

# CalAERO

DIVISION OF AERONAUTICS

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Summer 2015

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## Aviation Safety and the 2015 Wildfire Season

Pilots flying in California are reminded to be aware of Temporary Flight Restrictions (TFRs) established around wildfires. These areas typically result in intensive fire-fighting aircraft activity. The “postcard” below, developed by the federal Bureau of Land Management’s Fire and Aviation Directorate, provides guidance on keeping clear of smoke and TFRs. Also, pilots should remember that, during fire events, the operational tempo increases greatly at airports with established fire-fighting “attack” bases, as well as at airports located near a fire that become temporary hubs for fire-fighting aircraft, both helicopters and fixed-wing.

Please . . .

Stay at least five nautical miles from the smoke.

Report suspicious smoke to the nearest flight service station.

Check NOTAM’s prior to every flight!  
1-800 WX BRIEF  
1-800 992-7433

Size of restricted area varies with every incident.

Even a single small cloud of smoke could already have firefighting aircraft on scene.

More information can be found at: <http://airspacecoordination.org>

TFRs can be found on the Federal Aviation Administration website: <http://tfr.faa.gov/tfr2/list.html>

### FLY CLEAR OF WILDFIRES

For your safety and the safety of our aerial firefighters.



**Federal Aviation Administration Western-Pacific Region/NASAO  
2015 International Aviation Art Contest  
By Dolores Corpus**

Over the past decade, the Federal Aviation Administration (FAA) Western-Pacific Region (AWP) has traditionally had the honor of receiving national recognition from the National Association of State Aviation Officials (NASAO) for outstanding artwork from California students. Children from the AWP region have also been recognized at the international level with several winners over the years. This year the national tradition continued.

The International Aviation Art Contest encourages young people to express the importance of aviation through art and to motivate them to become more familiar with and participate in Science, Technology, Engineering, and Math careers. This is in accordance with the ARC business plan and the Memorandum of Understanding among the U.S. Department of Transportation, the U.S. Department of Education, and the U.S. Department of Labor to promote aviation and space education and aerospace workforce development.

The contest is sponsored by the National Aeronautic Association, supported by Embry-Riddle Aeronautical University, in association with NASAO, the National Coalition for Aviation Education, and the FAA.

The annual art contest is open to all youth, ages 6 to 17, from all over the world to reflect on aviation by designing a poster based upon a new chosen theme each year. This year, the theme was: Flying Saves Lives. The entries for the State of California were sent to the AWP's Executive Services Team. They arranged for local highly qualified art judges to determine the State winners.

Thousands of students participated in the 2015 International Aviation Art Contest from California. From these entries, 200 entries were reviewed at the AWP Judging held in the Regional Office earlier this year.

Nine State winners went on to compete in the national contest at the NASAO Center for Aviation Research and Education in Washington, D.C. One California State winner was selected as a national winner.

Winning entries were then forwarded to the Federation Aeronautique Internationale for inclusion in the International Contest in Lausanne, Switzerland in April 2015. Although a student from California did not win the International Contest, we are very proud of their artwork and efforts. Congratulations to the State of California International Aviation Art Contest winners as viewed on the next page.

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*Category I*

*Category II*

*Category III*

*1st Place*



*Eileen Kang (8)  
South Gate*



*Irene Kim (10)  
Los Angeles*



*Victoria Shin (16)  
Los Angeles*

*2nd Place*



*Nicholas Kim (9)  
Los Angeles*



*Kevin Lo (13)  
Glendale*



*Faith Burkhart (14)  
Fallbrook*

*3rd Place*



*Ryan Goh (8)  
Irvine  
3rd Place National*



*Rachel Kim (13)  
Cerritos*



*Songwoo Park (17)  
Irvine*

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## Federal Aviation Administration and Caltrans Collaborate to Reduce Wildlife Hazards

By Bob Fiore

Californians value their environment and wildlife, but few understand the consequences of conflicts between wildlife and aviation more than California's pilots. Since 1980, more than 12,600 wildlife strikes have been recorded in connection with California airports, and 362 aircraft have sustained substantial damage.



