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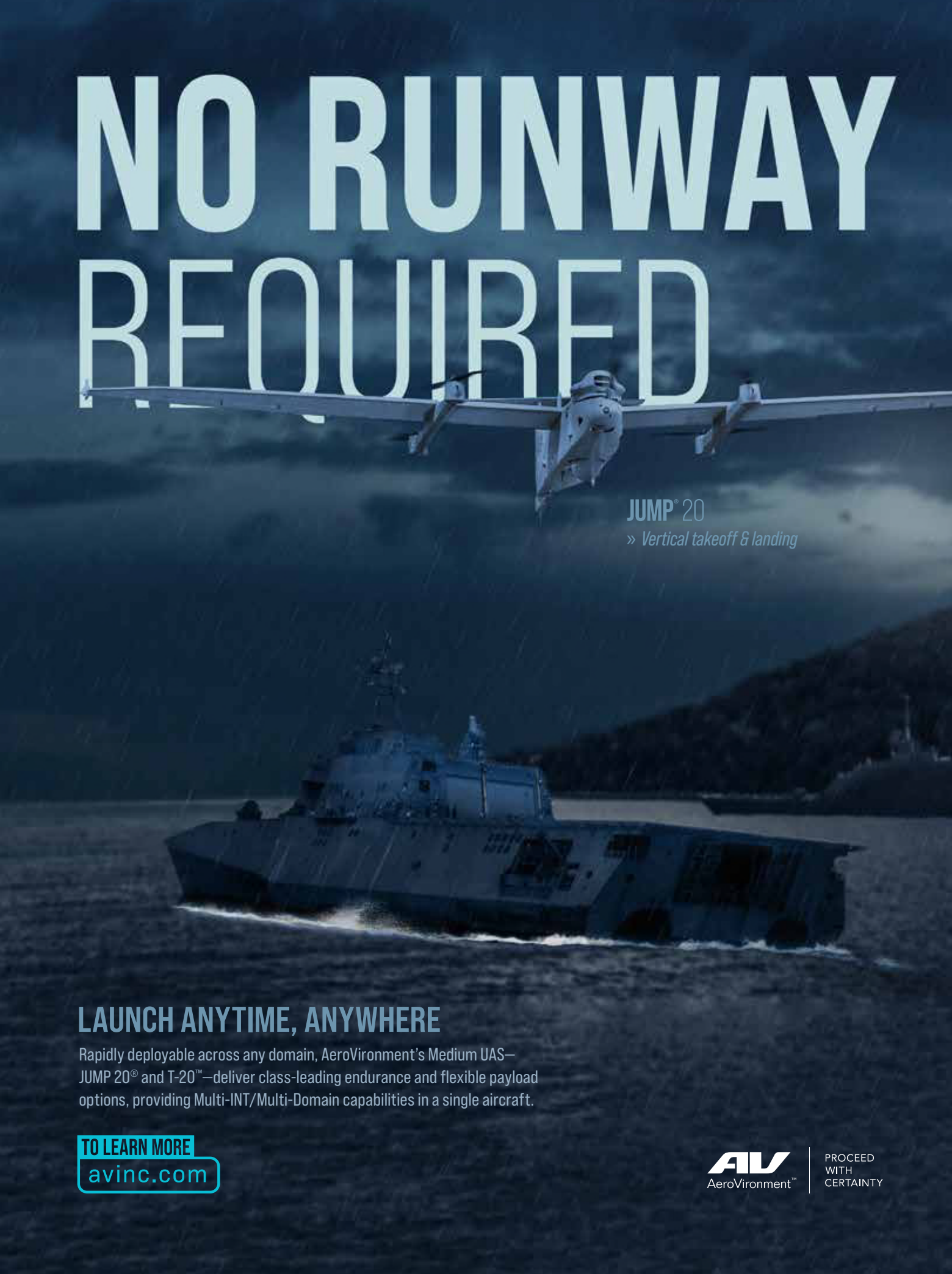
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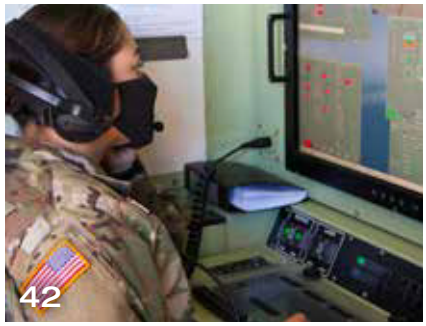

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ARMY AVIATION COMMUNITY NEWS

