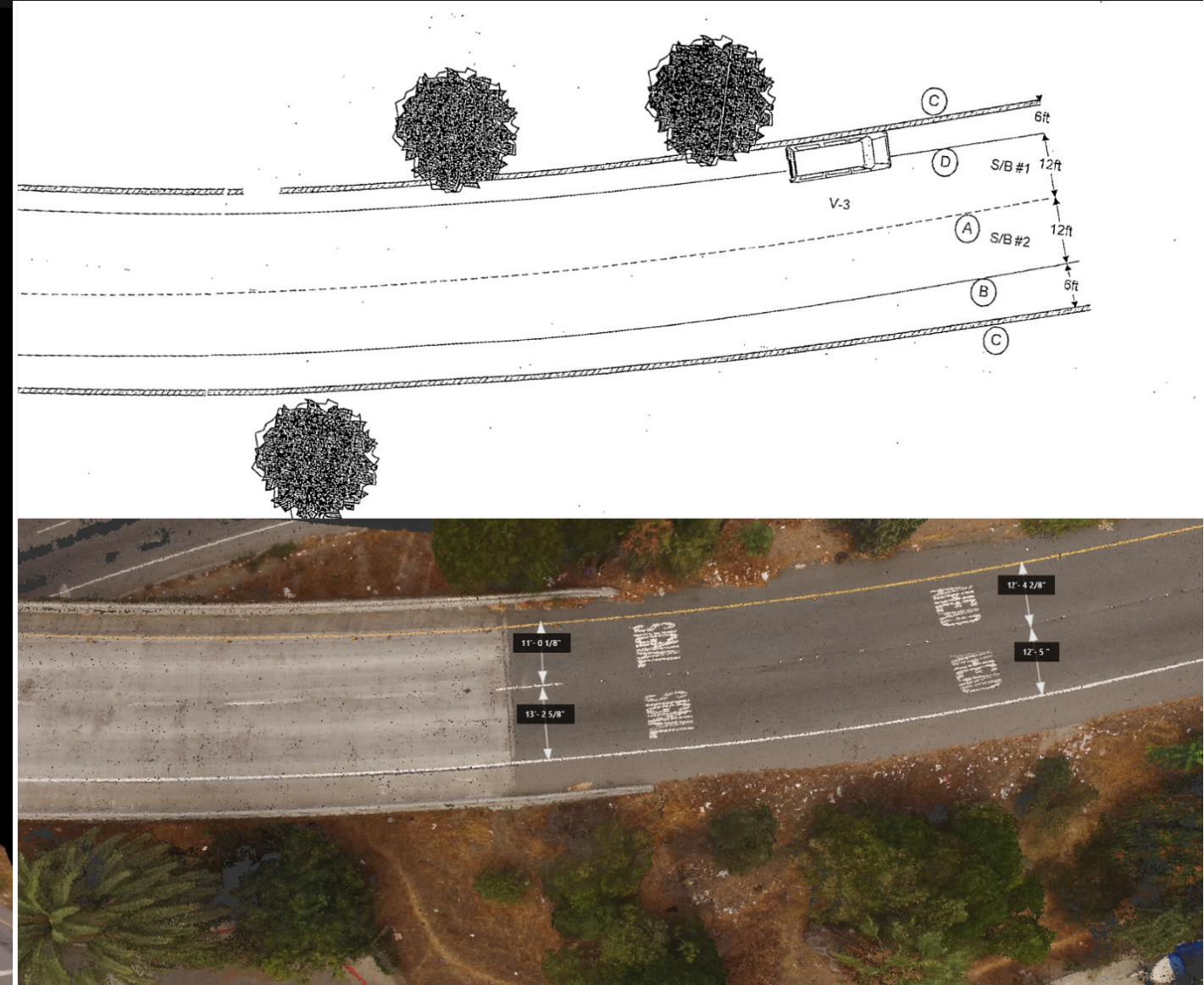
HAZARDOUS MATERIALS



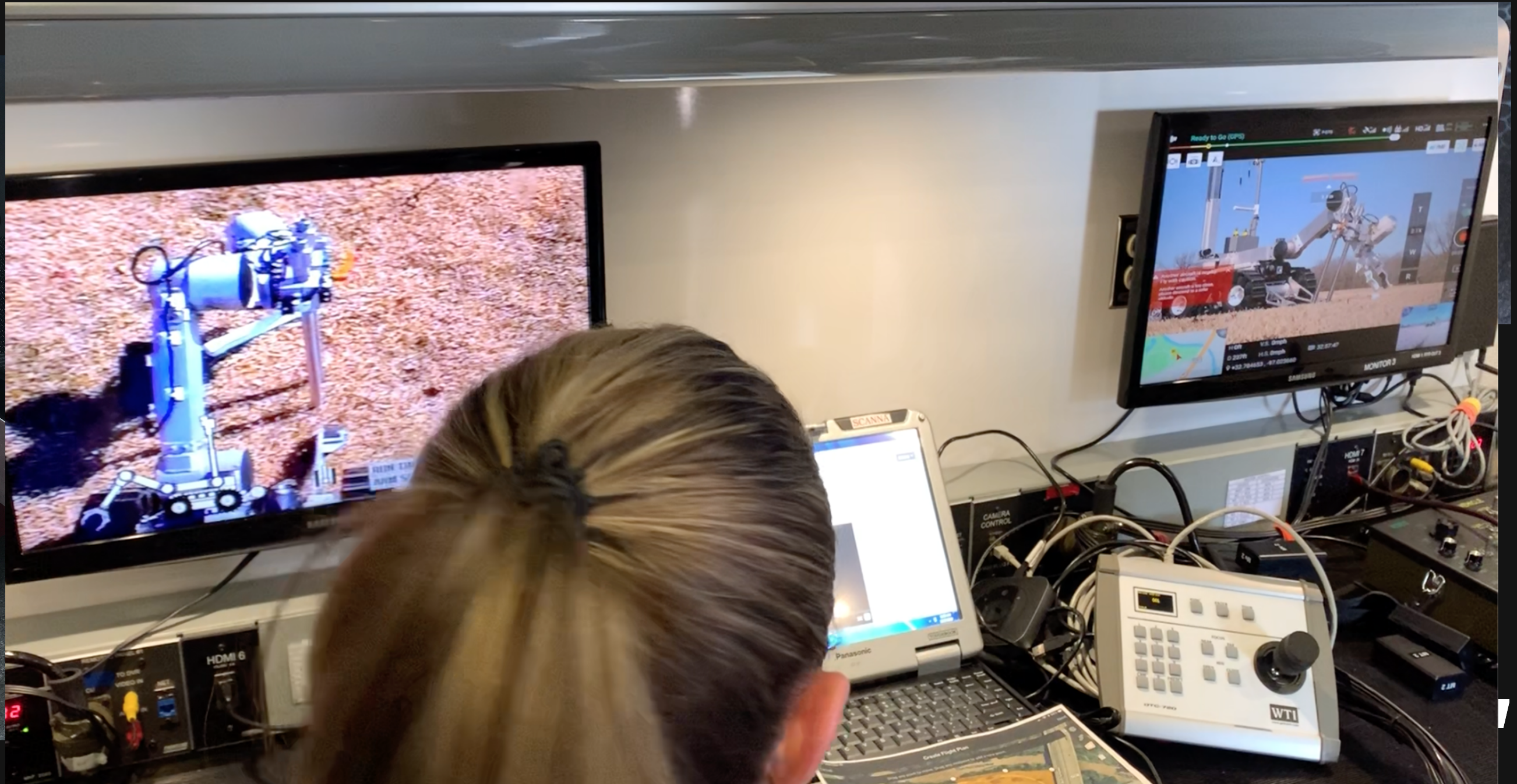
Southern Manatee Fire Rescue, FL



