

# DESERT WINGS

Serving the community of Edwards Air Force Base California  
www.edwards.af.mil - www.facebook.com/EdwardsAirForceBase

Public Affairs, Volume 63, Number 69

Dec. 2, 2016

## Final phase of C-17 drag reduction testing underway



Six microvanes are bonded to each side of the aft fuselage of the test C-17 for phases three, four and five in the C-17 Drag Reduction Program managed by the Air Force Research Laboratory, Advanced Power Technology Office, and tested by the 418th Flight Test Squadron at Edwards AFB. The C-17 Globemaster III used for all five test phases is provided by Joint Base Lewis-McChord, Washington. (U.S. Air Force photo by Kenji Thuloweit)

By Kenji Thuloweit  
412th Test Wing Public Affairs

When it comes to aviation fuel, the C-17 Globemaster III utilization rate makes it stand out as the largest consumer in the U.S. Air Force. This is why a team at the 418th Flight Test Squadron has been working for the past year on the Air Force Research Laboratory's C-17 Drag Reduction Program.

The 418th FLTS is currently wrapping up testing with the

final three phases – out of five total – using 3-D printed microvanes and fairings by Lockheed Martin. The Lockheed Martin installations use a combination of laser positioning for locating and sealant to bond the parts to the aircraft. The laser positioning allowed the team to skip the design and build of installation tooling that would only be used during flight testing, according to the test managers. The bonding process simplifies the installation and more importantly leaves the aircraft in its pre-test condition after removal at the end of the flight test program.

The squadron is testing parts in various configurations to see if the external structure modifications can improve airflow around the airplane. During computational fluid dynamics simulations and wind tunnel tests, areas on the C-17 were identified that showed excessive drag and were targeted for optimization.

In the spring, the first two phases of testing were completed. Those tests were conducted with two different configurations of parts made by Vortex Control Technologies.

The placement of the parts and the different configurations all have the same goal of reducing drag and improving fuel efficiency. "A one-percent improvement in drag reduction will result in 7.1 million gallons of fuel reduction per year," said Bogdan Wozniak, 418th FLTS, project engineer. "One-to-two percent drag reduction

See C-17, page 3

## Hypersonic combined test force oversight shifts to Arnold EDC

By Christopher Ball  
412th Test Wing Public Affairs

The Hypersonic CTF saw a shift in leadership Thursday, as oversight of the unit was transferred to the Arnold Engineering and Development Complex, Arnold Air Force Base, Tennessee.

According to Maj. Dick Wong, director of the Hypersonic CTF, the change was directed by Maj. Gen. David Harris, Air Force Test Center commander, to streamline the functions involved in hypersonic research and flight test, from modeling to wind tunnels and ultimately flight test.

"This will make coordination across the hypersonic research enterprise more synergistic," Wong said.

Since the 1950s, this small unit has operated at Edwards Air Force Base, testing the boundaries of speed. The Hypersonic CTF has been involved in the testing of cutting-edge, high-speed aircraft, including the renowned X-15 program during the 1960s and, most re-

cently, the X-51 WaveRider.

The X-51 unmanned scramjet aircraft's maiden flight was completed on May 26, 2010. The aircraft remained under powered flight for over 200 seconds at a top speed of Mach 5.

The CTF hasn't been limited to hypersonic testing throughout its history.

"There have been many name changes over the years," Wong said. "Before it was the Hypersonic CTF, it was called the Access to Space Office, for example."

As the former name suggests, the CTF does support some space-oriented projects. In the early 2000s, the X-38 Crew Return Vehicle was one example. The X-38 project was a series of five prototype research vehicles developing technology to build and operate a space station CRV. The wingless CRV, when operational, would have been the first reusable human spacecraft to be built in more than two decades.

The CTF director explained that the work performed here is different from



Ground crew members observe the X-51A WaveRider, which is affixed to an Edwards B-52H Stratofortress before being flown over the Pacific Ocean and launched June 13, 2011. The X-51 unmanned scramjet aircraft's maiden flight was completed on May 26, 2010. (Photo by Bob Ferguson/Boeing)

See Hypersonic, page 2



X-15 number 61-0034 sits on Rogers Dry Lake here as the B52 flies overhead in September, 1961. The 412th Test Wing's Hypersonic CTF was involved in the testing of this aircraft, and has been operating at Edwards Air Force Base since the 1950s. The command of the Hypersonic CTF was shifted to Arnold Air Engineering and Development Center in Tennessee Thursday. The change is intended to streamline the functions involved in hypersonic research and flight test, from modeling to wind tunnels and ultimately flight test. (NASA courtesy photo)

## ***Hypersonic test continues at Edwards after realignment***

### **From Hypersonic, page 1**

the flight testing traditionally performed by the 412th Test Wing. The Hypersonic CTF partners closely with entities such as NASA, the Air Force Research Laboratory and the Defense Advanced Research Projects Agency.

