



# The Dryden X-PRESS

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# Home, tweet home

## Dryden organizers showcase center at first NASA Social

By Jay Levine  
X-Press Editor

About 50 followers of NASA's social media accounts on Twitter, Facebook and Google+ attended Dryden's first NASA Social May 4, an all-day behind-the-scenes look at the center's planes, people and projects.

More than 390 people applied on the NASA social media website to attend the Dryden NASA Social and the finalists were randomly selected. In addition, eight mainstream media representatives attended. The Dryden Social Media site notched 930,000 impressions during the event. That's up from a daily average that ranges from 8,000 to 30,000 impressions. Impression is a Twitter term about how many people were likely to have received sent messages.

Lisa Mattox, who organized Dryden's NASA Social, said the feedback has been really good.

"We had an enthusiastic group



ED12 0144-44

NASA photo by Tom Tschida

*Social media learned about NASA's Ikhana, which is a Predator B aircraft, as part of Dryden's first NASA Social.*

See Social media, page 4

### What tweeters said about NASA Social at Dryden

The following are some selected tweets from May 4 Dryden Social.

Craig Fifer  
@CraigFifer

One of the biggest take aways from the Dryden Social is that NASA stands for aeronautics as much as for space.

Tim Scott  
@ImDuta

They can sonic boom over my place anytime!

Kim Luu  
@moneyardrisk

Thank you NASA Dryden for an amazing visit. You were the perfect hosts.

Camryn Prevost  
@CamrynPrevost

Flight Opportunities Program strives to make space accessible.

Just took a picture with a NASA test pilot!

See Tweets, page 5

# First C-17 arrives in Ohio

By Gray Creech

Dryden Public Affairs

The U.S. Air Force's first C-17 Globemaster III, known as the T-1 aircraft, arrived April 25 at the National Museum of the U.S. Air Force at Dayton, Ohio, where it will become part of the museum's permanent exhibit of historic aircraft.

NASA research test pilot Frank Batteas, Dryden associate director for Flight Operations, was one of three pilots who ferried the first C-17 to Wright-Patterson Air Force Base. Batteas, who was assigned to the C-17 program as an Air Force test pilot for four years before coming to NASA, flew chase on C-17 T-1's first flight back in 1991.

"I'm fortunate to be a part of this great aircraft and its development since the beginning," Batteas said. "It's a fitting tribute to the designers, engineers, maintenance and aircrew that this aircraft will reside at the Air Force museum for many people to enjoy. It has been my pleasure to fly and test this aircraft."

After he joined Dryden, Batteas occasionally flew the aircraft on joint



ED11 0125-17

NASA photo by Tony Landis

*The first C-17 Globemaster, which was based at Edwards Air Force Base, takes off from Edwards for Ohio.*

Air Force and NASA test missions. After completing the extensive C-17 flight test program, the T-1 aircraft supported many other flight and propulsion test programs for the Air Force, NASA and others. Joint efforts included noise mitigation, throttle-only and engine health management projects.

The Air Force and Dryden partnered with NASA Glenn

Research Center, Cleveland, and Pratt & Whitney, to use the aircraft to complete the first phase of the Vehicle Integrated Propulsion Research, or VIPR, project ground tests.

T-1 made its first flight on Sept. 15, 1991, when it was delivered to the Air Force Flight Test Center at Edwards Air Force Base, Calif., for testing. McDonnell Douglas built

the aircraft at the company's plant in Long Beach, Calif.

This C-17, No. 87-0025, was essentially hand-built for the sole purpose of developmental test and evaluation, with an estimated life span of five years. The aircraft was periodically refurbished as its lifespan grew from five to 21 years.

Joining Batteas on the flight crew for C-17 T-1's last flight were Air Force Maj. Eric Bippert, commander; Air Force Maj. Charles Cain, pilot; and Air Force loadmaster MSgt. Paul Varnish, all of the AFFTC's 418th Flight Test Squadron. Loadmaster Gary Briscoe of The Boeing Co. rounded out the flight crew.