ARMY AVIATION is the official journal of the Army Aviation Association of America (AAAA). The views expressed in this publication are those of the individual authors, not the Department of Defense or its elements. The content does not necessarily reflect the official U.S. Army position nor the position of the AAAA or the staff of Army Aviation Publications, Inc., (AAPI). Title Reg® in U.S. Patent office. Registration Number 1,533,053. SUBSCRIPTION DATA: ARMY AVIATION (ISSN 0004-248X) is published monthly, except May and September by AAPI, 593 Main Street, Monroe, CT 06468-2806. Tel: (203) 268-2450, FAX: (203) 268-5870, E-Mail: aaaa@quad-a.org. Army Aviation Magazine E-Mail: magazine@quad-a.org. Website: http://www.quad-a.org. Subscription rates for non-AAAA members: $30, one year; $58, two years; add $10 per year for foreign addresses other than military APOs. Single copy price: $4.00. ADVERTISING: Display and classified advertising rates are listed in SRDS Business Publications, Classification 90. POSTMASTER: Periodicals postage paid at Monroe, CT and other offices. Send address changes to AAPI, 593 Main Street, Monroe, CT 06468-2806.

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On The Cover

Briefings

Richardson Takes Command of SOUTHCOM

U.S. SOUTHCOM PHOTO BY MSGT.

U.S. Army GEN Laura J. Richardson accepts the colors from Secretary of Defense Lloyd J. Austin III as she assumes the duties of commander of U.S. Southern Command (SOUTHCOM) from U.S. Navy Adm. Craig S. Faller. The change-of-command ceremony, during which she became just the second woman in history to lead a combatant command, took place on Oct. 29 at the command's headquarters in Doral, Florida. Chairman of the Joint Chiefs of Staff GEN Mark A. Milley also attended, as well her family, including husband, LTG James Richardson.

U.S. ARMY PHOTO BY SGT. NICOLAS HOLMES

Colin Powell Passes Away

Former Secretary of State, retired Army GEN Colin Powell died on Oct. 18 at Walter Reed Medical Center, Bethesda, MD, of complications from COVID-19. He was 84. An ROTC Cadet, "He was the first African-American chairman of the Joint Chiefs, first African-American Secretary of State and a man who was respected around the globe," said current Secretary of State Lloyd Austin. His career was capped by his oversight of the 1991 Gulf War while chairman of the Joint Chiefs and later as secretary of state during the administration of President George W. Bush. In Austin's words, "Quite frankly, it is not possible to replace a Colin Powell. We will miss him."

Odierno Loses His Final Battle

Retired GEN Raymond T. Odierno, former Army chief of staff, died Oct. 8 of cancer, according to a family statement released through an Army spokesman. He was 67. A 1976 graduate of West Point, he became the Army's 38th chief of staff in September 2011. Prior to his service as CSA, he commanded U.S. Joint Forces Command from October 2010 until its disestablishment in August 2011. He led the 4th Infantry Division and III Corps in Iraq, served more than 50 months in country, was key in executing the surge of forces in 2007 and served as the top U.S. commander there, and oversaw the withdrawal from Iraq in 2011.

U.S. ARMY PHOTO BY SSG MIKKI L. SPRENKLE

New COVID-19 Pentagon Access Requirements

The Pentagon Force Protection Agency (PFPA) enacted new requirements for visitor access to the Pentagon. Effective Nov. 1, 2021, all visitors entering the Pentagon or any facility protected by the PFPA must present a completed DD Form 3150, "Contractor Personnel and Visitor Certification of Vaccination," prior to entry. Visitors can download the form at *https://www.esd.whs.mil/Portals/54/Documents/DD/forms/dd/dd3150.pdf.* Any visitor who indicates they are Not Yet Fully Vaccinated, Not Vaccinated, or Declines to Respond will, in addition to the DD3150, be required to provide a negative COVID test result (from either a rapid test or a PCR test) dated no more than 72 hours prior to the visit or they will be denied entry.

Durant Running for U.S. Senate

DURANT CAMPAIGN PHOTO

CW4 (Ret.) Mike Durant, best known as the Army helicopter pilot shot down, held as a prisoner of war, and whose actions in Operation Gothic Serpent in 1993 served as inspiration for the movie Black Hawk Down, is joining the U.S. Senate race in Alabama. Durant, now the founder and president of Pinnacle Solutions, an aerospace company in Huntsville, announced his campaign on Oct. 19. He joins a crowded GOP field vying for the Republican nomination to the seat being vacated by retiring U.S. Senator Richard Shelby.

Getting the Mission Done!

By the time you read this we will have held our first live and in-person event in exactly two years. The Joseph P. Cribbins Training, Equipping and Sustainment Symposium was held on November 15-17 in Huntsville, AL, and as of this writing we have had a record registration of over 1,200 attendees.

In addition, the support from our industry member partners has been truly outstanding and represents a growth this year of over 500% from the past Cribbins events. This symposium has now grown to be second only to the April AAAA Annual Summit itself six months later. Look for a full report in the next issue.

