

## Non-destructive inspection lab provides proactive maintenance to keep mission going

By Tech. Sgt. Joel McCullough  
445th Airlift Wing Public Affairs



Tech. Sgt. Joel McCullough

**Senior Airman Stephanie Gillispie, 445th Maintenance Squadron non-destructive inspector, explains how to measure magnetic particles used in an oil bath under normal lighting, Feb. 4, 2024.**

Tucked away on the northeast corner of Wright-Patterson Air Force Base in building 4026 through a couple doorways and hallways inside the fabrication flight is an area marked as the “Non-Destructive Inspection Laboratory,” or NDI lab for short.

NDI is the inspection of a structure or component in any manner that will not impair its future usefulness. The purpose is to detect flaws, measure geometric characteristics, determine material structure or composition, or to characterize physical, electrical or thermal properties without causing any changes in the part.

“Our main job is to make sure there are no discontinuities in these testing processes,” said Senior Airman Stephanie Gillispie, 445th Maintenance Squadron NDI inspector. “We make sure everything is structurally sound without destroying or permanently altering parts. That is why it is called non-destructive

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## Rising 6 offers professional, personal development

By Senior Airman Angela Jackson  
445th Airlift Wing Public Affairs

The 445th Airlift Wing has a one-stop shop with the goal of providing career guidance, mentorship, networking and community involvement – the Rising 6 council.

The council, open to enlisted ranks E-1 to E-6, has seen a revival in recent months. Although similar groups exist among several squadrons, the importance of continuing to develop the Rising 6 council on the wing level has been on the agenda of Chief Master Sgt. Gordon M.R. Wager, 445th AW command chief, since his assignment to the wing this past summer.

Staff Sgt. Mike Cage, president of the Rising 6 and 445th Maintenance Squadron crew chief, wants Airmen to realize their leadership potential with help from the council.

“The Rising 6 is here for our Airmen,” Cage said. “We want to give everyone who is an E-6 and below opportunities for career growth and personal develop-

ment, and to become the leaders they desire to be with our help. That’s what this group is all about. It supports the Airmen, so they feel like they have a voice and feel like they are getting what they need to succeed.”

Chief Master Sgt. Monte Snyder, the council’s senior enlisted mentor and 445th Logistics Readiness Squadron’s senior enlisted leader, believes the Rising 6 is an integral part of forming future leaders of tomorrow’s Air Force.

“I would describe the Rising 6 as Airmen on a journey to replace me,” Snyder said. “I say that because the junior enlisted are our future. We should do everything we can to provide them opportunities to advance and to develop effective leadership skills because if not, it’s mission failure.”

— See *RISING 6*, Page 2



# SPOTLIGHT



**Rank/Name:** Master Sgt. Patrick O'Reilly

**Unit:** 445th Airlift Wing Public Affairs

**Duty Title:** Public Affairs superintendent/photojournalist

**Hometown:** Military brat. I was born in Zaragoza, Spain and

graduated high school in Riverside, Ohio.

**Civilian Job:** Public Affairs assistant

**Education:** Associate degrees in fine arts and geography at Sinclair Community College; Associate degrees in fitness, recreation, and services management and public affairs at Community College of the Air Force

**Hobbies:** Photography, art, food (eating and cooking), movies, video games, camping and volunteering with art venues in Yellow Springs and Dayton.

**Career Goal:** Retire from the reserve and civilian position. I plan to develop my own photography and art business and travel before I wither and die.

**What do you like about working at the 445th?** The mission, the people and the adventure. I enjoy taking photos of Airmen in action, showcasing what they do to a learning audience.

**Why did you join the Air Force?** Not sure. I went into the services career field with the 178th Fighter Wing, Ohio Air National Guard in Springfield, and later cross-trained into public affairs. After the 178th lost the fighter mission I transferred to the 445th Airlift Wing Public Affairs office. After four deployments, 10 years of honor guard, and many TDYs I can say that I have received a considerable amount of life experience. The people and the adventures experienced throughout my military career is, in hindsight, why I joined and is why reasons were developed as to why I just never left.