### Canadian Geese

since the early 1990s, many GA airports had not undertaken a wildlife hazard management program. A WHA is the first step in risk management. This allows us to better understand the habitats and wildlife that are present on and in the vicinity of our airports.

Aeronautics contracted the services of Mead & Hunt, Inc. to perform wildlife surveys and prepare the WHAs. They identified potential hazards that can provide the basis for future wildlife hazard management plans. All airports do not face the same challenges, and FAA's WHA process helps to identify the specific environmental features and species that may attract or support wildlife at a specific airport. Each WHA study involves a 12-month ecological survey to identify the presence and extent of bird and mammal species. The survey considers species that are most hazardous and most likely to be involved in a wildlife strike, seasonal fluctuations in wildlife presence and behavior, the influence of nearby land uses, and both on-site and off-site practices that may attract potentially hazardous wildlife.

The Caltrans Division of Aeronautics' Office of Aviation Planning (Aeronautics) partnered with the Federal Aviation Administration (FAA) to help make California's General Aviation (GA) airports even safer for travelers. During the two-year period of 2013 and 2014, Aeronautics administered a \$1.3 million FAA grant to sponsor Wildlife Hazard Assessments (WHA) at some of California's 15 busiest GA airports from Southern California to the San Francisco Bay Area.

Following the 2009 "Miracle on the Hudson" bird strike incident, the FAA increased its focus on wildlife hazard management. While most commercial service airports have implemented wildlife hazard management programs



Wildlife-Damaged Helicopter

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Wildlife Hazards Continued from Page 4

The results of the two-year-long WHA effort are being used to identify site specific recommendations for reducing wildlife hazards.

Ultimately, the FAA plans to use the results of a WHA to determine whether an airport needs a Wildlife Management Plan, which will identify specific measures to reduce wildlife hazards and target dates for their implementation. Of the 15 reliever airports involved in the joint federal-State project, the FAA determined 13 of the airports warranted a Wildlife Hazard Management Plan. Caltrans and the FAA are exploring opportunities for ongoing collaboration.



**Starlings**

### *Helpful Hints*

Since most wildlife strikes occur at altitudes of less than 3,000 feet above ground level and during sensitive takeoff and landing cycles, airport operators must be diligent in managing their airport environments. Regardless of an airport location and the FAA's direction about the need for a WHA or management plan, some measures can be implemented at every airport to discourage wildlife.

- *Obtain Training!* Airport management and operations staff members should obtain training to identify and manage the potentially hazardous wildlife that may be present on and near their airports.
- *Construct and maintain a wildlife exclusion fence.* A well maintained fence can separate some of the most hazardous wildlife from runways, such as deer and coyotes.
- *Maintain turf/groundcover at an intermediate height of 6 to 12 inches.* Short grass may look neat and tidy, but higher vegetation heights will interrupt communication among some types of wildlife and mask predators making the airport less attractive to prey.
- *Remove trees and vegetation that provide sources of food and shelter, such as roosting and nesting opportunities.* Even ornamental landscaping can attract wildlife by providing berries or other food sources, and dense stands of trees can provide warmth for shelter and nesting.
- *Eliminate open water sources from the airport.* Temporary water sources such as ponded water in ruts or depressions following a storm can attract hazardous wildlife. Fill in ruts and depressions whenever possible. Be cautious, however, in filling wetland areas because regulatory approvals may be required.



**Moose Walking Boldly Onto Airport**

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## Federal Aviation Administration Designates a No Fly Zone

By Carol Glatfelter

Unmanned Aircraft Systems (UAS), commonly referred to as “drones” by the media, and lasers are two of the biggest threats faced by the aviation industry. Although UAS are typically flown unknowingly in restricted airspace, people who point lasers at planes almost always act with criminal intent. In May 2015, the United States Transportation Secretary, Anthony Foxx, stated that federal rules prohibit any type of aircraft from operating in the Flight Restricted Zone around our nation’s capitol without specific approval, which includes all UAS.

Fifty military drones have crashed in the United States since 2001. Causes range from human error to communication errors to technology malfunctions. Currently, the military is one of the few government agencies permitted to fly UAS in American airspace. But the U.S. Congress has ordered the Federal Aviation Administration (FAA) to open the skies to more UAS. Military, commercial, and recreational UAS are now infiltrating navigable airspace. Airspace encroachment negatively effects operational safety and is considered a national security concern.



