



THE QUARTERLY GRANITE

1Q22

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## BEDROCK INTERNS



**1LT FORREST DOSS**  
UNIT: 3AS

**DIGITIZED AIRCREW INITIATIVE**

1Lt Doss spearheaded the 3AS's Digitized Aircrew Initiative and created a streamlined procedure for their new digital mission paperwork format. His efforts alleviated workload on aircraft commanders by allowing all forms to be completed entirely on their personal iPads, resulting in increased crew efficiency.



**TSGT CODY LAMMY**  
UNIT: 9AS

**AIRCREW INTERCOM BOX**

TSgt Lammy is a C-5 Evaluator Loadmaster from the 9AS. He primarily worked on audio and visual production, and produces the Bedrock podcast. He is currently working on a prototype for a self-contained intercom box for aircrew members.



**SSGT JOSHUA HICKS**  
UNIT: 3AS

**AERPS PRESSURE TESTING PLUG**

SrA Hicks worked hand in hand with TSgt Dickson to further develop the partnership with the Metals Technology shop. With his new knowledge of machining, he designed and created a pressure fitting to fit into the Aircrew Eye and Respiratory Protection System mask to ensure the mask is serviceable during testing.



**SRA JOSHUA LEROI**  
UNIT: 436OSS

**INFORMATION SYSTEMS MANAGEMENT**

SrA Leroi supports all administrative duties within the Bedrock Innovation Lab, while continuing his degree in Information Systems Management. To this end, SrA Leroi works with 3D printers to design various prototypes, especially to further develop the utility of the Cameo printer system.



**SRA HALI BROWN**  
UNIT: 436APS

**DIGITIZED CARGO INITIATIVE**

SrA Brown supports all continuity efforts, specifically focusing on the venue tours. She enhanced the quality of venue tours by ensuring each tour was met by the same quality of professionalism, fielding questions, and providing an avenue for interested individuals to get further information about the program.



# 02

## AFRC BEDROCK INTERNS



**MAJ RYAN COX**  
UNIT: 326AS

**326AS DIGITAL TRANSFORMATION**

Maj Cox led the digital transformation of scheduling, go, no-go processes, post mission review, and aircrew messaging. Since the 326AS has many members who are geographically separated from home station, Maj Cox's digital initiatives allowed greater scheduling fidelity and better mission essential messaging, eliminating unnecessary delays.



**TSGT TYLER DICKSON**  
UNIT: 512MXS

**AIRCRAFT METALS TECHNOLOGY**

TSgt Dickson worked to develop a partnership with the metals technology shop and integrate metals tech into ongoing Bedrock projects, manufacturing a C-5 spinner removal tool, a prototype AERPS pressure testing plug, a battery pack adapter for the "Bleeding Bob" apparatus, among other projects.

### INTERESTED IN AN INTERNSHIP?

THIS IS THE FIRST ITERATION OF THE 512AW INTERNSHIP PROGRAM.

DURING A 4 MONTH PERIOD, AN INTERN WILL LEARN ABOUT DESIGN THINKING, THE INNOVATION ECOSYSTEM, AND WILL BE ABLE TO BRING VALUABLE COLLABORATIVE EXPERIENCE BACK TO THEIR UNIT!

OUR NEXT INTERNSHIP COHORT BEGINS 1 MAY - SOLICITATIONS WILL BE SENT THROUGH TMT!

## STAFF SPOTLIGHT



**1ST LT SORAYA PERON**

**CHIEF, COLLABORATION PARTNERSHIPS**

1st Lt Peron manages the cross-organizational collaboration space and podcast studio, and is Bedrock's primary scheduler and event coordinator. Additionally, she is responsible for managing Bedrock's venue and coordinating outreach events with industry and academia.



**2D LT HANNAH COMPTON**

**COMPUTER SCIENCE, TECHNOLOGY, AND WEB DEVELOPMENT DIRECTOR**

During her time at Bedrock, 2d Lt Compton worked to expand the Bedrock website and instituted a computer science curriculum for the intern program. Additionally, 2d Lt Compton worked on several programming projects, namely programming a bot to automate the MilPlanner process for the 3AS.