In addition to its role as a flight test aircraft, T-1 also had Hollywood appeal. The aircraft appeared in country superstar Toby Keith's Emmy Award-winning music video "American Soldier." T-1 also appeared in five movies including: "Transformers," "Iron Man," "Transformers: Revenge of the Fallen," "Iron Man 2" and the current production of "Superman: Man of Steel."

## ER-2 returns from MABEL mission

By Alan Brown and Beth Hagenauer

Dryden Public Affairs

NASA's high-flying ER-2 Airborne Science aircraft has concluded its four-week deployment to validate data acquired by the Multiple Altimeter Beam Experiment Lidar, or MABEL, laser altimeter over the Greenland ice cap and surrounding sea ice fields.

After an almost 10 and one-half hour transit flight from its deployment base in Keflavik, Iceland, NASA ER-2 pilot Stu Broce landed ER-2 No. 806 April 27 at the Dryden Aircraft Operations Facility in Palmdale. The flight from Iceland included data collection from the MABEL instrument over a portion of forest in Wisconsin.

"We completed 100 percent of the science flights," said Broce, noting that they were able to acquire data on several additional ad hoc targets that were not in the original plan. "The weather cooperated, the plane worked well as did the science instruments."

The ER-2 flew more than 100 hours on 16 flights in the MABEL validation campaign, including 14 data collection flights over Greenland and surrounding sea ice areas and two transit flights between Keflavik and its home base in Palmdale. Several of the flights were conducted concurrently and on the same flight tracks as flights of other NASA environmental science aircraft involved in the Arctic IceBridge campaign in order

to compare MABEL data with instruments on the other aircraft.

Targets of the flights included wide areas of Greenland's ice sheets and surrounding sea ice fields, the Jacobshavn, Svalbard and East Glaciers, and a volcano in Iceland.

NASA ER-2 research pilot Tim Williams, Dryden's senior representative on the deployment, noted that more than 5.5 terabytes of data were collected by the MABEL laser altimeter, the Cloud Physics Lidar and other instruments on board the ER-2 during the mission.

MABEL was developed at NASA's Goddard Space Flight Center to simulate a similar instrument planned for NASA's IceSat-2 environmental satellite

that is scheduled for launch in 2016. Scientists consider laser altimetry from satellites or aircraft to be the most accurate method of gauging changing elevations over a period of time, and thus determine the thickening or thinning of Arctic or Antarctic ice fields and sea ice related to climate change.

Flight and science team members participated in public and educational outreach activities in Iceland, including briefings on MABEL and IceSAT-2 during a speech on climate by Iceland's president, to the U.S. ambassador and embassy personnel, and to middle- and high-school students, the University of Reykjavik and the Keiler Aviation Academy in Keflavik.



NASA illustration

This map depicts the closure of Dryden's main entrance on Lilly Avenue during the first-phase of a project to refurbish and replace roads around the center.

## Entrance temporarily closed

By Jay Levine  
X-Press Editor

The main entrance to Dryden will close May 21 and remain so throughout the summer while Lilly Avenue is repaired and repaved.

The temporary entrance will be located on Thompson Drive. Thompson Drive will be accessible from Forbes Avenue, which becomes Swann Avenue as motorists approach Dryden. Detour signs will mark the new path beginning on Rosamond Boulevard. Protective Services officers will staff the temporary Dryden entrance at the intersection of Walker Avenue and Thompson 24 hours a day, seven days a week during the road repair project.

"We are working to let people know what's happening so we can minimize the disruption to people's daily lives. The multi-phase pavement project will include replacing asphalt, resurfacing and slurry seal," project manager Vicki Gray said.

For people who work at the Dryden communication site, buildings 4824 and 4870, access will be permitted from Lilly with detour signs beginning on Rosamond showing the route to those facilities during the construction.