COLLISSION INVESTIGATION



EXPLOSIVE ORDNANCE DISPOSAL



COVID-19 PANDEMIC CURRENT SITUATION



DJI DISASTER RELIEF PROGRAM - USA

20
Police Departments

9
Fire Departments

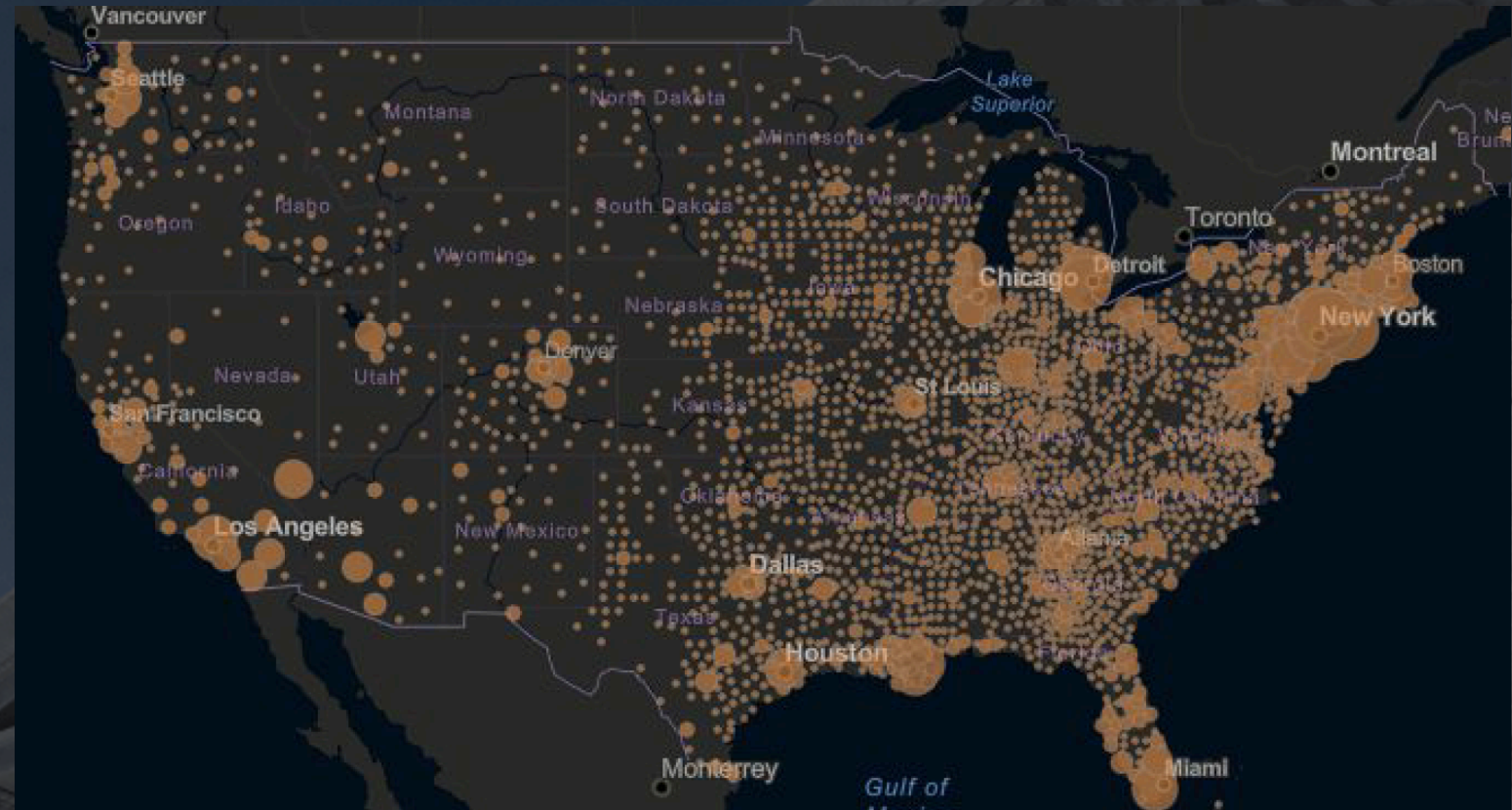
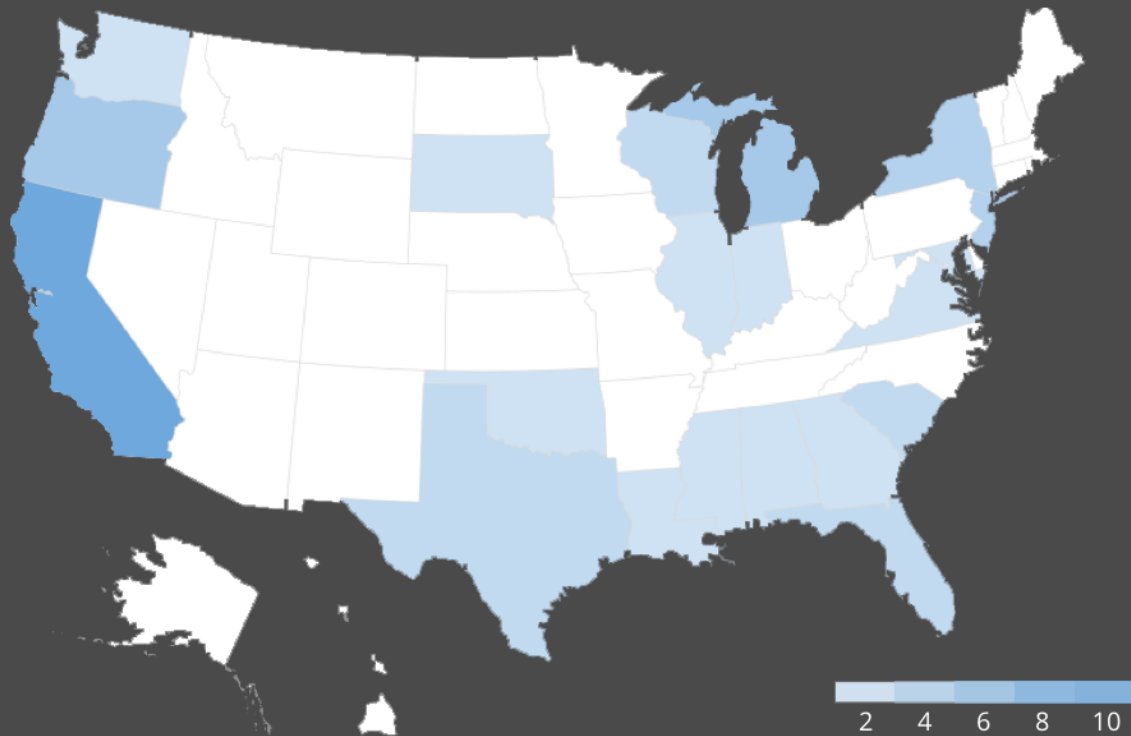
8
County Sheriff's
Offices