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Monthly meetings not only provide an avenue of information to those seeking to advance their Air Force career, but it also boosts morale, builds camaraderie and gives Airmen a sense of purpose with quarterly community service projects.

"The goal of this council is to improve the enlisted experience and to prepare them to be effective leaders," Snyder explained. "Being in this council can empower and inspire, by giving Airmen opportunities to enrich their lives both military and civilian."

"We all need to feel like we contribute to something bigger than ourselves," he continued. "The council's community outreach program gives Airmen the opportunity to volunteer their time and services which makes a positive impact on them and the community we serve."

Airmen in the corresponding ranks are automatically a member of the Rising 6 and may join at any time by attending the monthly meetings on Sunday at 10 a.m. during the UTA weekend. Locations vary and will be announced.



Senior Airman Angela Jackson

**Chief Master Sgt. Travon Dennis, Fourth Air Force command chief from March Air Reserve Base, California, speaks with 445th Rising 6 members during his visit at Wright-Patterson Air Force Base, Ohio, Jan. 6, 2024.**



## INSPECTION, from page 1

inspection."

The five standard NDI disciplines include: liquid penetrant, magnetic particle, eddy current, radiographic testing and ultrasonic testing. They are used to detect subsurface flaws.

Gillispie, who is currently the only one filling a full-time position in NDI, not only works with large stationary machines but also portable ones that she takes out to aircraft. She explained how the eddy current devices work while demonstrating some of the capabilities and everyday tasks she completes.

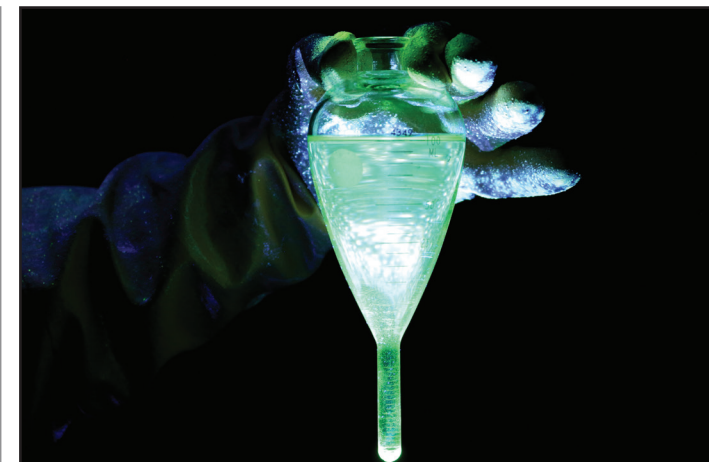
Eddy current testing uses electromagnetic induction to identify defects. The process relies upon a material characteristic known as electromagnetic induction. When an alternating current is passed through a conductor an alternating magnetic field is developed. Any changes in the conductivity of the material being examined, such as near-surface defects or differences in thickness, will affect the magnitude of the eddy current, resulting in spikes on her monitoring equipment.

"We use this technique to inspect components of a C-17 engine," Gillispie said. "All defective parts are removed from the aircraft. We log everything via paperwork for the Air Force so that they can collect the data for research purposes."

Gillispie also demonstrated the use of magnetic particles and liquid penetrants. One of the larger machines in the lab is the magnetic particle bath. It uses a fluorescent oil combined with magnetic dust particles to penetrate and identify defects in parts.

"I like my job," said Gillispie with a smile. "It's nerdy, and I'm a nerdy person."

Also, inside the back shop is an inspection booth that looks similar to a photo booth. The booth uses ultraviolet lamps combined with liquid penetrants to



Photos by Tech. Sgt. Joel McCullough

**Senior Airman Stephanie Gillispie, 445th Maintenance Squadron non-destructive inspector, holds the fluorescent oil used in a magnetic particle bath under a ultraviolet light at Wright-Patterson Air Force Base, Ohio, Feb. 4, 2024.**

detect surface level flaws. The liquid penetration technique requires an inspector to use a cleansing chemical, dye and developer to detect the flaws properly.

"We use these processes to detect things that are not technically visible to the naked eye," Gillispie explained. "It's one of my favorite processes."

The inspector went on to explain there are many different causes for defects or cracks in parts, including stress fatigue, impact and major accidents.