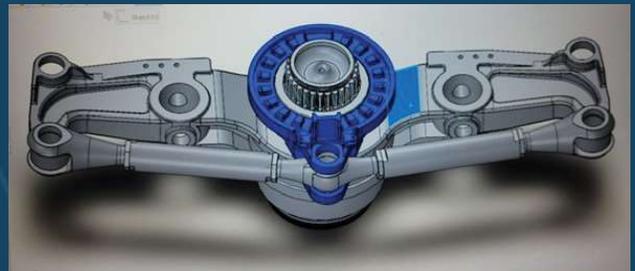
# INNOVATOR OF THE QUARTER

# 03



## MSGT MICHAEL WORKMAN 512TH AIRCRAFT MAINTENANCE SQUADRON

MSgt Workman created 3D printed training tools and procured a C-5 Engine Run VR simulator. These training aids were low-cost training aids given to hydraulics, AR, or other maintainers to practice assembly and disassembly when aircraft and FTD were unavailable. Further, these tools helped get younger airmen more proficient with training items that are sometimes unavailable or more difficult to get hands on time with it, providing real time training, with parts as they would appear in a real world scenario. The simulator functions for both jet mechanics and flying crew chiefs to practice when the FTD and simulators are unavailable - this helps with proficiency and reduces fail rates with both initial and refresher classes. His constant work towards improvement and innovation are definitely inspiring!



# 04

## DEFENSE VENTURES PROGRAM



The Defense Ventures Program, a partnership between AFWERX and Shift.org, is an industry immersion program that selects innovative officers, enlisted personnel and DoD civilians in the midst of their careers to join leading venture capital firms and tech companies across the US for eight weeks to bring the latest commercial tech trends and innovation back to the DoD.



**MAJ RYAN NICHOL**

### COHORT 11

“During my fellowship, I was embedded with Crowdbotics, a low-code/no-code software application development company. Since its founding in 2017, the company has created 25,000 apps. While working with them, I was exposed to multiple facets of their operations and spent most of my time working on their federal strategy. Crowdbotics has a Phase II SBIR project with Seymour Johnson AFB and I was able to help the team map out a strategy to transition the project from R&D to sustainment. I’ll bring back lessons learned from industry’s perspective on the challenges and benefits associated with working with the federal government.”



**MR. DAVE JACKSON**

### COHORT 7

“During the DVP program, I joined Refinery Ventures, a venture capital firm to learn the latest commercial tech and innovation trends back to Bedrock to help grow our program and entrepreneurs at Dover Air Force Base. The Defense Ventures Program help expand my network of innovators within the Department of Defense, acquire 21st-century private sector knowledge. Refinery Ventures provided me the opportunity to dive deep into venture capital and dual-use technology from around the country to be better informed when supporting Bedrock’s interactions with commercial companies looking to collaborate with Team Dover.”



**MAJ PACKY HILL**

### COHORT 6

“For six weeks, I was paired with Decisive Point - a New York-based advisory and venture capital firm founded by a small group of veterans with different backgrounds to advise and fund founders with “the guts to try” - a motto dating back to OPERATION EAGLE CLAW. During my time with Decisive Point, I advised portfolio companies on strategies and contacts available to them in the Department of Defense, and helped the firm craft and build out curriculum for the Propel Accelerator, hosted by Brooklyn’s NewLab during Summer 2021. I brought some of the tools and lessons learned back to share with others to make us better customers for private sector partners we wish to work with.”



### INTERESTED? APPLY FOR THE 8-WEEK DEFENSE VENTURES FELLOWSHIP!

Get your seat at the table in the right room. Shift’s Defense Ventures Fellowship is a partnership with AFWERX to deliver an industry immersion program that selects innovative officers, enlisted, and civilians in the midst of their careers to join venture capital and technology companies across the US for eight weeks to bring the latest commercial tech trends and innovation back to the Department of Defense.

Applications now open!



TALENT,  
TECHNOLOGY  
AND TRANSITION

05

## AFWERX FELLOWSHIP SPARK TANK '22



“SPARK TANK CATCHES FIRE” -GREG HADLEY, MARCH 23, 2022

[HTTPS://WWW.AIRFORCEMAG.COM/ARTICLE/SPARK-TANK-CATCHES-FIRE/](https://www.airforcemag.com/article/spark-tank-catches-fire/)

SPARK TANK IS AN ANNUAL COMPETITION DURING WHICH AIRMEN AND GUARDIAN PITCH INNOVATIVE IDEAS TO TOP DEPARTMENT OF THE AIR FORCE LEADERSHIP AND A PANEL OF INDUSTRY EXPERTS. HOSTED EACH YEAR AT THE AIR FORCE ASSOCIATION’S WARFARE SYMPOSIUM, THOUSANDS OF ATTENDEES WATCH THE PITCH COMPETITION.



