

EPA UAS Activities Reported in Fiscal Year (FY) 2021

The goal of the [EPA Unmanned Aircraft Systems \(UAS\) program](#) is to create a framework through which [EPA regional offices](#), [EPA headquarters offices](#) and grant recipients can take advantage of UAS technology to protect human health and the environment.

EPA's Unmanned [Aircraft Systems \(UAS\) Policy](#) was signed and issued on December 1, 2020 by EPA's CIO Vaughn Noga. It outlines how UAS can be used while taking into consideration privacy, civil rights, civil liberties, accountability, and transparency. Learn more about these considerations in the [EPA UAS Handbook](#) and the [EPA's UAS Policy](#) which is available at the [EPA UAS Program Webpage](#).

EPA provides an annual UAS Usage Report that summarizes UAS activities within the Agency during each fiscal year (FY). This is the first annual UAS Usage Report. It summarizes EPA UAS activities executed within each EPA Region during FY2021. The report lists missions flown, sensors used, types of information acquired, and under what authority such assistance was provided. Not every EPA Region conducted UAS activities in FY2021. For more information about EPA Regions, visit the [EPA website](#). The following tables summarize flights by Region.

Region 1 – serving CT, ME, MA, NH, RI, and VT

Region	State	County	Mission Title	Start Date	End Date	Statutory Authority	Sensors
Region 1	NH	Grafton	Emission sampling during in situ oil burns	4/21/2021	4/23/2021	CAA	Air
Region 1	ME	Washington	Passamaquoddy Tribal Response Program	6/16/2021	6/16/2021	CERCLA	Video (RGB)
Region 1	VT	Windham	Archaeological Survey for 250 Birge Street site (Brattleboro, VT)	7/10/2021	7/10/2021	CERCLA	Video (RGB), Imagery (RGB) - Photo
Region 1	VT	Windham	Herricks Cove Oil Release PASI	8/4/2021	9/30/2021	OPA	Imagery (RGB) - Photo
Region 1	VT	Orange, Windsor	Elizabeth Mine UAS Flight	9/29/2021	9/29/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB)

Region 2 – serving NJ, NY, Puerto Rico, and the U.S. Virgin Islands

Region	State	County	Mission Title	Start Date	End Date	Statutory Authority	Sensors
Region 2	NY	Duchess	Use of UAS at Wappinger Creek Superfund Site	5/18/2021	5/18/2021	CERCLA	Thermal

Region 3 – serving DE, DC, MD, PA, VA, WV and 7 federally recognized tribes

- No UAS activities reported.

Region 4 – serving AL, FL, GA, KY, MS, NC, SC, and TN

Region	State	County	Mission Title	Start Date	End Date	Statutory Authority	Sensors
Region 4	MS	Jackson	Mississippi Phosphate Corporation	4/2/2021	4/2/2021	CERCLA	Imagery (RGB) - Photo, Other
Region 4	MS	Jackson	Mississippi Phosphate Corporation	5/24/2021	5/24/2021	CERCLA	Imagery (RGB) - Photo, Other
Region 4	MS	Jackson	Mississippi Phosphate Corporation	8/6/2021	8/6/2021	CERCLA	Imagery (RGB) - Photo, Other
Region 4	MS	Jackson	Mississippi Phosphate Corporation	9/27/2021	9/27/2021	CERCLA	Imagery (RGB) - Photo, Other

Region 5 – serving IL, IN, MI, MN, OH, and WI

- No UAS activities reported.