She said there can also be corrosion stress fatigue cracks, adding that, "those are my least favorite because they take the longest."

The final piece of NDI is the X-ray control room. Although it is currently under construction as it is undergoing a major upgrade, Gillispie explained how their X-ray uses gamma radiation to take photographs, or X-rays, of parts. The system they are upgrading will take the system from a chemical process of photography to a completely digital one.

"This is my favorite system, so I am hoping to get it up and running as soon as possible," Gillispie said.

When the 445th MXS fabrication flight won MXS of the year for 2022 at the Air Force Reserve Command level, Chief Master Sgt. Clifton Griffie, 445th MXS senior enlisted leader, highlighted how NDI is an important piece of maintenance, discovering issues before they might have a bigger negative impact on the mission.

"They'll go out, and they'll verify wheels," he said. "When they break down the wheels, they'll check them for cracks and check bolts for cracks, so it's a lot of preventative maintenance as well, not necessarily a reactivity, but also proactive."



**Senior Airman Stephanie Gillispie, 445th Maintenance Squadron non-destructive inspector, demonstrates how an X-ray image is taken of an aircraft using radiation at Wright-Patterson Air Force Base, Ohio, Feb. 4, 2024.**





# Air Force, Space Force announce sweeping changes to maintain superiority amid Great Power Competition

Secretary of the Air Force Public Affairs

AURORA, Colo. (AFNS) -- The Department of the Air Force's senior civilian and military leaders, Feb. 12, unveiled sweeping plans for reshaping, refocusing, and reoptimizing the Air Force and Space Force to ensure continued supremacy in those domains while also better posturing the services to deter and, if necessary, prevail in an era of Great Power Competition.

Taken together, the changes made public Feb. 12 and endorsed by Secretary of the Air Force Frank Kendall; Performing the Duties of Acting Under Secretary Kristyn Jones; Air Force Chief of Staff Gen. David Allvin; and Chief of Space Operations Gen. Chance Saltzman represent one of the most extensive recalibrations in recent history for the Air Force and Space Force.

"Today, we are announcing 24 key decisions that are going to address the current force and our ability to stay competitive," Kendall said in announcing the changes and the rationale behind them. "We need these changes now; we are out of time to reoptimize our forces to meet the strategic challenges in a time of Great Power Competition."

While the changes feature a mix of near-term and longer-term initiatives, senior leaders emphasized the need for speed.

The changes included in the plan are grouped in four main categories – Develop People, Generate Readiness, Project Power, Develop Capabilities – and include:

### Develop People

- Consolidate force development functions under an expanded Airman Development Command to provide Airmen a common, mission-focused development and training path.

- Expand technical tracks for officers and create technical tracks for enlisted Airmen; reintroduce warrant officers in IT and Cyber fields to maintain technical leadership in these highly perishable skills.

- Develop "Mission Ready Airmen" with training focused on a mix of skills needed for wartime operational mission readiness.

### Generate Readiness

- Implement large scale exercises and mission-focused training encompassing multiple operational plans to demonstrate and rehearse for complex, large-scale military operations.

- Incorporate no-notice/limited-notice operational readiness assessments and inspections in the Air Force and Space Force to reflect pacing challenge requirements.

- Restructure key processes related to aviation spares and weapons systems to be data-driven and risk-informed to improve weapon systems health.

### Project Power

- Structure Air Force Operational Wings as mission-ready "Units of Action" categorized as Deployable Combat Wings, In-Place Combat Wings, or Combat Generation Wings. Each will have its own structure, with a redesigned concept of support for agile combat employment or ACE, to ensure the wings are prepared to execute their missions with assigned Airmen and units.

- Establish the relationship between Combat Wings and Base Command. Combat Wings will focus on mission level warfighting readiness and Base Commands will focus on supporting Combat Wings and operating the base in competition, crisis and conflict.

### Develop Capabilities

- Create a Department of the Air Force Integrated Capabilities Office to lead capability development and resource prioritization to drive Department of the Air Force modernization investments.

- Combine disparate efforts to create the Office of Competitive Activities to oversee and coordinate sensitive activities.

