

Background

Senate Bill 14-164, which authorized the Colorado Division of Fire Prevention and Control (DFPC) to purchase or contract for aerial firefighting assets, also created the Center of Excellence for Advanced Technology Aerial Firefighting (CoE). The CoE is an innovative, science- and data-focused entity that researches, tests, and evaluates existing and new technologies that support sustainable, effective, and efficient aerial firefighting techniques.

Location

The CoE is located at the Rifle Garfield County Airport. Rifle is home to the Upper Colorado River Interagency Fire Management facility, which houses U.S. Bureau of Land Management, U.S. Forest Service, Colorado River Fire Rescue, and DFPC resources. It also offers close proximity to the Grand Junction Air Center, which provides tactical aircraft resources (air tankers, smokejumpers, lead planes, and air attack) for initial attack and large incident support. In addition, Rifle is close to open lands and uncontrolled airspace with a variety of terrain, all of which support the evaluation of aerial firefighting techniques.




Photo Credit: Adam Trojanowski

Center of Excellence Staff

The CoE has compiled a staff with extensive experience and expertise in wildland and aerial firefighting, data research and analysis, policy analysis and development, and technical editing. The staff includes members with graduate-level degrees and years of relevant experience, all of whom are well-versed in technology. Most of the CoE staff are either pilots or closely affiliated with aviation.

The Center of Excellence is located at the
Rifle Garfield County Airport
375 County Road 352, #2065-A
Building 2060
Rifle, CO 81650
(970) 665-0034

Find us on 

www.facebook.com/COEATAF

Follow Us On Twitter:

https://twitter.com/CoE_DFPC



Center of Excellence for Advanced Technology Aerial Firefighting



Mission

To protect the citizens, land, and resources in Colorado, the Center of Excellence will research, test, and evaluate existing and new technologies that support sustainable, effective, and efficient aerial firefighting techniques.

Vision

The Center of Excellence is the worldwide leader in collaboratively researching and developing innovative technologies and capabilities supporting or related to aerial firefighting.

For more information, please visit
www.dfpc.state.co.us



Photo Credit: Brad Schmidt

Project Submission Process

The CoE welcomes project suggestions from everyone in the wildland firefighting community. To submit a project, please fill out the Project Request Form on the CoE website.

Current Projects

Night Aerial Firefighting Operations

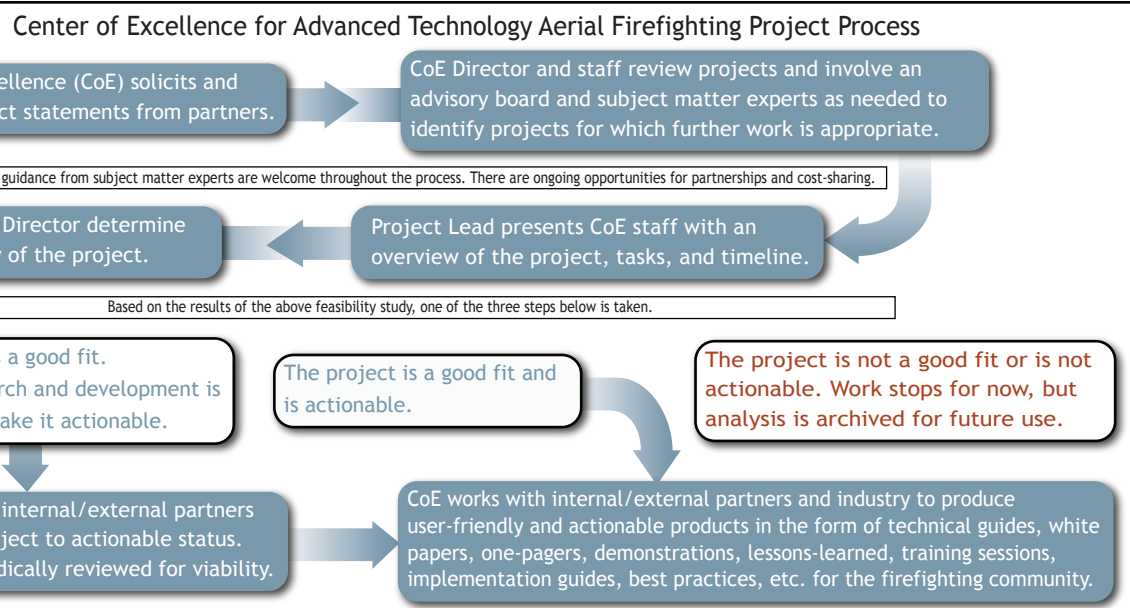
The CoE is investigating the goal of bringing safe, effective, and efficient night aerial firefighting operations to Colorado. A Night Aerial Firefighting Operations Summit was held on January 27-28, 2016, and aircraft operators, vendors, and experts in the field of night aerial firefighting operations provided the CoE with input and recommendations to help shape and guide Colorado's night operations program. Currently, CoE staff are analyzing data from the Summit and performing further research to prepare a recommendation to DFPC.

Unmanned Aerial Systems

The use of unmanned aerial systems (UAS) is a new frontier for the wildland firefighting community that has great potential. The CoE has been collaborating with leaders in the UAS industry, as well as interagency and federal partners, to develop future UAS testing and evaluations. The CoE is currently working toward using unmanned aerial vehicles on prescribed burns and possibly in night aerial firefighting operations.

Satellite Messenger Evaluation and Experimental Deployment

The CoE is evaluating the capabilities and limitations of satellite-based, handheld devices that transmit messages and tracking information. Devices are currently being tested by DFPC firefighters as part of the CoE evaluation process.



Colorado Fire Prediction System

House Bill 15-1129 directs DFPC, through the CoE, to establish and support a Colorado-specific fire decision support system. The state is contracting with the National Center for Atmospheric Research in Boulder, Colorado, to develop the system, which will be able to predict fire spread, smoke dispersion, and other fire phenomena up to 18 hours in advance. A stakeholder committee has been assembled to provide guidance as the system is developed.

Air-to-Ground Data Link

The CoE is evaluating technologies that will allow firefighters to access digital fire information in areas where reliable Internet connections are unavailable. Specifically, the CoE is assessing technologies with the capability to create a data link from the Multi-Mission Aircraft to fire crews on the ground.

Geospatial-PDF Maps

The CoE is an advocate for the development of mapping technologies that assist wildland firefighters and fire aviators. As part of this advocacy, CoE personnel have developed a number of geospatial PDF maps with content of interest to Colorado firefighters.