Access to the special projects Building 4847

currently housing the X-48 project will be available by continuing down Thompson and following the signs.

The first part of phase one includes work on the section of Lilly from the communication buildings to past McKay up to the special projects Building 4847. Also closed will be the sections of Swann between Lilly and Thompson and the section of Walker from Lilly to Thompson.

The NASA gas station can be reached from Swann via Thompson for employees coming from Dryden, or Forbes for employees heading toward Dryden.

During the second part of phase one road repairs, the section of Lilly from the communication buildings past McKay to Building 4847 will be re-opened, but the main Lilly entrance to Dryden will remain closed. The second part of phase one roadwork will occur on Lilly from Rosamond to the communications buildings and on Lilly from Building 4847 to the flight line area.

Project officials anticipate that phase one will be the most disruptive of the multi-phase road and flightline repair work. In addition to roadwork planned for other phases, the project also includes concrete work on the Dryden taxiways to repair cracks, joints and spalls.

# News at NASA

## Space tech advancing

A rocket launched by one of NASA's Flight Opportunities Program suborbital launch providers, UP Aerospace of Denver, Colo., reached 385,000 feet altitude, or 73 miles high, during a flight that carried a small NASA payload April 5 at New Mexico's Spaceport America.

UP Aerospace' SpaceLoft 6 launch was a mission by the Operationally Responsive Space Office of the Department of Defense, which had extra space available for the NASA-developed payload, the Suborbital Flight Environment Monitor. It was a risk reduction opportunity in preparation for the upcoming SpaceLoft-7 NASA mission in August 2012. Technology validation flights help reduce risks associated with emerging technologies and procedures for future space missions by demonstrating their application in a relevant environment.

In a related development, NASA's Flight Opportunities Program released its fourth Announcement of Flight Opportunities request for proposals April 4 with responses from potential participants due in early May. Notification of selectees is targeted for July 2012.

Payloads are selected for the crosscutting technologies that advance multiple future space missions toward flight readiness status. Although NASA does not provide funding for the payloads themselves, it provides funds for the launch of these payloads to enable the payload developers to have access to NASA's contracted launch providers.

## Social media... from page 1

attend our social from all over the United States," she said. "They soaked up all the information we provided for them through staff presentations and a walk through some of our facilities. They then used social media to help us reach new audiences with what we do at Dryden and the value that NASA adds to people's lives."

NASA social media followers, who came from as far away as New York and Florida, were briefed on the center's history and role within NASA, as well as several of the center's current research projects and missions.

Participants, who represented a wide cross section of the population such as government scientist, filmmaker and a city clerk, also had the chance to speak with Dryden engineers, pilots and technicians. The social media group also was offered a closer look at research and mission-support aircraft during a tour of Dryden's facilities, including an opportunity to sit in the cockpit of an F/A-18 aircraft.

Among research projects and programs highlighted at the social were Automatic Collision Avoidance Technology, or ACAT, the Flight Opportunities Program, Airborne Science, Environmentally Responsible Aviation, and sonic boom analysis and mitigation.

Dryden chief historian Christian Gelzer told attendees that while many people might be familiar with aerodynamic innovations proved at Dryden to benefit military, commercial and private aviation, some of that same technology is also on cars. For example, technology developed with the 1972 F-8 Digital Fly-by-Wire aircraft resulted in no mechanical connection between the cockpit controls and the flight control surfaces of the aircraft. Newer model cars are tapping the same technology for braking systems, cruise control and the gas pedal. Weight reduction and fuel

efficiency are some of the benefits.

Dryden researched the shape of additional aerodynamic fairings in the 1970s, which resulted in a revolution in semi truck design to achieve improved fuel economy, Gelzer explained.

"The thing that impresses me the most is the research at Dryden that benefits so many people," commented Craig Fifer, one of the NASA Social attendees. "A lot of the time research seems abstract, but we saw the connection about what NASA does that applies to everyday life."