3
State Patrols

2
County Public
Safety Agencies

1
Hospital

By State



PUBLIC SAFETY UAV MEASURES

LAW ENFORCEMENT

INFORM THE POPULATION ON HOW EACH INDIVIDUAL CAN PROTECT THEMSELVES.

ADVISE THE POPULATION ON SOCIAL DISTANCING, CLOSED PARKS, BEACHES ETC.

INCREASE POLICE CHECKS AND PATROLLING THE STREETS.



PUBLIC SAFETY UAV MEASURES

FIRE RESCUE

PRE-PLANNING FUTURE TESTING AND FIELD HOSPITAL SIDES.

STATIONARY MATRICE 210 with DJI/FLIR XT2 THERMAL CAMERA
AS SECONDARY CHECK

TRAFFIC FLOW MONITORING



DJI SUPPLIES DRONES ACROSS US...

AVIATION WEEK NETWORK, APRIL 10, 2020

DJI Supplies Drones Across U.S. To Fight Pandemic | Aviation Week Network

Local agencies have welcomed the equipment, contradicting U.S. government policies that ban the use or procurement of foreign-made drones out of concern over cybersecurity vulnerabilities. In mid-March, TechCrunch reported that the White House was drafting an executive order enforcing such a ban for federal agencies that specifically calls out threats posed by China.



