

CalAERO

DIVISION OF AERONAUTICS

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Fall 2016

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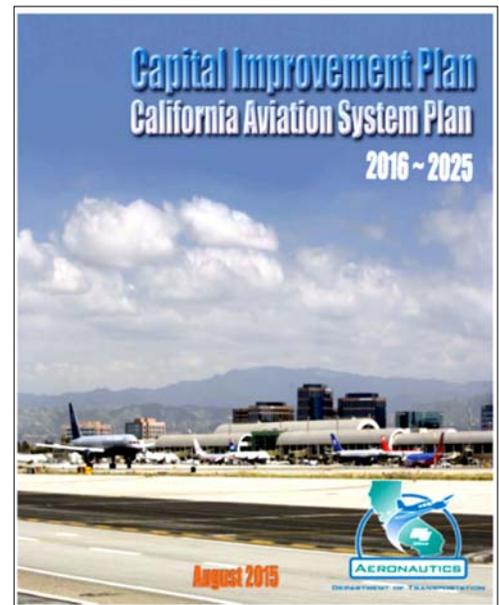
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CAPITAL IMPROVEMENT PLAN UPDATE COMING UP

This fall, the California Department of Transportation, Division of Aeronautics (Division), is working on the 2017 Capital Improvement Plan (CIP). The CIP contains a listing of all the projects proposed by California's publicly-owned airports for the next ten years and serves as one of the State's aviation planning documents. By statute, the Division compiles the CIP and submits it to the California Transportation Commission (CTC) for review and approval. The CIP is expected to be approved and published (online) in the summer of 2017.

Listing a project in the CIP is a requirement to qualify for the State's Airport Improvement Program (AIP) Matching Grant and Acquisition and Development Grant Programs. The AIP Matching Grant Program can provide up to half of the local matching requirement (five percent of the total AIP grant) for eligible airports. In the Fiscal Year 2015-16, the State provided \$1.8 million in AIP matching grants. Depending on funding, the Acquisition and Development Grant Program can provide State funds to eligible airports and Airport Land Use Commissions for projects listed in the CTC-approved Priority Matrix. Besides grant eligibility, participation in the CIP provides valuable data on the statewide capital improvement needs for the State's aviation system. The 2015 CIP listed over 2000 projects estimated at \$3.2 billion.

As part of the update effort, the Division will be reaching out to airport managers to request that projects be uploaded on the Airport IQ System Management (online) database. The Division will also ask for signed federal airports CIP forms



Current CIP

for each project. A letter was mailed out in October to all airport managers detailing the CIP process and instructions. Airport Managers should also include AIP projects from the 2017 federal airports CIP. Unless a State grant has already been provided, previously listed projects must be relisted in the 2017 CIP to qualify for future grants.

For additional information, contact Danny Uppal at (916) 654-4232 or by email: danny.uppal@dot.ca.gov



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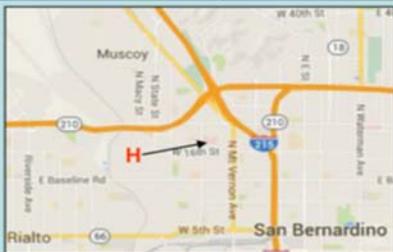
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UPDATES TO HOSPITAL HELIPORT DATAPLATES FORMAT

The Hospital Heliport Dataplates, available on the Division of Aeronautics (Aero) website, have been a very popular tool since their introduction in 2011. However, we're always interested in improving our product. We recently received input from an emergency medical services helicopter pilot asking if we could show the coordinates for each hospital heliport in Degrees and Decimal Minutes (i.e., 34° 31.5'N, 117° 17.6'W) instead of the current Degrees Minutes Seconds (i.e., 34° 31' 30"N, 117° 17' 36"W), because that was the format in which they entered the heliport location in their onboard GPS equipment. As the pilots flying to and from hospital heliports are one of our primary target groups for the dataplates, we said, "Sure, we can do that." So we're making that change and several others as outlined below (see sample dataplate for a depiction of the updates):

