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Final Written Testimony

Chairman Babin, Ranking Member Lofgren, and Members of the Committee, thank you for the opportunity to testify today.

My name is John Gale, and I serve as Head of U.S. Government Affairs for Pano AI, an American technology company focused on rapid wildfire detection and real-time situational awareness. Today, Pano's technology is deployed across the U.S. and abroad by utilities, private landowners, and government agencies at every level, successfully providing first responders with specific, accurate, and timely information to prevent or mitigate large-scale wildfires.

Prior to joining Pano, I spent more than twenty years working in public policy and government relations, including most recently at the U.S. Department of the Interior Bureau of Land Management. That experience taught me that addressing our wildfire crisis requires us to think about the entire lifecycle of fire.

We need healthier, more resilient landscapes. We need to reduce hazardous fuels and increase the pace and scale of active forest management. We need better science, better modeling, and continued investment in emerging technologies.

As the largest landowner, wildfire management entity, and funder of research and development in the United States, the federal government should play a critical role in the overall goal of better wildfire management and specifically in the research, development, and deployment of cutting-edge technology. The good news is that we already have proven, enterprise-grade solutions being commercially deployed across the country. The private sector has been and continues to be ready to meet the need. To accomplish this at scale, however, Pano believes we need a true public-private partnership to pursue two objectives simultaneously:

First, keep investing in research. Pano applauds the committee's leadership in advancing innovation in disaster prevention today. It's essential that we continue advancing visual monitoring, AI, satellites, autonomous systems, predictive modeling, communications and sensing. These are the building blocks that have created successful companies like Pano. The capabilities coming over the next decade can fundamentally improve how we manage wildfire, and we should be working together at the tip of the spear.

But second, create a much faster pathway for proven commercial technologies to reach the people who can use them today.

We must match our commitment to critical research investments by acting with a greater degree of urgency in utilizing the commercially proven and cost-saving technology solutions that we already have.

Too often, the barrier is no longer technological. It is institutional - fragmented procurement, separate funding streams, duplicative testing, and acquisition processes that can take years even when a technology is already operating successfully elsewhere.

We spend billions every year fighting fires after they grow, but spending a few million dollars to deploy technologies that spot small fires before they grow has been surprisingly difficult. We need to better align those investments. And just as Congress has given the Department of Defense flexible contracting tools like Other Transaction Authority to accelerate innovation, we should consider giving our federal wildfire agencies similar tools to rapidly evaluate and deploy proven technologies.

In fact, the Administration's own National Security Science and Technology Strategy offers a useful model. It calls for continued federal investment in early and mid-stage development while relying more heavily on private-sector technologies and services for later-stage capabilities - including advanced sensing.

We should apply that same philosophy to wildfire and move both research priorities and technology adoption in tandem.

That is the message I hope to leave with the Committee today, along with Pano's commitment to work with each of you and your staff to do the hard work together.

The Department of Defense has long operated from a simple premise: when we send American warfighters into harm's way, we should equip them with the best technology and intelligence available to accomplish their mission.

America's wildland firefighters and all fire agencies in the country deserve the same. Furthermore, by investing in these types of technologies, Congress can reduce the overall cost of wildfire management and the negative economic impact wildfires have on our communities.

Wildfire is unique among natural disasters because we routinely put human beings directly in the path of danger. Yet too often, those firefighters - and the dispatchers and incident commanders supporting them - still begin their response with incomplete information: Where exactly is the fire? How large is it? How quickly is it growing? Where is it predicted to grow to? What resources should we send?

Those are questions technology can help answer today.

At Pano, we combine artificial intelligence, advanced cameras, and other data sources into a real-time wildfire intelligence platform. Our stations continuously scan the landscape for smoke. At night, the AI is still hunting for smoke, but we layer in near-infrared sensors to hunt for heat signatures and key satellite data. And, critically, when our technology identifies a potential wildfire ignition, trained human analysts verify it before any alert goes out to emergency responders, so that responding agencies receive visual confirmation and precise location information and are empowered to make better decisions before crews even reach the fire. That layer of human verification - the “human-in-the-loop” - is a fundamental part of what makes Pano stations a robust tool for helping prevent catastrophic fires. Our customers regularly report that we’re beating 911 calls - averaging 3 - 3.5 minutes from detection to alert - and we also know that firefighters spend less time searching for the fire when Pano gives them a triangulated location with lat/long coordinates. We hear repeatedly from those on the frontlines that this situational awareness is vital to their efforts when every minute matters.

Today, Pano protects more than **70 million acres across 18 states**, with more than **1,500 fire and emergency-response agencies onboarded** to our platform. We’re also in every state in Australia and growing in Canada too.

And notably, much of that adoption is being driven by utilities, states, and local governments.

That creates an extraordinary opportunity for the federal government. Rather than starting from scratch, federal land-management agencies can leverage infrastructure and technology investments that their partners are already deploying and create a shared operating picture across jurisdictional boundaries.

Why does this matter?

Because in wildfire, **minutes matter - and small fires are less destructive to our communities and cheaper to contain.**

Our analysis¹ of federal wildfire data estimates that every dollar invested in Pano technology can produce approximately **four dollars in avoided federal suppression costs alone**. Fires that are detected earlier, located accurately, and assessed before the first resources arrive cost less to put out - and, most importantly, can do less harm to lives, land, and infrastructure. And those direct savings tell only part of the story: when avoided public-health impacts, disruption to communities and local economies, and

¹ Based on National Interagency Fire Center data from 2021-2025 for USFS, BLM, NPS, and BIA lands.

losses to working lands are included, the broader return on investment approaches ten dollars for every dollar invested in our technology.

We have seen this in the field.

In Colorado, Pano detected the Bear Creek Fire on remote **U.S. Forest Service land** and provided responders with precise location and real-time visual intelligence. Because hotshot crews faced a two-and-a-half-hour hike to reach the fire, Douglas County launched a helitack response while crews mobilized on the ground. The fire was ultimately contained at just **three acres**.

That example - one of hundreds I could share - also illustrates an opportunity before us: technology already being deployed by utilities, states, and local governments is helping protect federal lands, keeping communities safer, and saving taxpayers money. We should be looking for ways to expand on those investments - and ensure our federal wildland-fire agencies have access to the same real-time intelligence as their partners.

I commend the committee's dedication to addressing innovation in disaster prevention and response while exploring policies to improve the way we manage our natural resources. Research and deployment should reinforce one another. Deploy what works now. Learn from it. Integrate the data. Continue improving it. And build the next generation of technology on top of that operational foundation.

If we can bring the same commitment to technological superiority that we expect for America's warfighters to the men and women protecting our communities and natural resources from wildfire, we can keep more fires small, reduce suppression costs, protect communities - and send firefighters into dangerous situations with better information so they can get back home to their families.

They deserve nothing less.

Thank you, and I look forward to your questions.