NOT NEW TECHNOLOGY

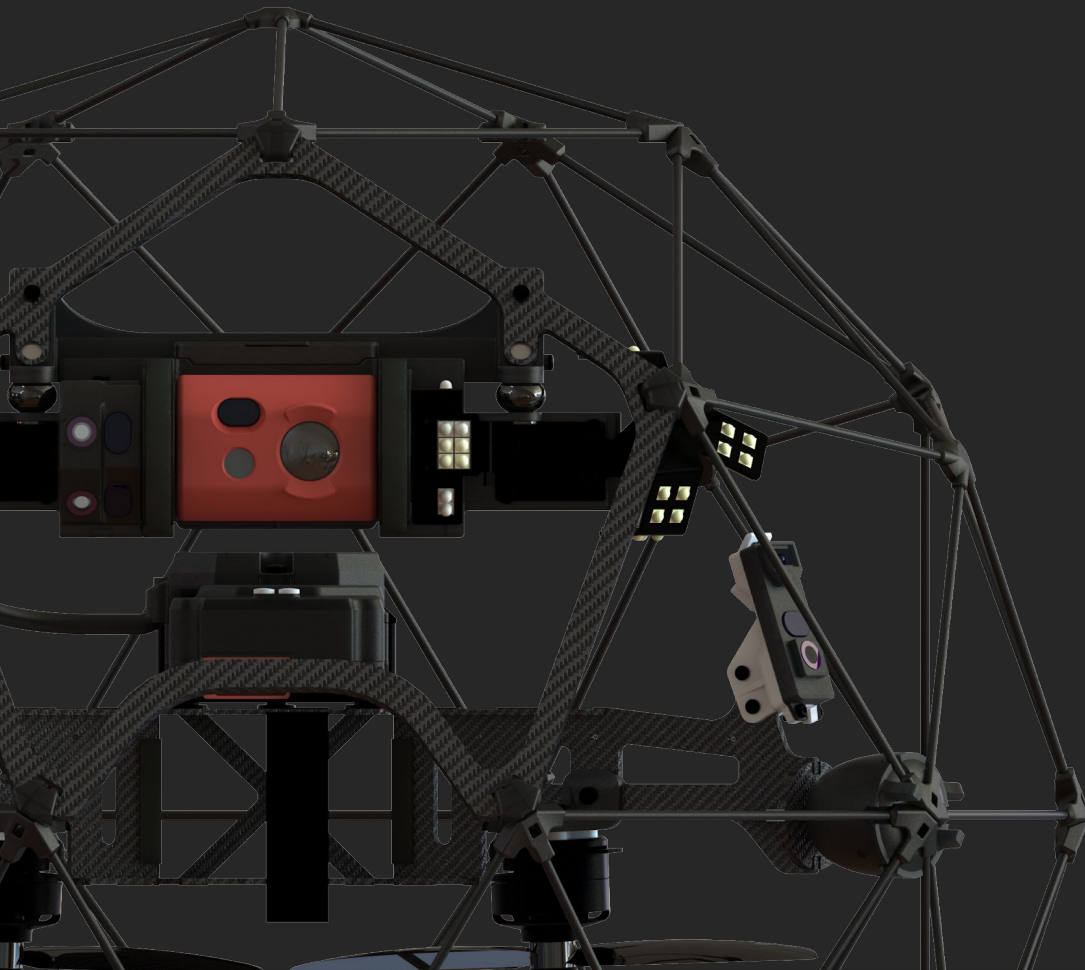


ECOSYSTEM





DRONE SOLUTIONS FOR A NEW GENERATION OF WORK



The recording of this webinar
will be sent to you afterward.

PAST AND UPCOMING WEBINARS

Thursday, April 9

10:30 A.M. EST / 04:30 PM CEST

Learn How API and ASME Experts Are Working to Expand Drone Inspection Applications

- Suzanne Lemieux, Manager, Operations Security & Emergency Response Policy at API
 - Luis Pulgarin, Project Engineering Advisor at ASME
-

Tuesday, April 21

10:30 A.M. EST / 04:30 PM CEST

3D Modeling with Indoor Drones: Applications and Implications

- Andrew McIntyre, Technical Trainer and mapping expert at Pix4D
- Marc Gandillon, Head of Marketing at Flyability

Wednesday, April 22

10:30 A.M. EST / 04:30 PM CEST

How to Build and Scale a Drone Program at Your Company

- Calvin Rieb, Head of Global Unmanned Systems at Cargill
- James Manni, Program Manager, Unmanned Aircraft Systems (UAS)