- ◇ Hospital Heliport Geographic Coordinates in Degrees and Decimal Minutes (i.e., 34° 31.5'N, 117° 17.6'W).
Note – Users will still be able to see the heliport coordinates in Degrees Minutes Seconds in the lower right corner of the dataplate (i.e., DMS 34° 31' 30"N, 117° 17' 36"W).
- ◇ Heliport Data Box – The information in this box, in the upper right hand corner of the dataplate, has been changed to put all the helicopter design information, necessary for pilots to determine if the heliport can support their helicopter model, at the top of the box. These criteria include the TLOF (Touchdown and Liftoff Area), the FATO (Final Approach and Takeoff Area), the maximum weight-bearing capacity of the heliport (if applicable), and the maximum helicopter overall length (known as D). The FAA made D, which determines FATO size, the primary heliport design parameter in their latest Heliport Design Guide update, published in 2012.
- ◇ Primary Approach Course – The permitted Primary Approach Course is now shown on the aerial photograph with an asterisk (*) next to the respective magnetic course number, for facilities where this course is identifiable. Note that we've also added the degree symbol (°) after the magnetic course.
- ◇ Dataplates with the updated format should be in place by the end of this calendar year. We hope you find these changes beneficial. As always, the Hospital Heliport Dataplates may be found on the Aero website homepage or at: <http://dot.ca.gov/hq/planning/aeronaut/helipads/dataplates/index.htm>.

San Bernardino Community Hospital Heliport		
Lat. 34° 07.84'N Long. 117° 19.30'W (NAD 83)		
LOCATION	FACILITY	HELIPORT
1500 West 17 th Street City: San Bernardino, 92411 County: San Bernardino Loc ID: None FAA Site NR: None	Trauma: N/A PH: (909) 887-6333 Notes:	TLOF: 40' Dia FATO: 68' Dia Max Weight: NA Max Design Helicopter Overall Length: D 45' Lighting: Perimeter Elev: On 8' Mound MSL: 1,180' Beacon: None Wind Sock: Yes, lighted Design Helicopter: Airbus EC145 Notes:
		
		
<small>This document is for informational purposes only and is not intended for navigation *Primary Approach Course</small>		
<small>DMS: 34° 07' 50.5"N/117° 19' 18"W</small>		
<small>User Notes:</small>		

INFORMATION ON NEW AND UPDATED CALIFORNIA HELIPORTS

COMMUNITY HOSPITAL OF SAN BERNARDINO HELIPORT - The Community Hospital of San Bernardino Heliport was reactivated with a corrected State Heliport Permit issued on July 14, 2016. The design helicopter for this heliport is an Airbus EC145. The facility was designed for a helicopter rotor diameter of 36 feet and maximum overall length of 68 feet and is lighted for night operations. For more information on this facility, see the Hospital Heliport Dataplate on the Division of Aeronautics website: <http://dot.ca.gov/hq/planning/aeronaut/helipads/dataplates/index.htm>.



Community Hospital of San Bernardino Heliport

WASHINGTON HOSPITAL PARKING STRUCTURE HELIPORT - The Washington Hospital in Fremont was issued a State Heliport Permit for a new rooftop Hospital Heliport. The new heliport, on a parking structure, became operational on August 15, 2016. The design helicopter for this heliport is a Sikorsky Blackhawk. The facility was designed for a maximum helicopter rotor diameter of 54 feet, overall length of 65 feet, and weight of 22,000 pounds. The heliport is lighted for night operations. This parking structure heliport has replaced the former ground heliport, which has been deactivated. For more information on this facility, see the Hospital Heliport Dataplate on the Division of Aeronautics website: <http://dot.ca.gov/hq/planning/aeronaut/helipads/dataplates/index.htm>.