While Cribbins was a huge success, I was very disappointed in the reaction of some of our former members who elected to resign as a result of the vaccination mandate to attend the event. I certainly hope that these members will reconsider. AAAA is not a political organization; we are a professional organization that shares a passion for Army Aviation patriots. To execute our mission, we must actively interact with our military and government agencies to enhance our Association pillars. The government would not be allowed to attend nor participate unless all were vaccinated. AAAA is not mandating vaccines; we are imposing the requirement simply to ensure Association success. I can only hope that those members will reconsider as we are an association that values every member.

As I travel around to more AAAA chapters in my quest to visit all 78 before the end of my term, I continue to be impressed with the can-do attitude and efforts to re-energize as we emerge from the pandemic. It is a great reminder that each chapter is unique and their pool of members is different. A consistent theme I keep hitting is that our AAAA Chapters are literally the life blood of AAAA. If you the members are not having an engaging, fun, and quality experience at the local chapter level, you simply will not continue to be part of this great organization. AAAA National exists to support the chapters, and we must embrace the chapter differences and foster their growth. We need you all to step up and express yourselves to your local chapter leadership and/or directly to me so we can make sure you are getting the experiences you are looking for.

Last month, at the conclusion of AUSA Annual Meeting, we were privileged to have the Chief of Staff of the Army, GEN Jim McConville, join us for an AAAA Senior Executive Associates dinner along with the "Six-pack + one" led by MG Dave Francis, our Branch Chief. The purpose of this meeting is to make sure AAAA and especially the dozen retired non-aviator three and four-star General Officers are fully aligned with the Chief's vision and can help support the Army and the Branch as we posture for the emerging challenges around the world. Several remarked after the event that it was the most enlightening and productive Associates meeting ever. It was truly informative and inspiring.

AAA PHOTO BY BILL HARRIS

BG (Ret.) Jim Hesson receiving the Art and Dotty Kesten AAAA Founders' Award with wife, Joyce at his side, from AAAA President, MG (Ret.) Tim Crosby.

Finally, I want to bring to your attention a very special award that was presented back in May to BG Jim Hesson, Ret. Jim not only was one of my predecessors as Chinook PM, and AAAA President, but really has devoted his life, in and out of uniform, to AAAA and the Army Aviation Soldier and Family. He and Joyce embody selfless service, what AAAA is all about, and richly deserve the Art and Dotty Kesten AAAA Founders' Award.

As I stated above, remember to send me and your chapter presidents your cards and letters with how we can better serve you. I am very serious about this.

Have a great Thanksgiving! We have a lot to be thankful for.

MG Tim Crosby, U.S. Army Retired
35th President, AAAA
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Modernizing Our Unmanned Aircraft Systems

By MG David J. Francis

U.S. ARMY PHOTO BY SGT MARTA SCHWAB

U.S. Army PFC Terry Hollywood, assigned to 224th Military Intelligence Battalion, conducts maintenance on a Gray Eagle in preparation for Project Convergence at Yuma Proving Ground, AZ.

The next version of FM 3.0, to be published next summer, identifies the Division as the unit of action in Large Scale Combat Operations (LSCO). The Combat Aviation Brigade is one of the most lethal and flexible tools the Division Commander has to shape the deep fight, synchronize the close fight and manage transition.

Army Aviation will play a significant role in synchronizing the execution of reconnaissance and security for combined arms forces. The ability to gain and maintain enemy contact, report rapidly and accurately, and provide reaction time and maneuver space to the Division Commander is vital. Unmanned aircraft systems (UAS) have a major contribution to the reconnaissance and security effort, and with our manned/un-manned, and manned to unmanned teaming.

As an integral component of Army Aviation, our UAS capabilities are quickly evolving to maintain operational parity with our enduring and future fleets. Like our manned aircraft, we can expect our UAS to operate in an ever-expanding diverse set of conditions, against near-peer adversaries in contested airspace supporting Multi-Domain Operations (MDO). Our UAS are able to provide the same fundamental capabilities required of our air and ground maneuver forces – the capabilities that enable us to See, Move, and Strike.

The Future Tactical Unmanned Aircraft Systems (FTUAS) provides the brigade combat team (BCT) an organic, runway independent, airborne R&S capability with real-time situational awareness (SA) information vital to cross-domain maneuver at the speed required in MDO. This capability allows commanders to posture FTUAS in austere conditions and positions of advantage to support integrated R&S operations at extended ranges throughout the BCT battlespace. When integrated with Scalable Control Interface (SCI), commanders will have the flexibility to conduct battle handoffs of FTUAS

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air vehicles and sensor data providing command and control on the move. During armed conflict FTUAS will provide critical screening, early warning, and force protection for ground maneuver forces in an anti-access aerial denial (A2/AD) environment. Similar to our FVL manned aircraft, FTUAS's Modular Open Systems Approach (MOSA) and architecture enable future growth and the rapid insertion of technology to deliver effective and relevant threat-based capabilities.