“Some of our projects are research and development oriented,” he said. “We can spend five to seven years working on a project for one or two flight tests.”

“Because of the research and development mission of the

Hypersonic CTF, the collection and analysis of flight test data – and feeding them back into our models and simulations – is paramount,” he said.

2017 will mark the 70th anniversary of the first supersonic flight of the rocket-powered Bell X-1, which reached 700 mph. It will also be the X-15's 50th anniversary. In just 20 years, aviation went from breaking the sound barrier with the X-1, to shattering it with the X-15 at Mach 6.7, or 4,520 mph. In comparison, a bullet from an M-16 rifle travels about 3,300 feet per second, or 2,250 miles per hour.



## ***'Tis the season***

Everyone is invited to come out to the Exchange parking lot Dec. 2 for an evening of fun as Team Edwards kicks off the holiday season. Festivities begin at 4 p.m. Enjoy holiday music, the Holiday Card Lane contest, vendors, snow, Santa and the annual Tree Lighting Ceremony at 5:30 p.m. Fifteen Holiday Card Lane participants and 15 vendors will be on hand. (U.S. Air Force photo by Kenji Thuloweit)

# Planning ahead can alleviate holiday stress triggers

By Maj. Kevin Hooker  
412th Medical Group Mental Health

Holiday stress and depression are often the result of three main trigger points: relationships, finances and physical demands. Understanding these trigger points can help you plan ahead on how to alleviate the stress associated with them.

## Relationships

Relationships can cause turmoil, conflict or stress at any time, but tensions are often heightened during the holidays. Family misunderstandings and conflict can intensify – especially if everyone is thrust together for several days. There is a high potential for conflicts to arise when there are so many needs and interests to accommodate. On the other hand, individuals who face the holidays without their loved ones may find themselves especially lonely or sad.

## Finances

Like relationships, financial issues can cause stress at any time of the year. Overspending during the holidays on gifts, travel, food and entertainment can increase stress as people try to make ends meet while they simultaneously try to ensure that everyone on their shopping list is happy.

## Physical demands

The strain of shopping, attending social gatherings and preparing holiday meals can be exhausting. Feeling exhausted can further increase stress, creating a vicious cycle. Exercise and sleep, which are often good antidotes for stress and fatigue, may take a back seat to chores and errands. High demands, stress, lack of exercise and overindulgence in food and drink are the ingredients for holiday illness.

## Twelve strategies

### to mitigate holiday stress

When stress is at its peak, it can be difficult to stop and regroup. In order to prevent normal holiday depression from progressing into chronic depression, try these tips:

**1. Acknowledge your feelings.** Recognize that feelings themselves are not right or wrong. There are a variety of reasons people may actually feel sad or angry during the holiday season. You don't have to force yourself to be happy simply because that's an expectation others have for the holidays. It can be helpful to simply acknowledge how you feel and find a healthy outlet for the emotion you're feeling.

**2. Seek support.** If you feel isolated or down, seek out family members and friends, or community, religious or social services. They can offer support and companionship. Consider volunteering at a community or religious function. Getting involved and helping others can lift your spirits and broaden your social circle. Also, enlist support for organizing your own holiday gatherings, as well as meal preparation

and cleanup. You don't have to go it alone.

**3. Be realistic.** As families change and grow, traditions often change as well. In some cases, it may be possible to maintain traditions, but in other cases, it may no longer be possible. When change seems imminent, find ways to keep the spirit of former traditions alive. For example, if the entire extended family can't gather together in one location any longer, find new ways to celebrate together from afar, such as sharing pictures, emails, or video chats.

**4. Set differences aside.** Try to accept family members and friends as they are, even if they don't live up to your expectations. Set aside grievances until a more appropriate time for discussion. With stress and activity levels high, the holidays might not be conducive to making quality time for relationships. Try to be understanding if others get upset or distressed when something goes awry. Chances are, they're feeling the effects of holiday stress too.