Washington Hospital Parking Structure Heliport

SMALL COMMUNITY AIRPORTS STRUGGLE TO RETAIN AIR PASSENGER SERVICE

By Kevin Ryan

In December 2014, SkyWest Airlines upgraded its fleet from nine-seat turboprop aircraft to thirty-seat jets. Then the airline eliminated a few routes producing minimal revenue. As a result, Chico Municipal Airport in Butte County lost its sole service provider. Chico Municipal Airport is about 70 miles from the nearest medium hub commercial service airport—Sacramento International Airport. This is only one example in California of an issue that is not new to the airport industry or federal transportation funding programs and dates back four decades. Without financial assistance, the hope of reestablishing air passenger service for these regions could be lost, given that federal financial assistance programs are under the strict scrutiny of the United States Congress.



Similar to Chico, there are a few other California Airports that have lost their passenger service over the

last few years including: Lake Tahoe, Oxnard, Inyokern, and Modesto City-County Airports. To date, none have regained commercial passenger service. This means that air passengers must travel farther to a distant commercial service airport using surface transportation options. It is possible that passenger air service may not return to these airports. For example, after Visalia Municipal

Airport lost its air service, the city of Visalia negotiated to provide a 20-passenger daily shuttle bus to Fresno Yosemite Airport called the [V-line](#).

There are three commercial service airports in California that have successfully applied to the federal Department of Transportation's (U.S. DOT) Essential Air Service (EAS) Program for financial assistance to reestablish passenger service including Jack McNamara Field, Imperial County, and Merced Regional. EAS eligibility criteria limits each State to no more than four communities in the program at a time. Fortunately, there is another federal financial assistance alternative to the EAS program, and recently, two airport communities applied for and were awarded grants from the U.S. DOT Small Community Air Service Development Program (SCASDP).

SCASDP eligibility criteria provides a grant applicant the opportunity to self-identify its air service deficiencies as well as propose an appropriate solution. According to the website overview, the program "can involve, among others, revenue guarantees, financial assistance for marketing programs, start-up costs, and studies."

Inyokern Airport and Stockton Metropolitan Airport communities aim to initiate service between themselves and a medium or large hub or commercial service airport—Los Angeles International Airport (LAX). Inyokern's award description states, "The funding will be used for a revenue guarantee, start-up costs, and an associated marketing program to recruit and

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support Mokulele Airlines to reintroduce commercial air service to the community.” This service is expected to “address its needs of convenient connections to major markets.” Stockton Metropolitan Airport administrators state that the federal award will be used for a revenue guarantee, marketing, and fee waivers to recruit, initiate, and support new daily service between Stockton and Los Angeles, targeting SkyWest Airlines. It is anticipated that the new service to a major hub airport will have a positive impact on the economy as well.

Following the termination of SeaPort Airlines, with the city of Visalia’s support, the Visalia Municipal Airport Manager, Mario Cifuentez, applied to the Community Flexibility Pilot Program as an alternative to the EAS Program. The Visalia City Council approved the action to apply for a grant to fund revenue-generating infrastructure improvements, despite the fact that, if successful, they will not be eligible to receive funding under the EAS Program for a period of ten years. Mr. Cifuentez said, “Given the current state of regional airline service, the U.S. DOT is so hopeful that other airports will take advantage of it that they’ve asked me to be somewhat of a spokesperson for the program. I think that shows the ‘writing on the wall’ for long-term EAS funding and viability.”

According to the U.S. DOT website, “This Community Flexible Pilot Program was established in 2003 as part of the Vision 100—Century of Aviation Reauthorization Act, P.L.108-76. Section 405 established the Community Flexibility Pilot Program, under which communities receiving

subsidized EAS service may obtain a federal grant equal to twice the subsidy that the U.S. DOT paid to the EAS carrier in the most recent 12-month period in exchange for foregoing their subsidized EAS Program for 10 years.”



To learn more about the Essential Air Service Program, the Small Community Air Service Development Program, or the Community Flexible Pilot Program, visit these official websites:

<https://www.transportation.gov/policy/aviation-policy/small-community-rural-air-service/essential-air-service>

<https://www.transportation.gov/policy/aviation-policy/small-community-rural-air-service/SCASDP>

<https://www.transportation.gov/office-policy/aviation-policy/community-flexibility-pilot-program>

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TRIM TABS By Colette Armao



In this issue, we look at the world of public benefit flying featuring two pilots who combine their love of flying with their desire to give back to the community and help others by sharing their aircraft with those in need. Aircraft owner/pilots donate many hours annually to support a wide range of charitable groups and non-profit organizations in support of such diverse activities as medical support, animal rescue, research, and emergency response. And, public benefit flying organizations come in all sizes from single airport pilot groups to national organizations.