Integrating UAS capabilities will be more extensive in an MDO environment. Modernization efforts will allow our aviators and Soldiers the opportunity to leverage both on-board and off-board Army and Joint intelligence, fires, and communications. FVL aircraft will act as the central node of the eco-system with the air launched effects (ALE) and FTUAS in a 'constellation' around the FVL. The ALE and FTUAS will operate both close-in and at a distance from the FVL aircraft, providing an array of sensors, fires, effects, and countermeasures that will enable the reach and stand-off of the advanced team. This FTUAS and ALE integration will enable and compliment air-ground maneuver teams as they conduct combinations of mounted, dismounted, and air operations providing reconnaissance and security helping the maneuver forces win the counter reconnaissance fight and close with and destroy the enemy. Along with our enduring and FVL aircraft, UAS will play a central role in the penetration and disintegration of enemy IADS and A2/AD.

Modernizing our UAS involves new acquisition strategies to ensure we field the best system for our Soldiers. The acquisition strategy for our FTUAS is prototyping through a "Buy, Try, Inform" methodology which affords risk reduction and an in-depth demonstration by the customer, our Soldiers. Through this process, we are learning the FTUAS will have a reduction in the operational footprint with the introduction of Vertical Takeoff and Landing (VTOL) and an expeditionary Ground Control Station (GCS) enabling movement on the battlefield with Army organic ground vehicle and rotary wing support.

Our Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities and Policy (DOTMLPF-P) review for UAS requires this evolutionary change in the platforms, employment, and capabilities driving real-time updates to our doctrine and what our organizations will look like for LSCO. Our leaders will have to develop the tactical and technical skills to employ these systems riding on a network that provides enormous amounts of information to inform decisions that will impact the maneuver force. The challenge for the branch is to ensure that we modernize and continue to fully integrate UAS in all forms with Army Aviation providing reliable reconnaissance and surveillance in a multi-domain environment. Our Army and our ground commanders need all of the capabilities of Army Aviation to fight and win in large scale combat operations.

Above the Best!

MG David J. Francis is the Army Aviation branch chief and commander of the U.S. Army Aviation Center of Excellence and Fort Rucker, AL.

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Soldiers conduct a swift insertion into mock enemy territory to prepare for the arrival of the main fighting elements during Noble Bastogne, a brigade-sized training operation, at Ft. Campbell, KY, Aug. 23, 2021.

U.S. ARMY PHOTO BY SGT. LYNNWOOD THOMAS

Trust and Balance:
FORSCOM Aviators are Ready for FY22

By GEN Michael X. Garrett

The U.S. Army's aviation community is well-trained, well-led, respected across the joint force, and ready for the challenges of tomorrow. These are some of the most clear and universal themes that I see and hear throughout Army Forces Command.

U.S. ARMY PHOTO BY SPC ROALAN GRIMALDO

Soldiers from Bravo Troop, 7th Squadron, 17th Cavalry Regiment, 1st Cavalry Division, begin refueling an Apache AH-64E at Ft. Hood, TX on February 3, 2021. This event provides flight crews and maintainers their only live opportunity to practice fueling and reloading procedures while in garrison.

From our formations' home-station hangars and operations centers, to our Combat Training Centers and in support of operations overseas, leaders, fellow service members, allies and partners trust the skills and precision of the Army's 15-series Soldiers and civilian aviation professionals.

I am writing this article immediately following the Association of the U.S. Army's annual meeting, where I was not surprised to find a similarly high level of trust for FORSCOM's aviators from Army and joint senior leaders, academic and policy experts, and industry partners.

Just as I took every opportunity to reinforce my trust in the readiness of FORSCOM's Soldiers – including its aviators – throughout AUSA's annual meeting, this article is my opportunity to share some of my take-aways in the context of Army aviation, and connect them to FORSCOM's priorities for this fiscal year.

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Priorities

The coming years will be an exciting time to be an Army pilot, operator, crew chief, mechanic, and repairer. The U.S. military is training and evolving for a new era of competition and large-scale combat operations, in which our ability to own and maneuver within the skies will remain vital.

Now and throughout 2022, Army aviators will continue to fly in just about every location and type of operation Soldiers are serving today; but you also have the responsibility to train and modernize for the types of war America must be ready to face beyond 2022. This is the single reason the United States has an Army: to fight and win its wars. If and when war finds us, we cannot afford to start building talent, skills, capabilities, and equipment while our forces are at the point of contact with the enemy. Americans trust the Army, and its aviators, to be ready to fight and win well before we are needed.