Early on, participants were told about supersonic flight and reducing the loud booms produced when an aircraft pierces the sound barrier from Dryden's expert, NASA aerospace engineer Ed Haring. Following his presentation, attendees were able to see and feel a sonic boom for themselves outside by the Bell X-1E rocket plane, one of the first aircraft to penetrate the sound barrier. Jim Less created the boom in a Dryden F/A-18 during a scheduled support flight for the DC-8 and also treated the crowd to a flyby so they could see the aircraft in flight.

"The work we do here enables the work NASA does," Dryden center director David McBride said in opening remarks.

As an example, McBride told attendees that Dryden is continuing to develop technology that benefits everyone even though the concepts are researched on high performance aircraft. For example, an F-16 at Dryden researched ways to avoid the single biggest cause of aircraft accidents and deaths – ground collisions. The systems developed may one day make a potential accident no more than, "a gentle maneuver that doesn't even spill your coffee."

Mark Skoog, ACAT project manager, later explained the system from the F-16 was modified as an application from a smart phone that was researched



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NASA Photo by Tom Tschida

Mark Skoog, second from right, explains an experiment on the Dryden Remotely Operated Integrated Drone, or DROID aircraft.

on a small Dryden aircraft called the Dryden Remotely Operated Integrated Drone, or DROID. The DROID has a 10-foot wingspan and weighs about 60 pounds. The system worked and can be modified to fly on other aircraft, Skoog added.

The system is ready for a test on NASA's Ikhana Predator B next, Skoog said. The key to the development of the smart phone application was a compression algorithm, or mathematical equation, that condensed the 300 gigs, best-available-terrain map into 180 mb, he said.

Concerning ideas and vehicles a little further off the ground, Dryden's Flight Opportunities Program manager, John Kelly, explained some of that program's goals. Maturing technology for commercial space, encouraging and facilitating industry growth and developing technology needed for getting the payloads to

space are some of the key goals.

Other goals include assisting in the development of commercial space platforms to permit frequent flight operations. A recent call for payloads has been released and capability enhancements are underway, such as a Draper Laboratory control system recently used to control a flight of Masten Space Systems' Xombie aircraft.

Several specialized Dryden facilities were featured, including Phillip Wellner, Aircrew Life Support technician, who represented the Life Support branch; Larry Hudson, chief test engineer detailing work in the Flight Loads Laboratory; and Ed Swan, Structural Fabrication Branch chief, who explained elements of the Experimental Fabrication Laboratory.

Presentations also included Dryden's Jim Ross, multimedia supervisor discussing aerial photography, and Lori Losey, senior video producer/director, explaining



ED12 0144-32

NASA photo by Tom Tschida

Social media learned about the Global Hawks during the NASA Social.

some of the intricacies of aerial videography required to support the center's flight research mission.

The event also featured a look at the autonomously operated Global Hawk unmanned Earth science aircraft offered by Phil Hall, a NOAA pilot and Global Hawk

operations engineer Matt Graham. NASA pilots Mark Pestana and Hernan Posada explained some elements of the Ikhana/Predator B unmanned aircraft system and NASA engineers Ethan Baumann and Natalie Spivey discussed a Gulfstream-III business jet

## Tweets... from page 1

James Gomez  
@GomezJames  
Here's to bigger brains! :) Best thing about Dryden Social was everything. My brain feels like it grew 150 percent today.

This is the first time the public has seen X-48C Hybrid Wing Body.

I'd take that gig! Nils Larson, chief test pilot, on working at Dryden: "It's like getting paid to eat ice cream."

Annie Wynn  
@acwynn  
Look at the wing the next time you fly. Look at that upturned end. It's a winglet for more efficient flight from NASA.

Ard (Janice) Collier  
@ardaniel  
Drive-by-wire systems in

modern autos came from 1972s F-8 Digital Fly-by-wire test bed.

Mike McHargue  
@mikemchargue  
Dryden is laying the groundwork for efficient and quieter commercial supersonic flight.