Bette Gardner (San Martin Airport) found her way into aviation when, on a whim, her husband gave her a flying lesson for a birthday present. She was “surprised and delighted with the gift.” “I was smitten” is how she described that flight, and four months after that first ride, she earned her private pilot’s license. Bette owns her own consulting company, travels extensively, and decided to purchase her own airplane as a way to have better access to her clients. She believes in building strong relationships with her clients noting that it’s exciting to actually be able to show up for meetings in person and describing face to face meetings as essential to building strong business relationships.

Bette owns a Columbia 350, a four-seat, composite, glass cockpit aircraft. She describes it as a long-range plane that usually gets 1000 miles on one tank of avgas. She and her husband typically make two long cross country business trips to the east coast annually, stopping along the way to meet personally with clients. The 350 is a comfortable and pleasurable aircraft to fly.

Bette became interested in volunteer flying, because she wanted to find a way to share her love of aviation

and all the wonderful things she experienced in some helpful way. She researched numerous volunteer pilot groups, selecting Angel Flight as her organization because many of her clients are in the medical field. “If you love to fly and help people, it doesn’t get any better than this,” she says about Angel Flight.



Commenting that every flight is memorable, Bette shared two stories. On one flight, she carried a very disabled young boy and his mother. She remembered watching the mother providing constant care to her son in a dignified and uplifting manner that touched Bette deeply. She saw that the mother performed the care with such complete attention, love, and devotion, and without any self pity that Bette often still thinks of her.

Another story she shared was of an older couple. The wife had dementia, and her husband was her caregiver. The husband had never ridden in a small plane before and sat in the right seat. She described him as being as excited as a child immersing himself in the joy of the experience. She said it was so gratifying to see him be able to forget his heavy responsibilities and just enjoy life for a while.

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Richard (Dick) Filston's introduction to aviation was through his brother-in-law, Paul Marshall. Paul wanted to buy an airplane, though most of the family tried to discourage him. But not Dick; he supported Paul's decision and agreed to go flying saying, "Let's go!" So the two set off on their first trip together to Redding. After the next "big adventure" to Oshkosh, Dick decided, "This is really fun. I think I'm missing something." He had to wait after the 9/11 tragedy for about 20 months though before he could get instruction. Finally in 2002, he was able to earn his private pilot's license and added an instrument rating. Then he bought himself an instrument capable Piper Cherokee that he keeps at the Stockton Metropolitan Airport.

Dick has always tried to find ways to share his love of flying with others. He describes himself as a "have plane will travel" kind of person. However, he feels conflicted about the emissions and pollution the engine creates. So he began to think of ways that he could offset the environmental impacts of the pollution his plane creates by turning his flying into something useful. That's how Dick got into public benefit flying. Because of his environmental interests, he chose Light Hawk as his volunteer flying organization. Light Hawk flights support scientific research, and Dick thinks it's the perfect match for him.

Dick has flown one mission for Light Hawk—a three-flight series for the Tuolumne River Trust. That Project helped geo-reference photos with existing maps and locate areas of interest accurately.

Pilots in the Light Hawk program bid for projects, and Dick is currently waiting to hear about a flight he has recently bid. This project would involve flying over a piece of property that a non-profit organization is considering purchasing.

Dick has also participated in the Experimental Aircraft Association Young Eagles

Program. He has introduced at least 35 young people to the joy of flying through that program.

There are three essentials to consider when volunteering, Dick noted:

- Tailor your interests with the organization
- Know your plane's capabilities and what it can realistically accommodate
- Consider your own skills

As a scientist, Dick has given a lot of thought to aviation. He said, "I really want to see a substitute fuel for leaded avgas¹ because I think about the environment." A true environmental scientist and pilot, Dick has found ways to become, in his words, "a productive useful citizen," sharing his love of aviation with people.