**5. Stick to a budget.** Before you go shopping, decide how much money you can afford to spend on gifts and other items. Then, be sure to stick to your budget. If you don't, you could feel anxious and tense for months afterward as you struggle to pay the bills. Avoid showering people with an avalanche of gifts in an effort to make them happy. In many cases, positive emotions generated from tangible things is often short-lived. Consider donating to a charity in someone's name, give homemade gifts, or start a family gift exchange.

**6. Plan ahead.** Set aside specific days for shopping, baking, visiting friends and other activities. Plan your menus and then make one big food-shopping trip. That will help prevent a last-minute scramble to buy forgotten ingredients, and you'll have time to make another pie if the first one does not work out so well. Allow extra time for travel so that delays won't heighten your stress.

**7. Learn to say no.** Believe it or not, people will understand if you can't do certain projects or activities. If you say yes only to what you really want to do, you'll avoid feeling resentful and overwhelmed. If it's really not possible to say no to something, try to remove another obligation from your agenda to make up for the lost time.

**8. Avoid abandoning healthy habits.** Don't let the holidays become a dietary free-

for-all. Some indulgence is fine, but overindulgence may add to your stress and guilt. Have a healthy snack before holiday parties, so that you don't go overboard on sweets, cheese, or drinks. Continue to get plenty of sleep, and schedule time for physical activity.

**9. Take a breather.** Spending just 15 minutes alone, without distractions, may refresh you enough to handle everything you need to do. Steal away to a quiet place, even if it's the bathroom, for a few moments of solitude. Take a walk at night and stargaze. Listen to soothing music. Find something that clears your mind, slows your breathing and restores your sense of calmness and wellbeing.

**10. Rethink resolutions.** Because unrealistic resolutions can set you up for failure, spend time thinking about what you might reasonably be able to accomplish. Don't resolve to change your whole life to make up for past issues. Instead, try to return to basic, healthy lifestyle routines. Set smaller, more specific goals with a reasonable time frame. Choose resolutions that help you feel valuable and provide more than only fleeting moments of happiness.

**11. Forget about perfection.** Holiday television specials are filled with happy endings, but in real life people don't usually find perfect solutions to problems within an hour or two. Recognize what you have control over, and take action to influence those areas. Do your best to accept what you do not have control over. Expect and accept imperfection.

**12. Seek professional help** if you need it. Despite your best efforts, you may find yourself feeling persistently sad, anxious, irritable, plagued by physical complaints, unable to sleep or unable to face even routine chores. If those feelings last for several weeks, talk to your doctor or a mental health provider. Those professionals can help pinpoint the problem and define a plan that will help you improve your mood and daily functioning.

Remember, one key to minimizing holiday stress and depression is recognizing that the holidays can trigger a variety of negative emotions. Make a concerted effort to identify what is bothering you and develop a plan to contend with the issues you have the power to influence. You may actually enjoy the holidays this year more than you thought you would.

If you do need professional support during the holidays, some supportive resources available on base that can be helpful are:

1. Your chain of command
2. Mental Health/Family Advocacy/ADAPT – 277-5291
3. Airman & Family Readiness – 277-0723
4. Chaplain – 277-2110
5. Employee Assistance Program – 800-222-0364

*Editor's note: Some information for this article was provided by the Mayo Clinic.*

---

**Make a concerted effort to identify what is bothering you and develop a plan to contend with the issues you have the power to influence.**

---

# 412th Force Support Squadron upcoming events

## Aero Club 275-AERO

**Aero Camp** is Monday-Friday, 8 a.m.-4:30 p.m. Three winter sessions available: Dec. 19-23 and 26-30; Jan. 2-6, 2017. Learn the first steps in training our future pilots. Minimum of three to maximum of six participants. Includes private pilot ground school kit. Pre-registration required. Call for price and registration.

## Airman and Family Readiness 277-0723

**Bundles for Babies** is today, 9-11:30 a.m. Quarterly class providing "bundles" of information with a finance piece that focuses on budgeting for your baby from conception to college and a chance to find out what support programs are available on base and in the community. Class is open to all ranks and not limited to first pregnancy.

**Department of Labor 5-day Transition Assistance Program** is Monday-Dec. 9, 7:30 a.m.-3:30 p.m. The Transition Assistance Program workshop is required for all separating and retiring military members; spouses are welcome and encouraged to attend.

**Smooth Move** is Wednesday, 2-3 p.m. Edwards Smooth Move seminar will assist in ensuring you select the proper path for a successful PCS whether it be planning for an OCONUS or CONUS move. The goal is to ensure you receive valuable information necessary to make informed decisions and alleviate stress that might come with a relocation.