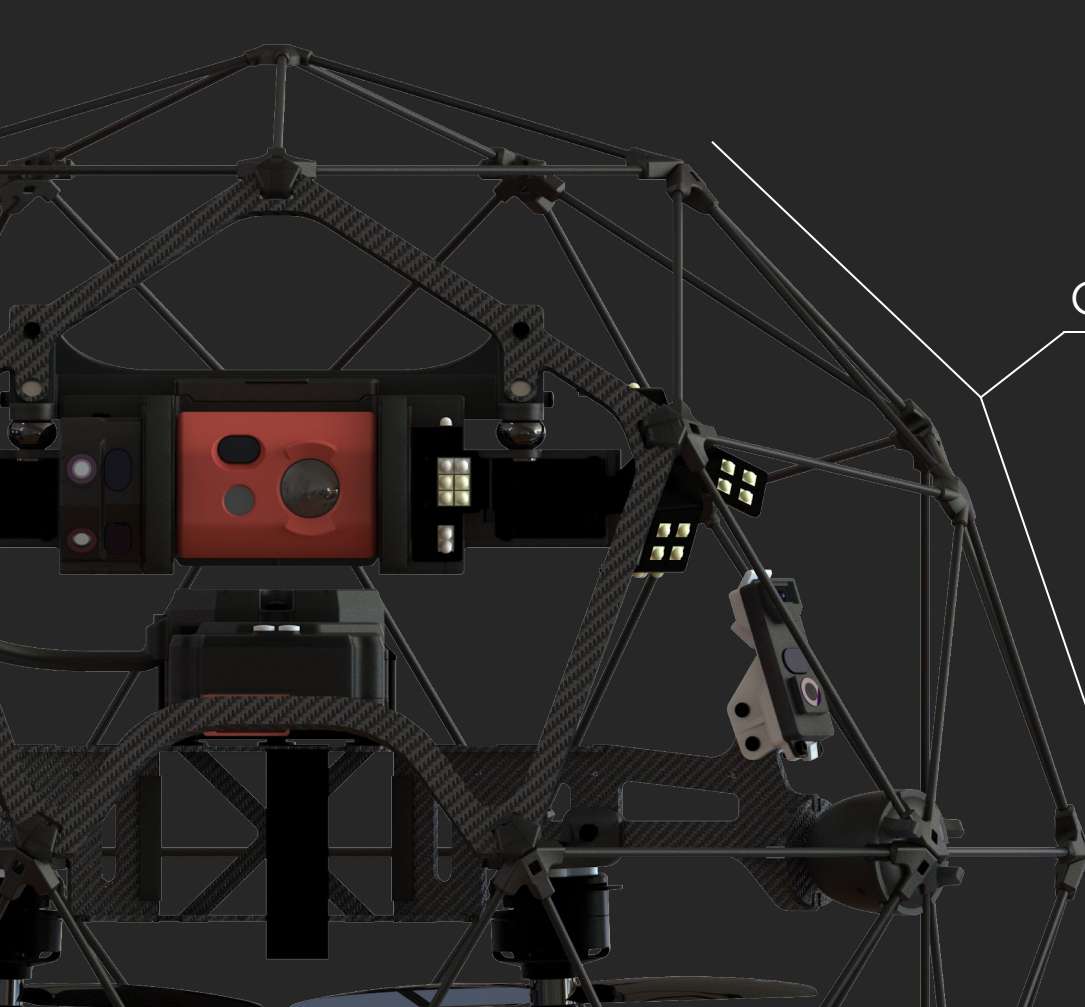
Tuesday, April 28

10:30 A.M. EST / 04:30 PM CEST

Drones in Oil & Gas: How Chevron Uses Drones to Improve Safety, Reduce Downtimes, and Save Money

- Larry Barnard, Downstream & Chemicals, Manufacturing ~ UAS Governance at Chevron
- Mauricio Calva, Non-Destructive Examination Expert at Chevron

<https://www.flyability.com/news/user-conference-webinars>



Q&A

You can also send your questions to:

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Alexandre Meldem, Flyability - ame@flyability.com

Johan Mlouka, Flyability - jm@flyability.com