After 20 years of combat in generally uncontested airspace against generally low-tech terrorist adversaries, I challenge rotary wing and unmanned aerial system units to consider what it will take to win on (and above) a battlefield that is larger, more crowded, less permissive, and less certain than any we have seen before. This is where Soldiers and leaders will rely on aviators to make sense of threats and opportunities; create decision space; deliver decisive overmatch at the time and place of our choosing; and force adversaries to reconsider the cost-benefit of fighting the U.S. military.

My own experience leading ground forces in the Middle East taught me to appreciate the power, reach, and flexibility that capable aviators deliver in combat. Today, as FORSCOM Commander, I am proud to lead and participate in the evolution of even more powerful aviation crews, platoons, and companies.

Like the Army, FORSCOM's priorities remain unchanged for the coming year. We always put People First by building disciplined, trained, fit, cohesive, and well-cared-for teams. We will train hard and be ready to fight and win. And we are modernizing for the battlefields of the future, so we do not face irrelevance against adversaries who are investing in their own technology.

Opportunities in 2022

Of the FORSCOM and Army aviation community's many opportunities to pursue excellence in FY22, I am particularly excited for the sustained increase in flight hours across the Army's three components: 10.6 flight hours per flight crew, per month, in the active component; 6.7 in the Army National Guard; and 6.8 in the U.S. Army Reserve. Outside the cockpit, I know Soldiers will also use every other training system and simulation capability possible.

I often emphasize that mastery of the fundamentals – and a Soldier's ability to operate and win at the point of contact – depends on the amount of reps and sets a Soldier gets in training. These flight hour requirements, which will further rise in FY23, are the directed, resourced, and measurable manifestation of this training philosophy. The Army is giving you more time to do the thing you became aviators to do – fly in operationally demanding environments. I trust you to use this time wisely, in challenging training situations, focused on upcoming missions and operating environments, and as often as necessary until you and your crew achieves mastery.

Of course, increased time in the air will bring a corresponding increase in maintenance requirements. As I write this article in mid-October 2021, only one of three FORSCOM rotary-wing fleets is at least 75 percent fully mission capable, which is the Army's maintenance goal. I expect aviation leaders at all levels to remain personally engaged in aircraft repairs and preventive maintenance, and to build and support mastery among our repairers, mechanics, and technicians.

Finally, all three FORSCOM priorities – people, readiness, and modernization – rely on the safety of our force. I am proud FORSCOM's aviators have flown more than 700 days without a fatal Class A manned aircraft mishap, and experienced only a single UAS Class A mishap attributable to human error since FY19. For good reason, Army aviators are incredibly candid and disciplined when it comes to safety, and I hope you realize the degree to which this ensures your credibility across the joint force, and among our senior leaders.

As I write this article, I can see and hear a flight of UH-60s pass across Fort Bragg in the distance, and I am reminded that near all FORSCOM installations, and in civilian towns and cities around our National Guard and Army Reserve aviation units, Americans trust Army aircraft to operate safely within our airspace. And when the nation calls, Americans trust Army aviators to carry our Soldiers into and out of combat; and to provide overwatch and direct aerial fire.

Thank you for serving in this unique, exciting, and vital career field, and thank you for maintaining the trust of our fellow Soldiers and citizens. I look forward to serving, flying, and winning alongside you in the coming year.

Freedom's Guardian!

GEN Michael X. Garrett is the 23rd commanding general of U.S. Army Forces Command headquartered at Fort Bragg, NC.

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Chief Warrant Officer of the Branch Update

Editor's Note: For this issue, the Aviation Branch Chief Warrant Officer, CW5 Myke Lewis, has reached out to CW4 Lebron Elder to provide some insight about the Air Traffic and Airspace Management Technician warrant officers.

U.S. ARMY PHOTO BY CW4 LEBRON ELDER

150As plan for and execute safe air traffic flow in a variety of tactical scenarios, such as this forward area refueling point, also known as "Fat Cow."

Air Traffic and Airspace Managers

By CW4 Lebron Elder Jr.

Air Traffic and Airspace Management Technicians are essential to the Army succeeding in Multi-Domain Operations. Military Occupational Specialty (MOS) 150A are Army warrant officers specializing in air traffic control (ATC), airfield management, and airspace control.

They are responsible for coordinating airspace usage and integrating assets from all services across the air domain. This work begins from the time the 150A serves in a first assignment as a platoon leader focusing on the tactical aspect and continues all the way up the senior ranks when they have an impact on strategic level operations. As the re-integration of this key MOS reaches the 14 year point, it is imperative to emphasize the value the junior 150A provides at the brigade level and look at the potential placement of senior 150A expertise to shape the future of Army ATC.