Jackie Silver  
@AgingBackwards  
I'm curled up in a ball having Dryden Social withdrawal symptoms! It was so amazing yesterday!



Camilla Corona (assisted by Heather Archuletta)

@Camilla\_SDO  
Trying the sloppy joe from a tube! Well, it isn't birdseed, but it isn't bad.

Rachel Lena Esterline  
@RachelsLadder  
Visiting the Dryden Social has proved my theory of real community within the workplace. I am so thankful for this experience.

Scott Davis  
@munciegadgetguy  
Dryden has created a cell phone app that brings the F-16 collision-avoidance system to other planes.

Damon Young  
@dayfornt  
Question: What's your most interesting customization?  
Answer: Cutting a CV-990 in half. A CV-990 is a jet airplane.

undergoing modifications for laminar airflow research.

Dryden historian Peter W. Merlin gave a brief explanation of the X-1E, the M2F1 aircraft and the Lunar Landing Research Vehicle prior to attendees having the opportunity to see the actual aircraft.

Doug Abney, a guest at the NASA Social, said he wanted to see the Lunar Landing Research Vehicle while he was at Dryden and it was part of the plan. He recalled flying with former NASA astronaut Buzz Aldrin in a helicopter and Aldrin explaining how the LLRV flew.

"He mentioned helicopter training mimicked the Lunar Lander on descent to the moon.

Then he mentioned the test vehicles. This is the first time I have seen a Lunar Landing Research Vehicle up close. It is impressive to see these machines that helped train astronauts to land on the moon," Abney said. Acting chief pilot Nils Larson

told attendees that he has "an awesome job" and Dryden is a "place where it all comes together." Larson and six other pilots and flight crew signed autographs for the NASA Social attendees including Less, Troy Asher, Mark Pestana, Posada, Kate Pavlock and Ashley Parham.

Jackie Silver, a New York resident, said she saw NASA 747 No. 905 with the Enterprise on top at John F. Kennedy International Airport in New York as her airplane was taxiing out for the flight to California for the Dryden event.

Seeing the Enterprise and coming to Dryden to learn about NASA's work here were "dreams come true," said Silver, who is an author.

NASA social media followers can track the center's activities on its Twitter account, @NASADryden and on its Facebook page. Dryden's social media also is available from its main website at: <http://www.nasa.gov/centers/dryden/home/index.html>

# Wright helps make it SAFE

By Jay Levine

X-Press Editor

Nadia Wright wants Dryden employees to be SAFE.

When people go home from work at the end of the day, she said they should be as healthy as when they arrived. To help see that happens, she is the current leader of the Safety Action Forum for Employees, or SAFE, a Dryden volunteer organization that works to educate people about safety and learn from them if there are hazards that need attention.

For Wright, safety is her job, but it is also her passion. In fact, Joel Wright, her Marine husband, also has a safety job at Edwards Air Force Base. Family and friends often joke that the couple has a “super safe” home.

Nadia Wright began her Dryden career in December 2010 as a support specialist in the Office of Safety and Mission Assurance, assisting with safety projects and with facility inspections. Wright isn't an inspector seeking to identify new hazards, but more of a liaison between the safety office and employees with violations or potential safety challenges in their



ED12 0082-1

NASA photo by Tom Tschida

*Nadia Wright and Shawn Albertson talk to a Dryden employee about safety at the Drydenland event April 18.*

areas.

“If it is a really simple fix, I'll try to find someone in the area, educate them on the hazard and propose a solution. Instead of putting it on the back burner, we want to fix hazards and keep them from accumulating on the facility finding list. At one point, the center had over 800 open items that were identified during

inspections,” she said.

Many of the violations are easily addressed. For example, portable heaters are permitted at Dryden, but there are requirements for having one. Safety inspectors will look to see if the unit is plugged directly into the wall, has tip over protection and that a nationally recognized laboratory tested the

heater, usually signified by a marking on the unit, Wright explained.