1. In 2014, Congress approved funding for the Piston Aviation Fuels Initiative. The FAA plans to transition from 100 LL to a high octane unleaded fuel by 2018.

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2017 INTERNATIONAL AVIATION ART CONTEST



Jeffrey Zhang, California

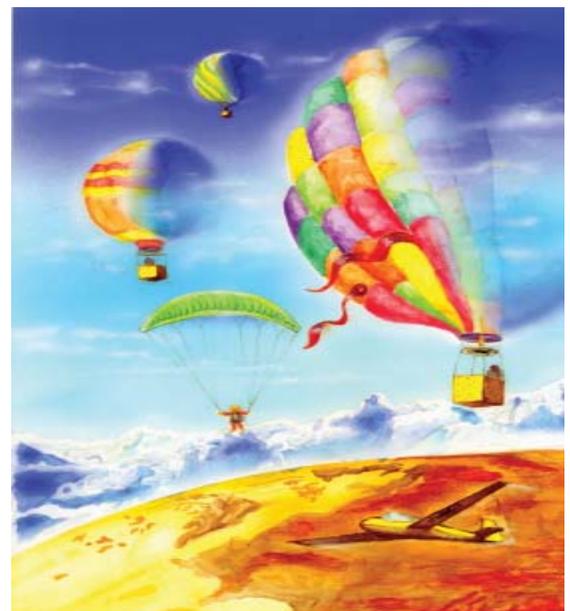
The International Aviation Art Contest encourages young people to express the importance of aviation through art and to motivate them to become more familiar with and participate in Science, Technology, Engineering, and Math careers. This is in accordance with the ARC business plan and the Memorandum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

For Contest Rules and Information, please see the following website: <http://www.nasao.org/wp-content/uploads/2016/08/2017-International-Aviation-Art-Contest-Brochure.pdf>

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 in the International Aviation Art contest. Children from the AWP region have also been recognized at the international level with several winners over the years. This year the art contest continues.

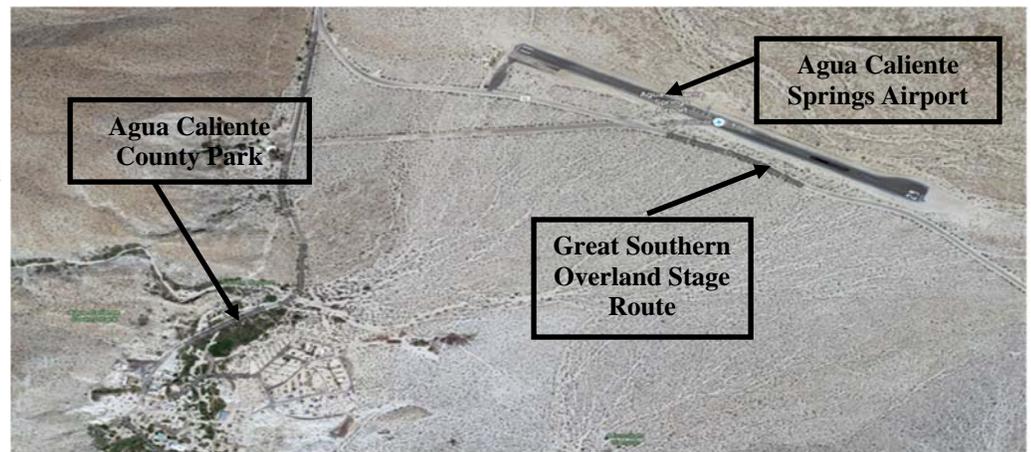


Sky Waters, Minnesota

NEW PAVEMENT AT AGUA CALIENTE SPRINGS AIRPORT

Agua Caliente Springs Airport was the recipient of a State grant to rehabilitate its runway and aircraft tie down area. Located near Anza-Borrego Desert State Park, Agua Caliente Springs Airport is a public-use General Aviation airport owned and operated by the County of San Diego. This airport serves residents of rural eastern San Diego County as well as visitors to the Agua Caliente Hot Springs County Park, which is within walking distance to the airport. The County Park features geothermal pools and springs, hiking trails, and panoramic vistas. This airport is adjacent to County Highway S-2 (also known as the Great Southern Overland Stage Route). This airport features one paved runway (11-29), measuring 2,500 feet long by 60 feet wide, with six aircraft tie down spaces.