- Create a Program Assessment and Evaluation Office to foster structure and incorporate a more strategic and analytically based approach to resourcing decisions.

*This is an excerpt of the original article. Visit the 445th Airlift Wing website at [www.445aw.afrc.af.mil](http://www.445aw.afrc.af.mil) to read it in full.*



# 87th APS Port Dawg Challenge



(left) Senior Airman Kingsley Oteng, 87th Aerial Port Squadron passenger services representative, fastens a chain to secure a load during the Port Dawg Challenge at Wright-Patterson Air Force Base, Feb. 4, 2024. (right) Members of the 87th Aerial Port Squadron guide a forklift carrying cargo during the Port Dawg Challenge, Feb. 4, 2024. The PDC is an opportunity for Airmen to demonstrate aircraft loading operations skills.



Photos by Master Sgt. Patrick O'Reilly

(left) Staff Sgt. Matthew Colonna, 87th Aerial Port Squadron air freight representative, and Tech. Sgt. Oyekola Mu-stapha, 87th APS cargo processing representative, secure a forklift onto a pallet as Master Sgt. Bakiden Gordon, 87th APS passenger services supervisor, observes during the Port Dawg Challenge, Feb. 4, 2024. (right) Tech. Sgt. Ryan Koch, 87th Aerial Port Squadron load planning representative, fastens a strap to secure a load during the Port Dawg Challenge at Wright-Patterson Air Force Base, Ohio, Feb. 4, 2024.





# Around the wing ...



Master Sgt. Patrick O'Reilly

Members of the 445th Aircraft Maintenance Squadron tug for the win in a match of tug-of-war against the 445th Maintenance Squadron (not pictured) during the 445th Maintenance Group Combat Dining Out at Wright-Patterson Air Force Base, Ohio, Feb. 3, 2024. Military and family members laughed and enjoyed an evening of camaraderie and fun as they cheered for others participating in the grog, tug-of-war and nerf gun battles.



Senior Airman Angela Jackson

(left) Lt. Col. Robert Wengerter, 445th Mission Support Group commander, passes the guidon to Lt. Col. Timothy Johansen, incoming 445th Force Support Squadron commander, during a change of command ceremony Feb. 3, 2024, at Wright-Patterson Air Force Base, Ohio.



Senior Airman Angela Jackson

(left) Col. Matthew Muha, 445th Airlift Wing deputy commander, passes the guidon to Lt. Col. Robert Wengerter, incoming 445th Mission Support Group commander, during an assumption of command ceremony Feb. 3, 2024, at Wright-Patterson Air Force Base, Ohio.



Tech. Sgt. Joel McCullough

(left) Master Sgt. Jason Kretschmar, 445th Maintenance Squadron munitions systems craftsman, Tech. Sgt. Jordan Reed, 445th Maintenance Group plans and scheduling and Tech. Sgt. Jacob Taylor-Hill, 445th MXS munitions systems craftsman, perform Shoot, Move and Communicate training at Wright-Patterson Air Force Base, Ohio, Feb. 4, 2024.



# News Briefs

## In Memory



### Maj. Matthew Kettler

Sept. 10, 1984 -  
Feb. 12, 2024  
89th Airlift Squadron  
Our thoughts and  
prayers go out to Maj. Kettler's family and friends.

## Newcomers

Maj Stacy Thomas, ASTS  
2Lt Alessandra Armstrong, LRS  
SSgt Jarrod Chaidez, SFS  
SSgt Benjamin Maxey, AMXS  
SSgt Kasey Meadows, MXS  
SSgt Samuel Ryan, LRS  
SSgt Ryan Straub, AMXS

SrA Brunt` Graham, FSS  
SrA Alex D'Avello, OSS  
SrA Andrew Edmondson, FSS  
SrA Jackie Hwnag, SFS  
SrA Justin Shuster, AMXS  
SrA Ian Steck, MSG  
AB Ryan Connor, 87 APS  
AB David Lopez, 87 APS