150A Career Progression

MOS 15Q (ATC Specialist) and sister service air traffic controllers are the feeder MOSs for the 150A. Upon completion of training, a 150A will move to one of the 62 platoon leader authorizations across all three Army Components in air traffic services (ATS) companies and air operations battalions (AOB). In these units, two 150As per organization lead terminal and airspace information services platoons, gaining a greater understanding of ATS's role in the tactical scheme of maneuver. Typical ATS missions consist of establishing contingency airfields, landing zones/pickup zones, and forward arming and refueling points. Beyond the platoon, 150As will progress as a staff officer through a combat aviation brigade, division, Corps, Army service component command, or battlefield coordination detachment. As a staff officer, the 150A plans, coordinates, and synchronizes air operations by combining their ATC experience and airspace management training. The 150A works with Field Artillery, Air Defense, Aviation (aviators and unmanned aerial system operators), Cyber, Maneuver, Maneuver Support, Sustainment, Special Forces and the U.S. Air Force. Depending on the theater, the list may grow to include other Joint services, governmental agencies, and coalition partners. With an understanding of the commander's intent and mission priorities, the 150A collects airspace requests from various subordinate units to construct a unit airspace plan for the joint force commander. During execution of the airspace plan, the 150A monitors current operations while integrating immediate airspace requests with the existing plan. 150As have proven themselves invaluable to commanders in training environments, natural disaster response, and real world combat operations.

An Argument for Increased Brigade Level Support

Division and corps airspace elements often report a knowledge and personnel gap among brigade combat team's (BCT) Air Defense and Airspace Management/ Brigade Aviation Elements (ADAM/

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BAE). Most BCTs are only authorized one staff sergeant, 15Q, responsible for processing and submitting all brigade and below preplanned and immediate airspace requests. Currently, all new 150As are assigned to an ATS company or AOB. In the future, the Army could expand the possibilities for initial 150A assignments to be either at an ATS Company/AOB or directly to staff as a brigade ADAM/BAE (or ADAM cell) airspace manager. Additional airspace managers at BCTs with a 15Q NCO already assigned (Stryker BCTs do not have 15Q NCO authorizations) better enable twenty-four hour airspace synchronization.

Optimizing Strategic Level Support

The first of the 150As joined the Warrant Officer Corps in 2007 and will compete for CW5 in calendar year 2022, potentially resulting in the first Chief Warrant Officer Five 150A to be promoted within the next two to three years. A senior field grade 150A has extensive knowledge, training, and experience understanding the ATS role in military and civil airspace integration. This strategic level expertise should be positioned to guide the career field from organizations most influential on Army ATC: FORSCOM's Air Traffic Services Command and HQDA's US Army Aeronautical Services Agency. Creating senior CW5 150A billets in these organizations postures the future force to integrate into increasingly complex military and civil air traffic management systems. The proliferation of civil UAS platforms into the National Airspace System and further expansion of military UAS operations will require the subject matter expertise and wisdom of these senior leaders.

Training & Development

The training and professional development required to implement the above courses of action are feasible utilizing today's professional military education (PME), functional courses and command leadership. Warrant Officer Basic Course and Aviation Warrant Officer Advanced Course prepare 150As for ATS and airspace management assignments. Depending on unit funds, Soldiers may also attend one or more functional courses provided by U.S. Army, Joint Service or Federal Aviation Administration agencies focusing on air operations. It is equally imperative command teams and senior 150As make themselves available to junior 150As. After years of PME, functional courses, and professional development, the 150A community has grown, and will continue to grow, into well-rounded senior field grade Warrant Officers with the experience to effectively advise strategic level leaders.

For 14 years, 150As have been a force multiplier for the Army. 150As are uniquely talented in understanding air traffic management and how it relates to U.S. and international regulations. With focused training and professional development, this relatively small group of subject matter experts will have an even more profound effect by helping commanders deal with complex multi-domain operations requiring comprehensive and dynamic management of airspace ATC assets. Future opportunities for the 150A MOS should look hard at staff placement and senior leader positions of influence in order to get the most out of this critical skillset.

Above the Best!

CW4 Lebron Elder, Jr. is the Army's senior Air Traffic & Airspace Management Technician serving at the U.S. Army Aeronautical Services Agency. CW5 Michael "Myke" Lewis is the ninth chief warrant officer of the Aviation Branch with the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.

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Developing and Sustaining Critical UAS Operators

By CSM James D. Wilson

MQ-1C Gray Eagle unmanned aircraft system.

U.S. ARMY PHOTO

Unmanned Aircraft Systems (UAS) Operators (MOS 15C and 15W) are highly trained and skilled aviation Soldiers. UAS Operators receive almost a year of Advanced Individual Training (AIT) along with home-station training and progression.

Operators gain UAS experience and credibility through frequency and repetition. The UAS Operator has flying hour, simulator, currency, academic, proficiency, evaluation, and medical fitness requirements. Flight safety and risk mitigation are an essential part of the responsibilities inherent in the MOS. Recognition of their atypical skillset and demanding requirements led to the development of UAS Operator Critical Skill Incentive Pay (CSIP). CSIP went into effect 01 October 2020.