Due to the harsh desert environment, the runway was in poor condition with severe pavement cracking. Construction on the project took two months and was completed in June 2016. Despite weather delays, construction went smoothly. The project included improving the base material, paving with asphalt concrete, and re-marking the new pavement to current standards. The runway will increase the safety at the airport and provide



smoother take-off and landing operations. The cost was \$641,000 of which \$499,000 was provided by the State of California's Acquisition and Development Grant.



Runway pavement at Agua Caliente Springs Airport pre and post construction

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CLEARER SKIES AHEAD FOR COMMERCIAL AIRPORTS IN CALIFORNIA

By Kevin Ryan

Sustainability is only one criteria included in the California Department of Transportation's (Caltrans) Mission Statement.

Thanks to the Federal Aviation Administration (FAA) Environmental Program's response to the Clean Air Act, the Voluntary Airport Low Emission (VALE) Program is moving airports toward cleaner air quality with reduced emissions from ground operations.

According to a 2014 VALE Program status report, the VALE Program is responsible for "reducing ozone emissions by approximately 478 tons per year, which is equivalent to removing 26,000 cars and trucks off the road." The national program is designed to reduce all sources of airport ground emissions. VALE Program criteria pollutants include: Ozone (8-hour), CO, PM₁₀, PM_{2.5}. Eligible projects include: pre-conditioned air units (PCA), chargers for electric ground support equipment like tugs and belt loaders, natural gas re-fueling stations for airport buses and shuttles, and electric gates at terminals.

An airport eligibility list produced by the FAA and updated in April 2011 in cooperation with the United States Environmental Protection Agency, shows that California has 22 commercial airports eligible to apply for VALE Program grants.

According to the FAA VALE Program website report, between 2005 and 2013 six projects were awarded to four commercial airports in California for a total of \$23 million. Most of the grants were received by airport sponsors in the San Francisco Bay Area. A total of \$16.82 million has been invested at three airports: Oakland International

Airport, San Francisco International Airport, and San Jose International Airport.

In Southern California, the San Diego County Airport Regional Authority has invested \$6.21 million at the San Diego International Airport to provide PCAs at 35 gates and gate power for 7 gates.

The Los Angeles International Airport (LAX) will soon receive a \$4 million grant from the VALE Program "to reduce pollution from airplanes on the ground." And it will be used to



Pre-conditioned Air Unit

partially fund the installation of nine 400 Hz electrical power units at overnight aircraft parking spaces on the west side of LAX." The power units can provide high-energy, cost efficient lighting and dispense water so

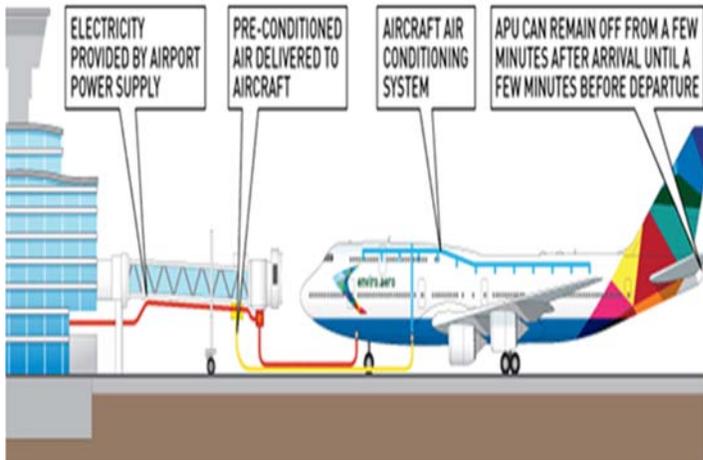
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planes can refill their tanks. They also feature fuel hydrants. A VALE Program grant will cover 75 percent of the \$6.5 million estimated cost. This project is a collaborative effort between the Los Angeles World Airports, (the LAX sponsor), the FAA Airports District Office, and the South Coast Air Quality Management District. The source of VALE Program grants as well as the other Airport Improvement Program (AIP) funding is solely from the collection of aviation federal fuel tax revenues.