## Promotions

**Senior Master Sergeant**  
Caleb Boles, ASTS  
Aaron Fritz, AMXS

**Master Sergeant**  
Phillip LeMaster, OSS  
Joseph Micalief, AES

**Technical Sergeant**  
Matthew Colonna, 87 APS  
Devin Copeland, AES  
Jacob Dietz, 87 APS  
Ryan Koch, 87 APS  
Austin Miller, AMXS  
James Moore, 87 APS  
Bryce Phelps, 87 APS  
Joseph Richer, CES  
Samuel Schneider, 87

APS  
Corey Scott, 87 APS  
Zachary Shonk, LRS  
Kelly Sloan, 87 APS  
Sean Stratton, 87 APS

**Staff Sergeant**  
Xavier Blurton, OSS  
Ian Chisholm, 87 APS  
Esa Edwards, AES  
Brooke Russell, ASTS  
Dayvian Wells, SFS

**Senior Airman**  
Austin Augsburger, AES  
Daisa Feaster, ASTS

**Airman First Class**  
Gregory Knoop, AMXS  
Jacob Miller ASTS  
Mikayla Murphy, AES

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U.S. Government Printing Office  
5-00001-445AW



# Before it gets overwhelming, please reach out

By Vera Ensalaco  
445th Airlift Wing Director of Psychological Health

In past articles, I've talked about mental health and emotional well-being, self-care, stigma for reaching out, where to get services, and what to look for in those around you that may be struggling.

This month, I want to talk about how to handle when you've done all that you know, been advised, and things still go awry. This can be a breakup, problems with kids, loss of a job or other finance issues, substance misuse, health issues, or a death.

These are extremely painful events with subsequent feelings. Situations are rarely as they seem nor are they simple. They are complex.

What you are feeling – whether that be sadness, anger over the situation or at the people involved, betrayal, distrust, anxiety, fear – is valid. The process you are going through, whether it is grief, remorse, anger,

or trust, is valid as well.

What is important to remember is that you do the best that you can at any given time and still sometimes things don't work out. You can second guess yourself forever – if only, what if, maybe I could have done something different – life still happens.

These feelings are natural. Before it gets overwhelming, please reach out to someone who you trust and is supportive, who can give you a different perspective.

Sometimes life on life's terms is the hardest thing. Sometimes it is the most beautiful. As always, there are the helping agencies available for services, resources, or if you need to talk.

Winston Churchill once said, "If you're going through hell, keep going."





# Understanding confined spaces

By Master Sgt. Joe Klimaski  
445th Airlift Wing Occupational Safety & Health

Confined spaces are everywhere – manholes, culvers, hoppers, tanks, pits, ducts, etc. Truth be told, most people probably have no idea what a confined space actually is and/or the potential hazards that exist within these spaces.

The Occupational Safety and Health Administration defines a confined space as, “A space large enough to bodily enter, has limited and restricted means for entry and exit, and is not meant for continuous human occupancy.”

Furthermore, confined spaces may be broken down into two distinct types: Permit Required Confined Space and Non-Permit Required Confined Space. The difference between the two is that a Permit Required Confined Space 1. Has the presence or potential of a hazardous atmosphere or condition to exist, and 2. Entry may only occur by way of a written permit.

While entering a confined space may seem com-



Courtesy Photo

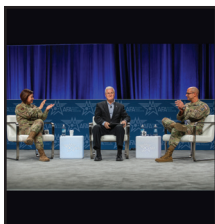
pletely harmless, it's critically important to know that potentially serious hazards or conditions may exist within a space i.e., oxygen deficient atmosphere, toxic gases or fumes, materials within the space that could engulf an entrant, and/or an internal configuration within the space that could entrap an entrant.

Needless to say, confined space entry is a “big deal,” as serious injuries and fatal mishaps have occurred within general industry. Therefore, necessary precautions must be taken before entry i.e. hazards evaluation, atmospheric testing/monitoring, etc.

Moral of the story? At no point in time should a person ever enter a confined space without first knowing the intricacies and details of the confined space and are able to determine that entry is safe and free of hazards or dangerous conditions.

For more information or questions, please contact the wing safety office at (937) 257-5767.

## On the Web



**DAF senior enlisted advisors discuss Airmen, Guardians in the fight**



**Tackling Voting Challenges of Military Members**



**2023 Year in Review video**



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