CSIP Tiers

CSIP is a three-tiered incentive designed to enhance UAS career progression and retention. The tiers are as follows:

Tier one requires Operators to attain Readiness Level (RL) 1 in less than six years to receive an additional $75 dollars a month.

Tier two requires Operators to be UAS Instructor Operators (IO). IOs with less than six years of experience receive a $150 a month incentive. IOs with more than six years of experience receive a $200 a month incentive.

Tier three requires Operators to achieve UAS Standardization Operator (SO) designation with the additional skill identifier F8 (Aviation Master Gunner course graduate). SOs (F8) with less than six years of experience receive a $250 a month incentive. SOs (F8) with more than six years of experience receive a $300 a month incentive.

One year since implementation, only 25% of the eligible 15C/W UAS Operators are receiving CSIP. Based on feedback from the force, there are challenges processing CSIP at the unit and at finance because the implementation memo is not being followed. Organizations that provide the correct command emphasis and follow the implementation memo were successful in attaining CSIP for their UAS Operators. Failure to take advantage of this incentive has the potential to result in the termination of the UAS CSIP program.

Standardized AC Program

In addition to CSIP implementation, the UAS community is working toward the standardization of the Aircraft Commander program. The Aircraft Commander (AC) is a local designation with a training program established by the Aircrew Training Program (ATP) commander. The AC will be responsible and have the final authority for operating, servicing, and securing the UAS they operate. The AC is an operator that demonstrated competence, maturity, and trustworthiness to the unit standardization personnel and leadership. As the unit's first line trainer, the AC is proficient and knowledgeable in all aspects of the unit's mission and is capable of executing mission essential tasks.

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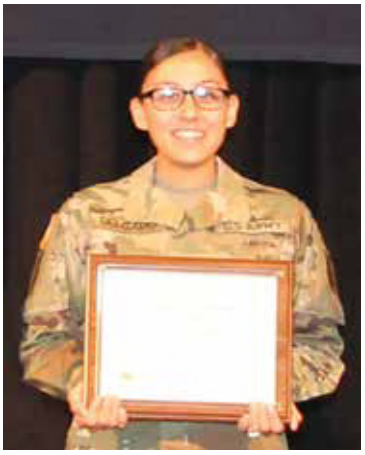
Enlisted Aviation Soldier Spotlight

Each month we will feature a past AAAA National or Functional Enlisted or NCO Award winner as part of our ongoing recognition of the Best of the Best in our Aviation Branch. The CY 2020 National winners were featured in the April/May AAAA Army Aviation State of the Union issue.



AAFP FILE PHOTO

UAS Soldier of the Year, 2018

Sponsored by General Atomics Aeronautical Systems, Inc.