“During this five-month cohort, I gained insight into AFWERX capabilities, shared by expertise and explored how we can work together to solve Air and Space Force challenges. To develop the workforce we need for our future, it is imperative that we expand and grow our collective knowledge and influencer networks, and uncover pathways to resources that enable us to keep pace in an environment where change is unyielding. General Brown has called upon all Total Force Airmen to prioritize speed of delivery and foster a culture of courageous problem-solvers through collaboration and diversity of thought, approach and solution execution for current and future operations. The AFWERX Fellowship is one small step in execution of the CSAF’s vision. During the Fellowship, I was able to interact and work with previous SPARK Tank finalists to help move their projects towards full implementation. Additionally, I assist the AFWERX and SAF/MGB teams work on projects that are helping accelerate change in the Air Force. Finally, I participated and help coordinated the quarter-finals, semi-finals and finals of SPARK Tank 22.” -

Mr. Jackson

SPARK TANK

2022

# 06

## PAST EVENTS

### DOVER AFB TECH EXPO

The Dover AFB Tech Expo is a great opportunity for airmen to speak directly with companies, see the latest in tech, and grab some swag. Co-hosted by the 436CS, AFCEA and the Bedrock Innovation Lab, the expo was open to all military, government, and contractor personnel able to attend.



**SOME OF OUR  
GUESTS THIS YEAR  
INCLUDED:**

Verizon  
Magnum Electronics  
Bose Corporation  
ID Technologies,  
and many others!

#### WHEN/WHERE

Wednesday  
March 9, 2022  
0930-1330

**The Landings**  
479 Chevron Ave  
Dover AFB

# TECH Expo



## PAST EVENTS

### WOMEN'S HISTORY MONTH PANEL

For Women's History Month, female leaders from multiple units across base shared their unique perspectives on serving in the military and the challenges they've overcome.



### EMOTIONAL INTELLIGENCE PROFESSIONAL ENHANCEMENT COURSE

TSgt Benson, the Mental Health Flight Chief from the 436OMRS presented an emotional intelligence professional development course, to help present cognitive distortions and thinking mechanisms to help Airmen develop their mental health skills.



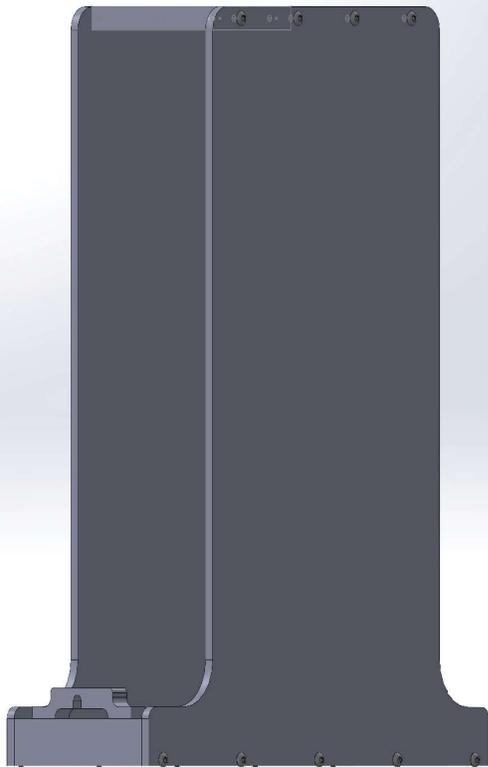


## PROJECTS

### PS5 MOUNT

TSGT TYLER DICKSON, 512MXS; SSGT JOSH HICKS, 3AS

The PS5 enclosure is a joint effort, engineered to encase five PS5 consoles purchased by the Dover AFB Dorm Leaders, allowing the dorm leaders to mount the PS5 consoles to the furniture. This initiative gives residents the opportunity to play the latest generation of games hosted on the PS5, with the potential to increase quality of life - with this upgrade, the dorm Day Rooms will be back on the forefront of entertainment gatherings, increasing the likelihood of interactions amongst the dorm residents outside of their rooms. This also will allow the Dorm Management Team to hold competitive tournaments with the most up to date hardware and games available on the open market.