Unmanned Air System

One great concern is the near collision between UAS and commercial airlines. Pilots around the United States have reported a surge of near collisions in the past six months. The FAA is gradually opening up the skies to UAS, but during a 3-month period, from July 1 to September 30, 2014, there were 25 reported episodes where small UAS came within very close proximity to a larger aircraft. Many of these close calls came during take offs or landings at our nation’s busiest airports. This presents a new threat to aviation safety after decades of steady improvement in air travel.

As recently as May 29, 2015, a commercial airliner narrowly missed colliding with a UAS at 2700 feet as it neared LaGuardia Airport in New York. The flight crew reported having to climb 200 feet to avoid colliding with the UAS. Although the plane landed safely, the Joint Terrorism Task Force investigators are looking into the matter.

On January 27, 2015, a recreational UAS crashed onto the lawn southeast of the White House, in Washington, D.C. This particular drone was two feet long and lifted by four propellers. This is a common shape and size referred to as a Quadcopter. Although relatively small in size, it created havoc and concern at the nation’s



QuadCopter

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No Drone Zone Continued From Page 6



**The White House**

capitol. The man responsible for flying the UAS claimed he did not intend to fly it near the White House, and it was being used only for recreation. This incident was determined to be an accident by the U.S. Secret Service and did not pose any threat to the White House. However, there is concern that someone could fly an explosive or dangerous substance into or around the Capitol. Although the White House does have aerial defenses, it is unclear if they can identify anything as small as a UAS could be. Therefore, the “No Drone Zone Campaign,” is specifically for the National Capital Region around Washington, D.C., which reinforces the message that the District of Columbia and cities and towns within a 15-mile radius of Ronald-Reagan Washington National Airport are in a “No Drone Zone.” According to FAA Administrator, Michael Huerta, “Anyone visiting the DC area should leave their drone at home!”

Laser targeting occurs when a bright visible laser light causes a distraction or temporary “flash blindness” to a pilot during a critical phase of flight, such as during a landing or taking off. Flash blindness is visual impairment during and following exposure to a light flash of extremely high intensity. It can last for a few seconds or as long as a few minutes.

Pointing a laser at an aircraft can be hazardous to pilots and has resulted in arrests, trials, and jail sentences. In February of 2009, a dozen planes were targeted with green laser beams at the Seattle-Tacoma International Airport. An FAA spokeswoman said there were 148 laser attacks on aircraft in the United States from January 1, 2009 to February 23, 2009. In California, it is a violation of Penal Code, section 247.5 and 248 to shine a laser at an aircraft.



**Pilot Seeing Laser Light**



**Laser Light Equipment**

Pilots exposed to a laser or bright light during flight should follow FAA Advisory Circular 70-2, “Reporting of Laser Illumination of Aircraft.”

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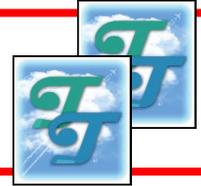
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## TRIM TABS

By Colette Armao



A chance extra credit elective course in airport planning was the serendipitous start of the aviation career for a young engineering student at Michigan State University. Mark McClardy, the Division Manager of the Federal Aviation Administration's (FAA) Western Pacific Region Airports Division had two goals. He knew he wanted a career in transportation and to work for an employer who valued personal responsibility, teamwork, vision, strategic thinking, and access to management.

Hired by one of Detroit's premier upon graduation, Mark still kept his transportation. In 1991, he was engineer at the Federal Aviation Office (ADO) in Chicago. That in the transportation industry. better? I don't think so!" he

Working in the Chicago ADO business model focused on so everyone got to do a little of was excited about the FAA's freedom he was given to complete best value possible for the project, management. These early experiences skills needed to rise to his current position

about 185 FAA senior executives in an agency employing about 47,000 people. Now, Mark makes himself accessible, fosters a sense of pride of ownership, and challenges his staff to "see the Big Picture" when it comes to analyzing the merits of airport proposals. He values teamwork as the best way to deliver projects of lasting value to airports. "We have the best aviation system in the world, . . . and it's all our jobs to make it better, safer, and more efficient," he commented



architecture and engineering firms eye focused in the direction of offered a position as an Administration's Airport District was the beginning of his career "Could I have landed anything said.