The work to fix safety items rather than simply document them helps resolve what she said she saw as a disconnect. People didn't understand why something was a safety violation and why it needed to be fixed. In fact, there often wasn't a way for people to know that they had a safety violation in their work area.

To meet this challenge, Wright developed a spreadsheet including all of the items identified during facility inspections that she manages on the Xnet. As a result, people have taken ownership of safety challenges and helped get them resolved, she said.

SAFE began in February 2011 and Wright became its chairwoman in September 2011. One of the biggest challenges is finding volunteers, as Dryden employees are busy. However, people have stepped up to join the organization.

SAFE has a solid reputation for its coffee chats, where SAFE provides the coffee and treats and employees bring their ideas and questions about safety at the center.

**See SAFE, page 8**

## Dryden Safety Day scheduled for May 16

Safety Day is set for May 16 and the theme is, “Safety starts with you.” The mandatory event is set to start at 8 a.m. in Hangar 4802, where most of the activities will take place.

Jacobs Technology CEO Craig Martin is set to speak at 8:35 a.m. on the company's safety culture. The presentation is called, “Beyond Zero: A culture of caring and changing how we feel about safety.”

The morning session will also include Scott Polgar of the Los Angeles County Fire Department who will explain disaster preparedness and the Community Emergency Response Team, or CERT, at 9:35 a.m. Jeff Baumgartner, a representative of the Antelope Valley Chapter of the American Red Cross will make a presentation at 10:20 a.m.

The Lampshades comedy skits are scheduled at 10:35 a.m. and at the opening of the session after the lunch break at 11:45 a.m. The Lampshades are billed as a “fake lounge act” from Hollywood. Its members are Kate Flannery, who is known as Meredith from “The Office” and Scot Robinson, who was in the movie “Anchorman.”

The afternoon session also features Wayne Dedafoe, Dryden safety specialist, who will cover the topic “Travel and Safety Training” at noon.

Following Dedafoe is CHP officer Edward Smith. The Mojave-based officer's presentation is, “It's not worth it, the dangers of distracted driving.”

Vince Chacon, Dryden associate center director, will wrap up the formal presentation with the safety checklist.

The afternoon sessions include two, one-hour Red Cross and first aid trainings in the ISF beginning at 1:30 p.m., fire extinguisher training demonstrations outside Hangar 4802 at the same time, and safety booths and exhibits inside and outside of Hangar 4802 will be available from 1:05 p.m. to 3 p.m.

The booths and exhibits include the CERT trailer and the California Highway Patrol outside Hangar 4802 and a number of booths inside the hangar including the local environment, the safety checklist, Kern County Search and Rescue, Red Cross first aid, mishaps and lessons learned, Global Motor Cart, or GEM safety, health and wellness center, motorcycle safety, hand tool safety, the Safety Action Forum for Employees and Arcata and Associates.

Dryden's Code M sponsors this Safety Day.

# Landis helps preserve SCA legacy

By Jay Levine  
X-Press Editor

It's not uncommon to find a hobby that brings personal satisfaction, but it's something special when it has meaning to other people.

Dryden photographer Tony Landis is multi-talented, contributing writing or photo expertise to 13 aeronautics books. As a hobby, he also has developed a number of patches, coins, shirts and posters that have been shared and enjoyed by many.

An example of Landis' initiative was his work to create mission markings that were developed and applied to both sides of the NASA 747 Shuttle Carrier Aircraft No. 905. It will stand as a lasting legacy of the aircraft's use in ferrying shuttles, the Boeing Phantom Ray and air launching Enterprise five times for the Approach and Landing Tests at Dryden in 1977.

While working with the 747 SCA crew to archive their history, Landis thought that patches should be created to commemorate the shuttle retirement ferry flights. He saw patches representing the shuttle's retirement, but none including the aircraft that ferried them.