**The Thrift Savings Plan Workshop** is Thursday, 3:30-4:30 p.m. Workshop will cover all pertinent information regarding the Thrift Savings Plan.

**Pre-Separation Counseling** is Dec. 14, 8:30 a.m.-noon. Pre-Separation Counseling is a prerequisite for the 5-day Transition Assistance Program. Spouses are highly encouraged to attend.

**Newcomer's Orientation** is Dec. 15, 7:40 a.m.-2 p.m. Required for all active duty members and provides vital information regarding base resources, services, policies, procedures, recreation opportunities and more. Spouses are welcome and encouraged to attend.

**Hearts Apart** is Dec. 15, 5-7 p.m. Our monthly event for families of servicemembers who are deployed, on an extended TDY or on a remote tour assignment. Join us for dinner and fun activities

## Club Muroc 275-CLUB

**Fight Night: UFC 206** is Dec. 10, Doors open at 5 p.m.

**Club Muroc will close for the holidays** Dec. 24-Jan. 2. Happy Holidays!

**Members Appreciation Breakfast** is Dec. 12, 7:30-9:30 a.m.

**Kids Club** is Dec. 13, 5-7 p.m. Games, prizes, Members' children eat for free. Adults must supervise their children. Members only.

## Arts and Crafts Center/Auto Hobby 275-ARTS/AUTO

**What We Offer:** Custom Engraving (wood, plastic, ceramic, acrylic, glass, leather, aluminum, and brass) Custom Framing Wood Hobby Shop Embroidery Dye Sublimation Vinyl Printing (custom shirts, wall and window decals, etc) Visit us today!

**Classes Starting Soon** so we are looking for instructors for painting, stained glass, sewing, and crocheting.

## High Desert Lanes Bowling Center 275-BOWL

**Breakfast with Santa** is Dec., 11, 9-11 a.m. Pancakes, scrambled eggs, bacon, sausage served with juice. Unlimited games and shoes with purchase of breakfast. Fun for the whole family. Visit with Santa and don't forget your camera!

**NFL Sunday Ticket** is 9:30 a.m.-7 p.m. The Big Game is on at High Desert Lanes Bowling. Active Duty who wear their team's shirt, get a free game of bowling with rental shoes! Breakfast served all day. Appetizers and wing specials!

## Library 275-BOOK

**Children's Story Time** is every Wednesday and Friday, 10 a.m. Toddlers and pre-school children are invited for story time and to create very unique craft projects. Volunteer readers are welcome. Special Holiday Story Time for Christmas is Dec. 16

## Muroc Lake Golf Course 275-PUTT

**Spirits Tournament** is Dec. 17, 8 a.m., with a shotgun if not frosty. Sign up by Dec. 14 at the MLGC golf shop. Call for prices. Fun format with choice of prizes based on finishing order. One of our most popular events. Food is included! Holiday themed attire is appropriate! SCGA membership required.

## Oasis Community Center 275-CNTR

**Lunch Hour Table Games Tournament** is Dec. 16, 11:30 a.m.-1:30 p.m. Foosball, ping pong, air hockey, shuffleboard and pool are available.

**Madden 16 Tournament (PS4)** is Friday, Dec. 16, 5-7 p.m. Entry fees go to the overall winner.

## Outdoor Recreation 275-CAMP

**Big Bear Ski Trip** is Dec. 17. Trip departs at 6 a.m. from Outdoor Recreation, and returns approximately 7 p.m. Registration deadline is Dec. 15. Maximum participation: 15, minimum participation: 10. Gear can be rented. Cost includes transportation, ski and snowboard gear. Lift tickets are not included, but can be purchased at ITT located at the Community Center. Minimum age requirement is 6 years.

For more information  
about 412th FSS offerings, visit  
[www.edwardsfss.com/wordpress](http://www.edwardsfss.com/wordpress)

Anyone under 18 years must be accompanied by a parent or adult guardian. Fitting required NLT Dec. 15! We will be heading to Big Bear Mountain for a day of skiing and snowboarding. Socialize with other skiers and snowboarders during the trip. Big Bear provides slopes for all skill levels. Tubing available for a fee. Alcoholic beverages not permitted.

**Need Ski or Snowboard Gear?** Outdoor Rec has all of the equipment you need. Check out the Equipment Rental pricelist on ODR's page at [www.edwardsfss.com](http://www.edwardsfss.com) or come stop by Outdoor Recreation today!