was a great opportunity. The outreach and customer service everything and contribute. Mark mission, he appreciated the assignments that would deliver the and he enjoyed having access to helped him cultivate the leadership

where, in August 2003, he became one of

Mark also values long term relationships and promotes trust between stakeholders, explaining that trust is essential to developing solutions to challenges. He likes to see "skin in the game" from airport owners and communities when they present the FAA with critical airport projects requiring federal support or funding. He gets very serious about a proposal when he sees a community standing behind an airport showing its support by being open to pursuing funding from alternative sources, such as bonding or private public partnerships to leverage federal dollars. This not only demonstrates the seriousness of the airport/community, but helps him stretch his budget further and deliver more projects. "When

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Trim Tabs—Continued from Page 8

communities present a good business case for a project, it shows me they've really thought this through," he said. Building projects that solve both current and future needs and have long range benefits beyond immediate problems is key today. His hope is that stakeholders in the future will look back on projects and say, "I'm glad they made required tough decisions and did what was needed."

In his current position, Mark often asks "Why should we make this investment in aviation?" He notes that the federal checkbook is frequently about funding sustainable projects that meet both local and wider system demands. He pays attention to forecasts showing continued aviation and population growth in the west, the rapid changes in the aerospace industry, and looks for opportunities to stay ahead of the growing global demand for air travel. He energetically supports the four Strategic Initiatives announced this year by FAA Administrator, Michael Huerta:

### FAA Strategic Initiatives

1. Make aviation safer and smarter through risk-based decision making.
2. Deliver the benefits of technology and infrastructure through deployment of NextGen.
3. Enhance global leadership through targeted investment.
4. Empower and innovate the FAA by recruiting and developing future workforce.

Another important focus for Mark is land use compatibility around airports. Though generally outside the purview of the federal government, he believes everyone needs to care about the potential for local decisions to affect aviation access in communities. Access is important to local economies, and we must find ways to educate State and local decision makers on the importance of aviation and the need to protect these assets we call "airports." Mark's strategy is to provide more outreach delivering a strong message of aviation's value and benefits. That means getting the right people involved in local conversations and including people who use airports in the mix. They're the ones who can do the best job of showing the "why and how benefits" to a community. It takes a team and a message, and that is something Mark has committed himself to doing.

On a personal note, some of Mark's proudest accomplishments involve work he has done with youth. He has participated in outreach and mentoring with inner city school children and volunteered with the Big Brother/Big Sister Organization. "Watching at-risk children become interested in their future is one of the most rewarding experiences, and it is important for youth to have good mentors," he commented. A theme Mark touched on throughout this interview was getting young people interested in aviation by making it more accessible to them and to mainstream aviation as a viable career option. He wants to instill the passion he has for aviation in students and encourage them "to dream big and think things they can't even imagine possible today."



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## Funding for Fiscal Year July 1, 2015 through June 30, 2016

By Bambi Jake

If you are interested in funding for your airport this coming Fiscal Year (FY), the following information may assist you with two State grant programs available through the Division of Aeronautics (Division).

### Annual Credit Grants

Annual Credit Grants provide a \$10,000 per year entitlement to eligible, publicly-owned, public-use airports. Please provide a Certification Form and disbursement request for each eligible year of annual credit.

Grant Certification Form DOA-0007 must be submitted to the Division each FY to establish airport eligibility. Please submit FY 2015–16 Certification for your airport, if eligible, as soon as possible. All airports that have completed the California Aid to Airports Program (CAAP) Certification Form, and are eligible, may request funding.

### Airport Improvement Program Matching Grants

Airport Improvement Program (AIP) Matching Grant funds assist General Aviation (GA) airports in meeting the local match for federal AIP grants. Eligible projects must benefit GA airports and be included in the most recent Capital Improvement Program (CIP) element of the California Aviation System Plan.

