

**Statement of Mr. Rick Goddard
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**Before the
House Committee on Natural Resources, Subcommittee on Federal Lands
Legislative Hearing on H.R. 3389 Emergency Wildfire Fighting Technology Act of 2023**

May 23, 2023

Chairman Tiffany, Ranking Member Neguse, and members of the Subcommittee, thank you for the opportunity to testify on H.R. 3389, the Emergency Wildfire Fighting Technology Act of 2023.

Introduction

I currently serve as the Managing Director of Caylym Technologies, a veteran owned California-based company that has developed an aerial delivery system to fight the ever-increasing destruction of wildfires globally. Prior to joining the civilian business community, I served as an Officer of Marines specializing in aviation and particularly the close air support and air defense missions.

California-based Caylym is helping minimize the destruction of wildfires across the world. Our innovative technology and strong public-private partnerships have proven successful in mitigating catastrophic wildfires in several countries, but unfortunately, we cannot help in fighting wildfires here in our own back yard in California and the United States due, I believe, to bureaucracy and red-tape.

Caylym has made many efforts to introduce and share the immediate benefits of Containerized Aerial Fire Fighting Systems (CAFFS) to the United States Forest Service (Forest Service) and to top elected officials as an additional tool for firefighters but was told by the Forest Service that their “current capabilities align well with [their] requirements and modernization strategy.” We are here today advocating for adding another tool in the toolbox for combatting and preventing the mass destruction we experience from wildfires. CAFFS has already been adopted across the globe including Romania, Peru, Greece, Uruguay, Bulgaria and Israel, but because of the Forest Service’s refusal or inability to complete necessary evaluation, it is not currently approved and used in the United States.

Background

Here in the U.S., we are all witness to a terrifying trend — the fact that wildfire seasons are now year round and more catastrophic. With this year’s heavy rainfall leading to high yield of vegetation growth, that will fuel this year’s wildfire season, we are looking at another brutal potentially deadly year. Just look at the situation up in Alberta and British Columbia Canada now. They have lost millions of acres already and it is not even summer yet. In California we have already seen high 90 degree temperatures this past week.

The Forest Service alone does not have the necessary resources to handle what’s to come. They are severely understaffed, and pending a court decision in FSEEE v. USFS, Forest Service could lose their ability to deploy aerial fire retardant altogether until the EPA issues a Clean Water Act permit, which could take years. If the Forest Service cannot deploy an aerial fire retardant, state agencies like CAL FIRE will be spread far too thin to be effective.

The result of this delay of potential aerial firefighting payload delivery alternatives would be so catastrophic it is hard to let your mind go there, but in order to protect lives, property, businesses, and our beautiful land, it is imperative that we do so. If the Forest Service cannot deploy retardant from aircraft, this will leave state

agencies alone in the skies and wildfires will burn longer and hotter. Communities will be ravaged by flames just like we witnessed happen in Paradise California, in the deadly Camp Fire. Families will have empty seats at their dinner tables because those vulnerable and less mobile will struggle to evacuate before it is too late. People, especially children, will suffer from asthma due to the incredibly poor air quality as a result of prolonged smoke exposure. This will have a generational climate impact. Mr. Chairman, the list goes on, but my time is limited.

As we stare down the barrel of the next wildfire season, state and federal fire agencies need better technology and private support now more than ever.

In 2015 the United States Air National Guard released a report highlighting the domestic-response equipping priorities forged across the Air National Guard. They emphasized the need for a robust domestic-response capability to support homeland emergency operations. From their lessons learned in California Wildfires in 2008, 2010, and 2012, particularly the Yosemite Rim Fire in 2013, there was a clear need for new technology to allow for around the clock capability to directly attack and extinguish wildfires and expand the number of air assets fighting wildfires.

The United States Air National Guard highlighted and recommended the use of a Container Delivery System (CDS) based capability which today they call CAFFS. They noted that the airdrop capable disposable containers with liquid payloads for aerial firefighting “dramatically increases the number of airlift assets available to respond to wildfire emergencies”.

