

**AERIAL FIREFIGHTING DELIVERY SYSTEM**

**1. Background.** Existing Air National Guard (ANG) C-130 aerial firefighting systems consist of water tanks and release mechanisms that allow the firefighting agent to freefall or be pumped overboard from the aircraft. Effective delivery is dependent upon releasing the firefighting agent approximately 300 feet above the target to ensure minimal evaporation prior to the agent reaching the wildfire. Aerial firefighting aircraft typically need to “dive-bomb” the target. This tactic requires unobstructed visibility and a safe climb out path, leaving little room for error or recovery from downdrafts or turbulence. The ANG has only eight aerial firefighting systems available. Utilizing a Containerized Delivery System (CDS) airdrop capable disposable container for water or fire retardant for aerial firefighting dramatically increases the number of airlift assets available to respond to wildfire emergencies. No additional training is required since an existing pool of CDS-qualified airdrop aircrew is available. The CDS creates the capability to directly attack and extinguish wildfires utilizing single or multi-ship formations. Current systems do not allow multiple aircraft in formation; however, a CDS allows multiple aircraft to fight fires. This capability is substantially less expensive than current aerial firefighting operations. Additionally, a CDS is flown day or night at 500 feet Above Ground Level (AGL) during the day and 1000 AGL at night. These higher altitudes and commonality to normal CDS airdrop procedures increases safety. The Army National Guard utilizes sling-load water buckets with UH-60 and CH-47 helicopters, a capability that ANG rescue units do not have. Equipping ANG rescue unit’s HH-60s with sling-load buckets increases the ability to use helicopters in wildland fire responses.

**2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, California Wildfires in 2008, 2010, and 2012, Superstorm SANDY in 2012, and Yosemite Rim Fire in 2013; 2014 Domestic Capability Priorities Conference.

**3. Units Impacted.** All C-130 tactical airdrop units.  
 106 RQW Gabreski AP, NY      129 RQW Moffett FAF, CA      176WG JB Elmendorf, AK

**4. Program Details.**

Remaining Quantity Required	Unit Cost	Program Cost
<b>1700 Fixed Wing Aerial Firefighting CDS (3080)</b>	<b>\$100,000</b>	<b>\$170,000,000</b>
<b>12 Firefighting Buckets, 660-Gallon (3010)</b>	<b>\$24,000</b>	<b>\$288,000</b>
<b>12 Firefighting Bucket Maintenance Kits (3010)</b>	<b>\$2,000</b>	<b>\$24,000</b>
<b>3 Firefighting Bucket Power Packs (3010)</b>	<b>\$2,000</b>	<b>\$6,000</b>
<b>12 Line, 150-Foot (3010)</b>	<b>\$5,000</b>	<b>\$60,000</b>
<b>12 Remote Hooks, 9000-Pound (3010)</b>	<b>\$5,000</b>	<b>\$60,000</b>
<b>Total</b>		<b>\$170,438,000</b>