# 10

## SUAS WORKING GROUP



### EASY AERIAL

The 436OSS was awarded a \$750k Phase II SBIR contract with Easy Aerial! Easy Aerial (“EA”) is an American aerospace company that specializes in the development & manufacturing of robotic systems that automate monitoring and surveillance using smart autonomous drone. EA’s primary product is a drone-in-a-box system that can be deployed remotely.

Here at Dover AFB, EA will be primarily working with Airfield Management, developing capabilities for FOD detection, airfield inspections, and lighting checks using AI and Machine Learning. The Bedrock Innovation Lab teamed up with the OSS for Phase I deliverables, and will continue to support the 436OSS through the Phase II deliverables. This contract is Bedrock’s 6th SBIR in our portfolio, and this program will be integral to Dover AFB’s drone program!

## AFRC RECRUITMENT COMMERCIAL

MSgt Erin N. Esquer had an opportunity to audition for an Air Force Reserve Command commercial spot, as well as the emcee for the MAJCOM’s Annual Awards Ceremony, a position she was selected for. The commercial will be used nationally for recruiting purposes. She took advantage of the Bedrock Podcasting Studio for her audition for an excellent environment to showcase her talent.



## TRAINING RESOURCES



### AIR FORCE GREEN BELT TRAINING

Lean Six Sigma is a disciplined, problem-solving and process improvement approach that focuses on eliminating waste, reducing variability, and improving customer satisfaction. The benefits of Lean Six Sigma ultimately drive right to the bottom line! This course will prepare you to lead smaller scoped projects in your immediate work environment, or to participate more effectively in complex projects led by a higher-level practitioner.

Sign up at:

<https://usaf.opusworks.com/edu/index.asp?bhcp=1>

Be sure to add your Wing Process Manager's email for tracking for certification. Talk to your UTM about the Special Experience Identifier (SEI) for this course.

### DIGITAL U

Digital University is an online learning platform catering to warfighters by offering courses to improve their technical skills. DU is revitalizing the way the Air Force and the Space Force train its cyber warriors by providing integrated training pathways that guide users toward desired end results.

Air Force Digital University strives to build digital competency and help Airmen build specialized technical skills. One component of DU is the nanodegree program in partnership with Udacity. Learn more about the program and how you can get involved at:

<https://digitalu.af.mil/>

<https://digitalu.udemy.com/organization/home/>



# 12

## PODCASTS

### SAVING PATIENT RYAN

REACH 797 WAS IN GERMANY WHEN THEIR MISSION UNEXPECTEDLY CHANGED - A HIGH PRIORITY MEDICAL EVACUATION. THE AIRCREW AND 18 MEDICAL PERSONNEL FLEW 8,000 MILES, OVER 19 HOURS NONSTOP, FROM BAGRAM AB TO SAN ANTONIO, TEXAS TO DELIVER RYAN, AN INJURED ARMY RANGER, INTO THE CARE OF BROOKS ARMY MEDICAL CENTER. RYAN, HIS WIFE ASIA, AND THE CREWMEMBERS RECONVEND ON ZOOM TO RECAP THE HARROWING JOURNEY.



### DEFENSE VENTURES PROGRAM

BREAKING DOWN BARRIERS AND BRIDGING THE GAP BETWEEN THE DOD AND INDUSTRY. MAJ RYAN NICHOL AND LT ANDREW CUCCIA, BOTH DVP COHORT II ALUMNI, DISCUSS THEIR SILICON VALLEY EXPERIENCES AND WHAT THEY LEARNED DURING THEIR FELLOWSHIP.

### INTELLIGENT LOCKER: HOW AN AIRMAN IS SCALING HIS IDEA AF-WIDE

AIR FORCE INNOVATOR, SRA NOAH MORALES, JOINS THE BEDROCK PODCAST TO DETAIL HIS AIR FORCE INSTALLATION AND MISSION SUPPORT CENTER INNOVATION RODEO WIN.



APPLE



SPOTIFY



GOOGLE PODCASTS