The California Transportation Commission allocated \$1.0 million to fund the FY 2015–16 on June 25, 2015.

Projects not included in the current CIP are ineligible for State funding according to the California Code of Regulations Title 21, Division 2.5, and Chapter 4, Article 3, section 4062.1. Additionally, projects that

have already been started or have been completed prior to State allocation are not eligible.

The AIP Matching Grant funds are limited. Eligible applications are funded as funds become available. Completed grant applications are processed in the order they are received. Please submit a completed application as soon as possible. The application is considered complete only with all required attachments and documentation. Pursuant to the California Public Utilities Code, a complete grant application includes:

- Completed State Matching Grant application for the Federal Aviation Administration (FAA) AIP (Form DOA-0012)
- Completed CAAP Certification (Form DOA-0007)
- Local government approval (resolution or minute order) as described in CAAP Regulations, section 4067
- FAA grant agreement with FAA and sponsor signatures
- California Environmental Quality Act (CEQA) documentation (Note: National Environmental Quality Act clearance does not satisfy CEQA requirements.)
- Sketch of project location and dimensions

Please review all funding eligibility, criteria, and forms on the Division website under Grants and Loans at:

<http://www.dot.ca.gov/hq/planning/aeronaut/>



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## New and Updated California Airports

**N**EW CUYAMA AIRPORT REOPENED - On May 4, 2015, the privately-owned, public-use New Cuyama Airport was reopened. This airport in Santa Barbara County had been voluntarily closed to the public for several years because of poor pavement conditions. The new owner, the Blue Sky Sustainable Living Center, recently resurfaced the 3,940-foot-long Runway 10/28 and the ramp at the northwest corner of the runway. The runway is unlighted and is closed at night.



**CHARLES M. SCHULZ-SONOMA COUNTY AIRPORT RUNWAY SAFETY PROJECT** - The airport in Santa Rosa recently completed a project to improve airport safety by “decoupling” the ends of Runway 14 and Runway 20 (formerly Runway 19), which had previously been in a “V” configuration. The project also involved an extension of Runway 14/32 from 5, 119 feet long to 6, 000 feet long, the redesignation of Runway 1/19 to 2/20 because of a change in magnetic variation, an extension of Runway 2/20 from 5, 004 feet long to 5,2002 feet long, and the addition of lighting to Runway 2/20 to enable night operations on that runway. An Amended State Airport Permit for Charles M. Schulz-Sonoma County Airport was issued on June 5, 2015.



Photo credit: O.C. Jones & Sons, Inc.

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## 2016–2025 Capital Improvement Plan

By Parvin Bijani

The Capital Improvement Plan (CIP) is compiled and completed for 2015. Thanks to all airport sponsors who participated in updating the 2016–2025 CIP. Biennial updates to the CIP provide the basis for the development of the Caltrans Division of Aeronautics funding program, which consists of Airport Acquisition and Development (A&D) and Airport Land Use Compatibility Plan (ALUCP) projects selected by Caltrans based on a Priority Matrix.

The CIP is a ten-year listing of capital projects submitted to Caltrans. It allows Caltrans' partners to actively participate and assist in the coordination of its ongoing, statewide, aviation system planning and project funding effort. The CIP is updated biennially (every two years) in accordance with the California Public Utilities Code, section 21704. The California Aid to Airports Program (CAAP) includes three funding programs: Annual Credits, Airport Improvement Program (AIP), and Matching Grants and Acquisition and Development grants.

The ground access projects, located outside of an airport's operations areas, are listed separately in the CIP and are not eligible for any CAAP funds. Funding for these projects is typically from local agencies or the State Transportation Improvement Program.

This CIP contains 2,080 airport improvement and related projects desired by airport sponsors with a fiscally unconstrained cost estimate of \$3.21 billion.

The list of projects shown in the CIP is contained in a database that includes the capital needs for California's publically owned, public-use airports. Not all projects listed in the CIP will be programmed due to limited federal and State funding.

The CIP will be presented to the California Transportation Commission for adoption at its August meeting. Projects must be listed in the CIP to obtain State grant funding.



### Upcoming Events

ACA Conference  
South Lake Tahoe  
September 16–18, 2015



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