Region 6 – serving AR, LA, NM, OK, and TX

Region	State	County	Mission Title	Start Date	End Date	Statutory Authority	Sensors
Region 6	NM	Socorro	Sampling Emissions from Detonations	8/2/2021	8/13/2021	CAA	Air
Region 6	TX	Harris	Vermiculite Products Inc Site	8/16/2021	8/16/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB)

Region 7 - serving IA, KS, MO, and NE

Region	State	County	Mission Title	Start Date	End Date	Statutory Authority	Sensors
Region 7	KS	Riley	Emission Sampling in the Flint Hills Region	3/29/2021	4/1/2021	CAA	Air

Region	State	County	Mission Title	Start Date	End Date	Statutory Authority	Sensors
Region 7	MI	Jasper	TSMD - Nelson Subsidence	4/1/2021	4/1/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB)
Region 7	MI	Newton	Aggus Property	4/29/2021	4/29/2021	CERCLA	Imagery (RGB) - Photo, Multispectral
Region 7	MI	Lawrence, Newton	NCMT Johnson/Butts 1G	6/18/2021	9/30/2021	CERCLA	Imagery (RGB) - Photo, Multispectral
Region 7	MI	Jasper, Newton	E. 17th Repository	8/2/2021	8/2/2021	CERCLA	Imagery (RGB) - Photo, Multispectral
Region 7	KS	Chase, Elk, Riley	Sampling Emissions from Flint Hills grassland burns	9/13/2021	9/16/2021	CAA	Air

Region 8 – serving CO, MT, ND, SD, UT, and WY

Region	State	County	Mission Title	Start Date	End Date	Statutory Authority	Sensors
Region 8	CO	San Juan	Pride of the West Emergency Response	5/27/2021	6/28/2021	CERCLA	Video (RGB), Imagery (RGB) - Photo
Region 8	CO,SD, UT,WY	Multiple	Telluride Valley Floor Removal Action	8/23/2021	8/23/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB)
Region 8	CO,SD, UT,WY	Multiple	Manila Load Removal Action	9/1/2021	9/13/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB)
Region 8	CO,SD, UT,WY	Multiple	Daisy Mine Removal Assessment	9/7/2021	9/7/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB)
Region 8	CO,UT, SD,WY	Multiple	Perigo Mine Removal Assessment	9/9/2021	9/9/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB)
Region 8	CO,SD, UT,WY	Multiple	Bauer Tailings Removal Assessment	9/15/2021	9/15/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB)

Region 9 - serving AZ, CA, HI, NV, American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, and Republic of Palau

Region	State	County	Mission Title	Start Date	End Date	Statutory Authority	Sensors
Region 9	CA	San Mateo, Santa Cruz	2020 California Wildfires - CZU Complex Fire UAS Surveys - San Mateo and Santa Cruz Counties, California	10/2/2020	10/17/2020	Stafford Act	Imagery (RGB) - Photo, Video (RGB), Multispectral
Region 9	CA	Yuba	Custom Chrome and Bumper Site, Yuba City, CA	3/31/2021	6/18/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB), Multispectral
Region 9	CA	Marin	American Challenger UAS Surveys	5/21/2021	6/9/2021	OPA	Imagery (RGB) - Photo, Video (RGB), Multispectral
Region 9	NM	McKinley	NFPI - UAS Surveys	7/17/2021	9/30/2021	CERCLA	Imagery (RGB) - Photo, Video (RGB), Multispectral
Region 9	CA	Plumas, El Dorado	2021 CA Wildfire Surveys-Plumas & El Dorado Counties	9/15/2021	9/30/2021	Stafford Act	Imagery (RGB) - Photo, Video (RGB), Multispectral, LiDAR, Thermal

Region 10 – serving AK, ID, OR, WA and 271 native tribes

- No UAS activities reported.

Summary

As shown above, EPA flew 29 flights across the country under the following programs: Clean Air Act (CAA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) which is commonly known as Superfund, Oil Pollution Act (OPA), and Stafford Act. For more detailed examples of how EPA uses UAS to fulfill its mission, view the [EPA Unmanned Aircraft Systems Program: Case Studies Storymap](#). Data from these missions can be found by searching the Agency’s metadata catalog, the [Environmental Dataset Gateway](#). For additional questions please go to [EPA’s UAS website](#) or contact EPA_UAS@epa.gov.