## Adopt me!

Jack is a big guy who loves to play fetch and Frisbee. In fact, he would go all day if you'd let him! He is calm and collected in the house but loves to get outdoors. Jack would make a great fit for an active family. He needs a home with no cats. Contact APET to adopt Jack. APET is located at 615 S. Forbes Ave. They're open Monday-Friday, 4:30-6 p.m.; and Saturday and Sunday, 3:30-5 p.m. 661-258-9525.

# 2016 Federal Benefits Open Season runs through Dec. 12

By Kat Bailey

Air Force Personnel Center Public Affairs

The Office of Personnel Management has set the dates for the 2016 Federal Benefits Open Season from Nov. 14 through Dec 12, which includes the Federal Employees Health Benefits program, the Federal Employees Dental and Vision Insurance program and the Federal Flexible Spending Accounts program.

Open season gives federal employees and retirees the opportunity to review the 2017 rates and benefits and enroll in or change their health care coverage. They also have the opportunity to select supplemental dental and vision coverage as well as elect to participate in a tax-deferred Flexible Spending Account for health care and dependent care.

New for 2017, all FEHB carrier plans will offer clinically appropriate and medically necessary treatment for children diagnosed with Autism Spectrum Disorder.

Most FEHB plans will see benefit and rate changes for 2017. Some plans are dropping out of the program, others are changing their service areas or coverage options while some new plans are entering the FEHB program. OPM encourages all employees to review their coverage during open season to decide what coverage and premiums best suit their needs for the upcoming year.

Enrollment for FSAFEDS, which will be administered by a new contractor in 2017, does not automatically continue from year to year. Employees need to reenroll every year to participate and can submit their enrollments directly through the FSAFEDS website at [www.fsafeds.com](http://www.fsafeds.com).



Open season for federal health benefits programs runs Nov. 14 - Dec. 12, 2016. Now is the opportunity to enroll in, review or change your health care coverage. (U.S. Air Force graphic by Kat Bailey)

Open season is the only time to enroll, change enrollment or cancel coverage unless an employee has a qualifying life event. Open season enrollments or changes will be effective Jan. 1, 2017, for FEDVIP and FSAFEDS and Jan. 8, 2017, for FEHB coverage elections.

Detailed information regarding open season, including a new plan comparison tool, can be found at [www.opm.gov/healthcare-insurance/open-season/](http://www.opm.gov/healthcare-insurance/open-season/).

For more information about Air Force personnel programs, visit <https://mypers.af.mil/app/login/redirect/home>. Individuals who do not have a myPers account can request one by following the instructions at [www.retirees.af.mil/myPERS/](http://www.retirees.af.mil/myPERS/).

## Drag reduction testing aimed at saving money on C-17 jet fuel

From C-17, page 1

could translate to 24-48 million dollars in fuel savings per year.”

Currently, the team is preparing to test the fifth and final configuration using the Lockheed Martin parts. They have recently tested the third and fourth phases, which consisted of placing 12 microvanes toward the aft of the C-17 for phase three and then adding three fairings to each wing for phase four.

The fifth phase will keep the 12 microvanes and six-total fairings with the addition of two fairings on each winglet.

At least three flight tests are conducted with each phase – a flying qualities regression flight and cruise performance flights at .74 and .77 mach. The team will also conduct air-



For phase five of C-17 Drag Reduction testing, two fairings will be placed on each winglet. One winglet fairing is located at the wing to winglet transition (shown) and the other fairing is located on the upper inboard side of the winglet. The winglet fairings will be added to the six wing pylon fairings and 12 aft fuselage microvanes of the aircraft used in phase four tests. All the test articles are 3-D printed by Lockheed Martin and bonded to the aircraft by Boeing contractors. (U.S. Air Force photo by Kenji Thuloweit)

drop tests in December to ensure the microvanes do not interfere with the C-17's airdrop mission.

The flights are always the same to make certain the data collected in each phase can be accurately compared to each other. The 418th FLTS is also using the same C-17 for all the flights. The plane is on loan from Joint Base Lewis-McChord, Washington, along with four maintenance Airmen.

“Aircraft and atmospheric data are collected with the aircraft flying straight and level at a constant airspeed and constant altitude with low winds and low air turbulence at 90 degrees to the wind to mitigate head and tailwind effects. Each flight at a constant airspeed and altitude requires eight hours to acquire sufficient data for the analysis,” said Wozniak.