A [sustainability report](#) conducted by LAX states that 88,698 metric tons of carbon emissions were generated by ground operations over the last reporting period. To reduce the emissions, the airport recently adopted a reduction policy that will require ground equipment operators to lower emissions 20 percent by 2021.

The FAA Environmental Program manages the Zero Emissions Vehicle (ZEV)/airport equipment program, which is also available to commercial service airports in California. The ZEV Program,

created through the FAA Modernization and Reform Act of 2012, allows airport sponsors to apply for grants to purchase vehicles that produce zero exhaust emissions. AIP funds cover up to 50 percent of the total project cost. Airports can fund these types of projects with Passenger Facility Charges collected, or they can apply for AIP grant funds to afford all related infrastructure construction or modification needed to facilitate the acquisition and delivery of these vehicles.

On September 28, 2016, the FAA released the AIP grant report. It states that two commercial service airports—LAX and San Francisco International Airport (SFO)—were awarded a total of \$14 million for VALE Program infrastructure investments. LAX and SFO are the two busiest commercial service airports in California and collectively reported 124 million passengers and more than a million aircraft operations in 2015.

Regional airport authorities and airport sponsors are finding the funding mechanisms to make airports more sustainable by investing in alternative technologies to reduce their airport ground emissions. This will improve the ambient air quality and will reduce airports' carbon footprints.

To learn more, visit the FAA website: <http://www.faa.gov/airports/environmental/vale/>



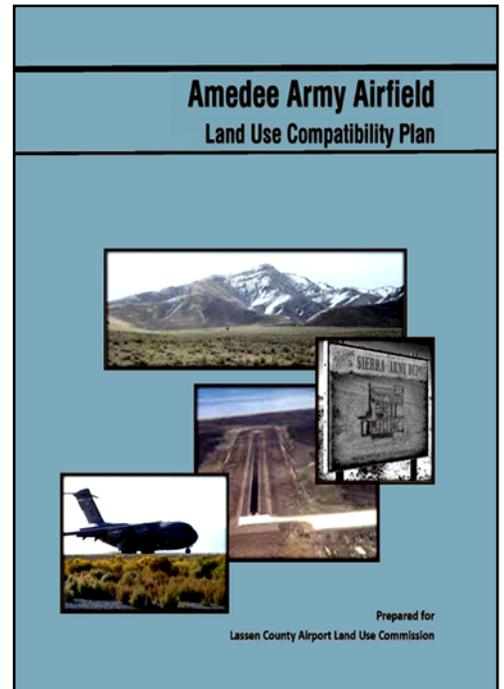
CONGRATULATIONS TO LASSEN COUNTY

By Tony Sordello

California State law requires the preparation of an Airport Land Use Compatibility Plan (ALUCP) for each public-use airport in the state, including the area surrounding any military airport. An ALUCP is a very powerful safety instrument that protects the public and aviation users. This is because it contains land use measures that minimize the public's exposure to safety hazards within areas around these airports. An ALUCP most importantly protects the public but also protects an airport from encroachment that could jeopardize its very existence.

Lassen County and the Lassen County Airport Land Use Commission just completed their new ALUCP for Amedee Army Airfield. The new ALUCP was adopted on August 11, 2016.

To help you develop or update your ALUCP, contact your Land Use Planner at: http://dot.ca.gov/hq/planning/aeronaut/documents/planning/aviation_planning_office_staff.htm



Upcoming Events

January 29–February 1, 2017 Southwest Chapter of SWAAAE
Winter Conference, Monterey, CA

www.swaaae.org

March 29, 2017 California Aviation Day
California State Capitol, Sacramento, CA

<http://caaviationday.com/>

September 13–15, 2017 Association of California Airports
Annual Conference, South Lake Tahoe, CA

www.calairports.com



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