His set of three unofficial shuttle delivery patches was developed to honor the SCA crews and serves as another example of his creativity and the popularity of some of his work. These patches depict the 747 SCA No. 905 carrying the shuttles to their final destinations. Another design was created to commemorate the two SCA aircraft, while the NASA Orbiter Transition Team solely used a fifth patch design.

Each patch has special features that long-time followers of the program will appreciate. For example, the colors on one of the patches are the same ones used on the original NASA 747 No. 905 and the 747 lettering is the same that The Boeing Company used. On the Endeavour patch, there is a sunset denoting the last shuttle to be



Photo courtesy of Leroy Marsh

delivered for permanent display.

"I didn't expect these to be as popular as they were. I just wanted to do something special for the 747 crew," Landis said.

NASA's two NASA 747 SCAs were specially modified to carry the shuttles on top – No. 905 and No. 911. SCA No. 911 was retired earlier this year. Whenever the shuttles landed at Edwards Air Force Base, the orbiters would need to be prepared at Dryden and gently lifted with a giant steel structure called the Mate-Demate Device to its piggyback position on the NASA 747. From there, the shuttle would be ferried back to Kennedy Space Center, Fla.

Landis' love of aviation began when he was a kid. He received a book called *Airplanes and Helicopters* from a sale at school and he was hooked. A section called odd aircraft had the X-22 and the X-15. Landis said he still owns the book that started it all for him, although it is a worn copy that no longer has a cover.

"I grew up in the era of Gemini and Apollo. Astronauts were test pilots and that's where my connection to airplanes grew," he said.

Landis, who has been at Dryden 18 years this July, began his career in the Air Force, where for

four years he was responsible for processing reconnaissance imagery from aircraft and other overhead reconnaissance platforms. From there he went on to the Defense Intelligence Agency. He also worked for an aero mapping company in Maryland and a Hawthorne, Calif., photo lab prior to accepting the position at Dryden.

His work includes two-dozen patches, a dozen coins, 10 posters and a half a dozen shirts – all with an aerospace theme. His only official design for NASA was the flag for Enterprise. The tradition began with Columbia, so Enterprise didn't have one. With the retirement of the shuttles, aerospace history author Dennis Jenkins proposed an Enterprise flag be created and Landis was asked to do the design work.

When Landis was working on the "Hypersonic: The Story of the North American X-15" book with Jenkins, he was taught to use a graphics program to develop side profiles of the X-15 and NB-52N that carried it. Landis' book credits also include some writing, research and photo editing with Jenkins on collaborations such as "The X-15 Photo Scrapbook" and "The North American XB-70A Valkyrie." His latest solo book was "The Lockheed Blackbird Family Photo Scrapbook"



Tony Landis, at left, is seen with the art he designed depicting NASA 747 SCA No. 905's missions. Above are his patches. The background image is of a Discovery/747 pairing heading back to Kennedy Space Center, Fla.

published in 2010.

Earlier he tried his hand at a patch design, which was for the X-38. The X-38 was designed as a crew return vehicle from the space station and increasingly complex vehicles were air launched at Dryden from a pylon under wing of the NB-52B. He then sent his rough sketch to his friend, aviation artist, author and historian Mike Machat, who created the final art design.

Landis makes it clear why he creates his aviation art, "I try to design a patch that I would want to own."

However, he is always respectful of the project he is depicting and gives project officials an opportunity to make recommendations prior to the final design.

In addition to his Dryden imagery, Landis said he believes the SCA artwork and patches are just a few of the items that he believes will have a lasting impact. For example, the back of Hangar 4802 did not have a Dryden Flight Research Center sign for visiting dignitaries to see. With Tom Grindle's support, that became a reality. In addition, he assisted Matt Graham with repainting the NB-52B's nose art and mission markings for the retirement ceremony in December 2004.

See Landis, page 8

**SAFE.. from page 6**

These information events provide an outlet for people to ask questions and pick up literature about the latest accident prevention ideas, or propose some creative solutions.