Flight data is collected and put into a computer program developed by Boeing that puts out parameters for lift and drag and then compares everything to see how much drag is reduced.

The flight tests here are the final stage of AFRL's program following computational fluid dynamics simulations and wind tunnel tests with a scale model. The data collected will be sent to AFRL at Wright-Patterson Air Force Base, Ohio, to see if any of the modifications increase streamlining and reduce drag. After that, Air Force leaders will ultimately decide whether or not any of the modifications should be implemented throughout the C-17 fleet.

The team at Edwards consists of 412th Test Wing personnel, Lockheed Martin and Boeing contractors along with representatives from allied countries who have a stake in the program.

The final flight for the C-17 Drag Reduction Program is expected to happen in December.

## This Week in Edwards Flight Test History

On Nov. 28, 1956, the Ryan X-13 Vertijet made the world's first jet vertical transition flight. Following a horizontal takeoff, test pilot Pete Girard put the test airplane into a vertical hover and then recovered flying speed for a conventional landing. This Edwards History Office file photo was captured at South Base on Oct. 24, 1956, during a vertical takeoff test.



# Searching for Gunijoglas, the **Green Dot** gnome

From 412th Test Wing Green Dot team

The Air Force Green Dot program and its message of interpersonal violence prevention has been center stage for the past several months at Edwards AFB. Taking action by either directing, delegating or distracting when observing a situation that could escalate to interpersonal violence is a Green Dot.

From Dec. 5-9, The 412th Test Wing wants Team Edwards members to find Gunijoglas (Goonie Jog Las). He is a gnome from another planet that has observed Team Edwards and noticed Green Dot activity. Gunijoglas is curious but shy; he wants to meet people and find out about Green Dot activities. Since he's shy, people have to FIND him. Clues to his location are being posted at the [Edwards afb Green Dot](#) Facebook page.

Once located he wants people to take a selfie with him and then write a phrase or slogan regarding interpersonal violence prevention and post the resulting meme to the Edwards afb Green Dot Facebook page ([www.facebook.com/profile.php?id=100014319495221](http://www.facebook.com/profile.php?id=100014319495221)). Those receiving the most "likes" will result in a first- and second-place winner and receive a \$75 and \$25 AAFES gift card respectively. The cards are courtesy of the Edwards Enlisted Spouses Club.

A quick example, upon observing someone in a social situation resisting another's advances, a Green Dot would be taking direct action by simply asking if they are okay or otherwise diffuse the situation. An example of a meme would be "DON'T LOOK THE OTHER WAY, ASK IF THEY ARE OKAY."

**To get started, here's the first clue:** "I have landed in a place where earthlings are seeking knowledge. They appear to



From left: Brig. Gen. Carl Schaefer, 412th Test Wing commander; Marlan Woodside, Green Dot implementer; and Chief Master Sgt. Todd Simmons, 412th TW command chief; pose with Gunijoglas, a gnome that will appear in different locations from Dec. 5-9. People who find Gunijoglas can take a selfie and create a meme to post to the Edwards afb Green Dot Facebook page at [www.facebook.com/profile.php?id=100014319495221](http://www.facebook.com/profile.php?id=100014319495221). (U.S. Air Force graphic by Ethan Wagner and Kenji Thuloweit)

be using objects that they hold in their hands as well as using electronic devices to display information. I also noticed that once they leave this building, they often take the information with them. I hope they bring it back so others may do the same."

[www.facebook.com/profile.php?id=100014319495221](http://www.facebook.com/profile.php?id=100014319495221)

**Follow EAFB online**


[EdwardsAirForceBase](#)  

[@EdwardsAFB](#)  

[EdwardsAirForceBase](#)  

[@EdwardsAirForceBase](#)

**To start receiving  
Edwards Alerts text messages  
on your phone, text  
"Follow EAFBAlerts" to 40404**



<http://issuu.com/desertwings/docs/current>



Commander, 412th TW ..... Brig. Gen. Carl Schaefer  
 Installation Support Director ..... Dr. David Smith  
 Command Chief ..... Chief Master Sgt. Todd Simmons  
 Director, 412th TW, Public Affairs ..... Ed Buclatin  
 Editor ..... Kenji Thuloweit  
 Contributors ..... Christopher Ball, Dawn Waldman

To submit articles or upcoming events  
send an email to  
[newsroom@edwards.af.mil](mailto:newsroom@edwards.af.mil)