Our team has found that countries such as Romania, Peru, Uruguay, Bulgaria, Greece and recently Israel are committed to a 24/7 rapid response or surge in aerial firefighting capability and have adopted CAFFS because of that commitment. If available for domestic use, these additional resources would provide our ground crews and the Incident Commanders with more resources and tools to protect communities, the environment and put out wildfires more swiftly.

In 2021, the EU and Mediterranean basin experienced the 2nd worst fire season since 2000 with 2.7 million acres burned across 39 countries, 25% of which were agricultural lands. I raise this aspect of the global nature of what we are dealing with regarding wildfires as this problem is not unique to the United States. We have found that predominantly the European and Latin American view is that almost any major wildfire could have been prevented with a bucket of water if you were there fast enough.

H.R. 3389 Emergency Wildfire Fighting Technology Act of 2023

This legislation provides an opportunity for the latest aerial firefighting technology, including CAFFS, to be evaluated, and deployment protocols to be updated based on the results of the evaluation. With the continuous escalation of wildfires as our new reality, the need for increased investment in new firefighting systems that provides Incident Commanders with the ability to respond to the ground crews calls for air.

Technologies such as CAFFS enable scores of additional aircraft to come alongside and be responsive to wildland firefighters. Providing a rapid surge of the full spectrum of payloads as a direct attack on the active wildfire. This helps attack the wildfires at early detection, even in remote areas. Using these types of systems, aircraft can operate and drop payloads from higher altitudes and in higher wind conditions without sacrificing safety or accuracy.

CAFFS can be dropped from any rear-loading cargo aircraft, transforming the thousands of cargo planes currently in our inventory into firefighting platforms. A commonly used cargo aircraft, the C-130H & J, can carry 16 CAFFS boxes which totals over 4,000 gallons of firefighting payload onto the target. With no aircraft modifications needed, these systems are an affordable and immediately available tool that effectively supports California’s and our country’s ability to fight wildfires.

The CDS based CAFFS went through and passed a 2-year evaluation by the Air National Guard at Yuma Proving Grounds Arizona. Allowing agencies to utilize CAFFS through the standardized and proven US Air Force CDS protocol would drastically increase the number of planes available to combat wildfires safely and effectively.

It is important to note that using a CAFFS based system eliminates the need for potentially the most harmful chemicals in traditional air drop retardants. That is the “anti-corrosion” chemicals currently required. This is because the CAFFS based alternative does not allow or require the liquid payload to come into contact with the aircraft. This CAFFS benefit also significantly, by orders of magnitude, reduces the post mission maintenance costs and downtime on the aircraft that is required to clean fire retardant residue from the aircraft.

Conclusion

It's well known that California has a history with destructive wildfires, which is why the California Department of Forestry and Fire Protection, as well as the Forest Service have some of the largest and most advanced firefighting operations in the nation. And yet, they are still having to make the tragic decision as to which homes or communities to save and which are left to the ravages of the wildfire.

While their dedication to this vital mission is unmatched, their available resources have been stretched so thin that fire officials are still being forced to make this choice. Regrettably, more and more often the urgent calls from ground crews for aerial support are unable to be filled due to lack of air resources.

According to federal data, two of California's largest wildfires in 2021 cost fire agencies more than \$500 million each to suppress, and a third of these fires cost more than a quarter-million dollars each to fight. This doesn't include the costs in personal losses, the cost to rebuild or the long-term costs to our environment.

H.R. 3389, the Emergency Wildfire Fighting Technology Act of 2023 would provide the evaluation path and timeline for new technologies like CAFFS to our firefighters and incident commanders. Thus, providing fire crews with dependable cover from the air, providing a rapid surge response as they battle to save lives, homes and businesses, and the prevention of the profound and awful destruction of our forests and environment.

Chairman Tiffany, Ranking Member Neguse, and members of the Subcommittee, thank you again for the invitation to appear today. I look forward to your questions and the continued partnership to address the pressing crisis of out-of-control wildfires.