Wright is quick to add that members are active at booths at events, such as at Safety Day or the recent Drydenland activity. It takes a team to make things happen and she appreciates the members of SAFE. SAFE meets quarterly, but the core committee meets once a month. SAFE also has a new webpage on the Xnet site. It is accessible under the safety menu on the main Dryden Xnet page.

SAFE core members include: Wright; Shawn Albertson, deputy chairperson; Kim Puebla, secretary; Denise Cope, treasurer; Gus Carreno; Geraldlyn Drake; Eric Huffmaster; Dean Lebre; Todd Mostyn; Tami McCoy and Patrick Ray.

Huffmaster has been a key

member. He is charged with keeping the organization's Issue Tracking and Resolution Binder and talking to people about resolving safety challenges contained in the book.

"That's what we do, we talk to people," Wright said. "Because it might be intimidating in a formal setting to bring challenges up, so SAFE is there for you to talk to. We are bridging the gap that we think currently exists among the safety office, employees and communicating messages to management," she said.

Wright's philosophy is simple: "Safety is everyone's responsibility, because when it comes right down to it, we all want to return home in the same condition we came to work and you need to look out for your fellow co-workers to make sure they do the same."

In her safety office position, she said some people misunderstood

her goals at the beginning.

"Accidents do happen. It's not a matter of if, but when. I'm not the bad guy. I'm here to help you understand why certain rules exist," she said.

People's attitudes have changed a lot since Wright came to Dryden, she said.

"They used to be grumpy because, 'Here comes safety.' We still encounter some of that, but it has improved. We are really trying to establish better relationships and a better rapport with people. We're not using a hammer, we're using a handshake," she said.

Wright has taken on the challenge of changing attitudes, but she said she understands that is a slow process overcoming a person's past negative experience with the safety office.

"We can't go back and change people's past experience with safety.

However, we have a great team and we want to help," she added.

Communication is so important to accident prevention and that's a role SAFE fills, Wright said. The committee wants to be the voice for employee's safety ideas or concerns.

"SAFE is all about following up with the employee who voiced a concern or idea. We will do the research. We will help you," she said.

Employees who have safety questions or concerns are welcome to ask SAFE for help. Contact Wright at ext. 6137, or Albertson at ext. 2229, for more SAFE information

SAFE will have a booth at the Dryden Safety Day on May 16, or people can grab a cup of coffee and talk to SAFE members during one of the future chats. It's just important, Wright said, that employees voice their concerns and offer solutions so that the center's goal of zero lost-time injuries can be realized.

**Landis.. from page 7**

Landis also builds model aircraft, a meticulous hobby requiring patience and dexterity. Most models he builds from kits, but others he builds from scratch. Most models take a month, a few hours a day. However, he said a model of the F-16XL took him more than nine months to build.

His affinity for aircraft and models extends to his garage. He had to temporarily move his restored 1965 Mustang out to make way for

his restoration of a Bede BD-5B aircraft. He doesn't intend to fly the aircraft, but rather turn it into a working static display for kids to gain a sense of wonder for aviation. Modifications were made to add realistic elements that make visitors want to sit in the cockpit and try it out. "It sounds and feels like a real airplane," Landis explained.

No matter what his next challenge is, one thing is certain – it will be taken on with enthusiasm.

**Callister, former employee, dies**

Betty June Callister, a former secretary at Dryden, died May 3.

She started on May 15, 1959, as a clerk and typist in the Building Services area and retired in 1986 from her position as a secretary in Flight Operations. She had worked at Dryden 30 years.

People who knew her said she was the glue that held her support areas together. Betty could always be counted on, was an outstanding friend to everyone, was lots of fun and she did a great job that contributed greatly to safe flight operations.

**Bolden announces leadership change**

Geoff Yoder will assume leadership of the James Webb Space Telescope, said NASA Administrator Charlie Bolden. Yoder will become the program director June 30, when Rick Howard retires from that post.

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