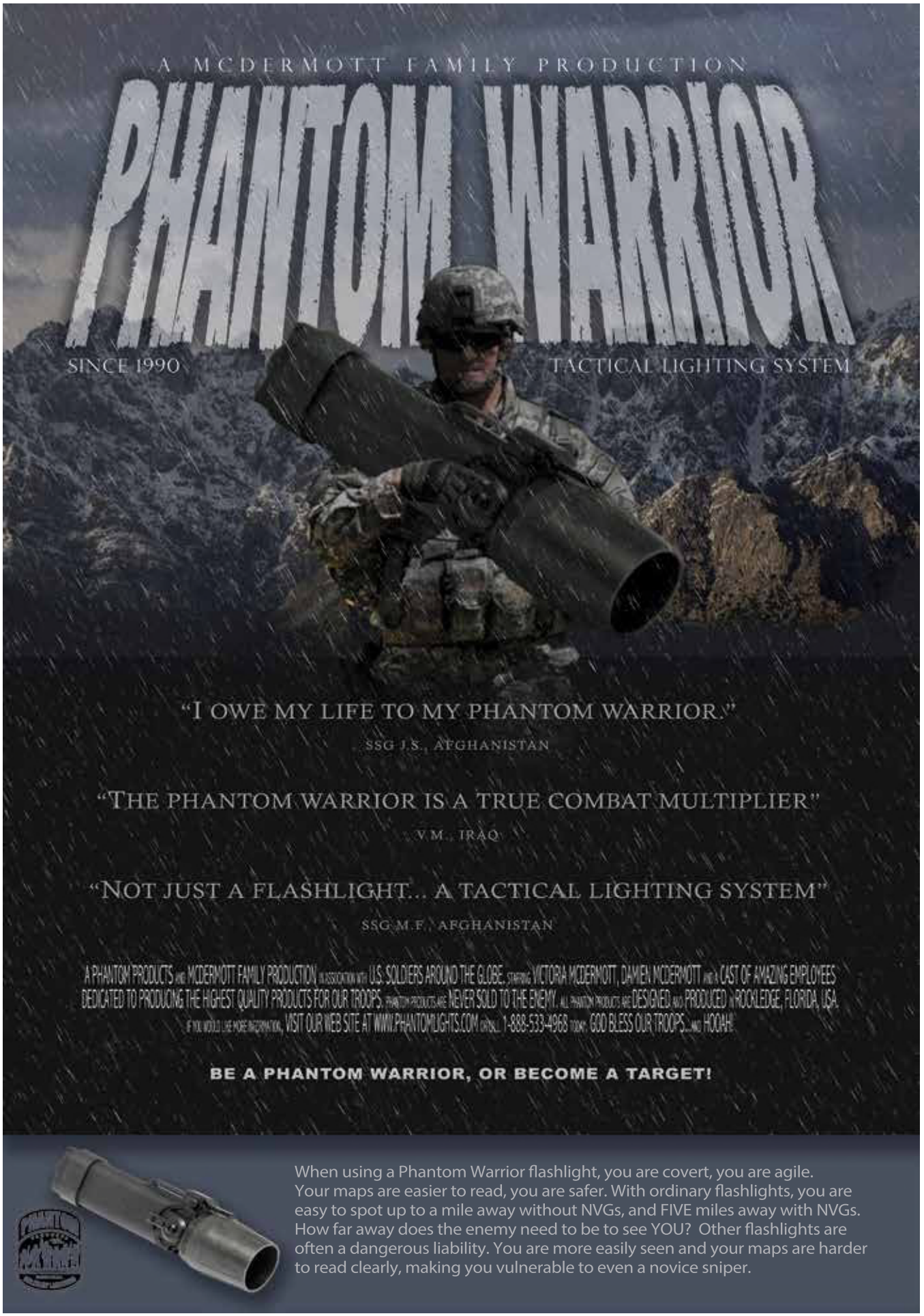
SGT Angelica M. Delgado

Company F, 1st Aviation Regiment
Combat Aviation Brigade, 1st Infantry Division
Fort Riley, KS

SGT Angelica M. Delgado, while performing duties as an Instructor Operator for Fox Company, 1st Aviation Regiment, played a vital role in the success of Operation Freedom's Sentinel in 2017 and 2018. She personally flew over 1,400 hours while completing 8 Readiness Level 1 progressions and training 6 new aircraft commanders. As the company Standardization Operator, normally a sergeant first class position, she ensured the safe execution of the company's 15,000 accident free flight hours while conducting split based operations from separate airfields in Afghanistan. She ran the unit's gunnery training program, developing a rigorous schedule that improved combat effectiveness across the formation. As a result of her efforts, the company executed 91 kinetic strikes with a 95.5 success rate that resulted in 105 Enemy Killed in Action, 16 Enemy Wounded in Action, 20 vehicles destroyed, and 7 buildings destroyed. She is the consummate "Total Soldier;" consistently scoring 300 on the Army Physical Fitness Test, qualifying for the Ft. Riley Army 10-miler Team, and ensuring that every Soldier in her squad passed the promotion board. SGT Delgado's professionalism and achievements clearly identify her as the Army Aviation Association of America's 2018 Unmanned Aircraft Systems Soldier of the Year.

The proposed AC Standardization Program consists of five stages. In the ***first stage***, an operator must be RL1 and fly 150 hours in the Mission Design Series (MDS). The ***second stage*** requires Operators to initiate AC training, be able to navigate the local area, and be aware of all local policies and procedures. Operators must demonstrate technical and tactical proficiency in the unit's mission tasks. The ***third stage*** requires Operators to pass a 50 question closed book test, achieving a minimum passing score of 80%. Part of the exam will include, at a minimum, five scenario-based emergency procedures questions with a pass rate of 100%. The ***fourth stage*** of the program requires Operators to successfully complete an AC evaluation flight, demonstrating the necessary knowledge and capabilities to an evaluating IO/SO. The ***fifth stage*** requires the owning unit to conduct an AC evaluation board. The company/troop must convene a four Soldier board (minimum) consisting of the ATP commander, IOs, SOs, and ACs. Sponsoring IOs, SOs, and ACs give their assessment of every recommended Aircraft Operator (AO) to the ATP commander and the selection committee. The board feedback provides the ATP commander information to determine the suitability of AC candidates. The proposed AC Standardization Program and the Aircraft Commander program provide unit commanders a first line trainer capable of making sound, autonomous decisions to execute the unit's mission within the commander's intent.

CSM James D. Wilson is the command sergeant major of the Aviation Branch at the United States Army Aviation Center of Excellence, Fort Rucker, AL.



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Unmanned Aircraft Systems (UAS) Safety – The Human Factor

By CW3 Nathan Koch

As unmanned aircraft systems (UAS) continue to rapidly evolve to meet the needs of our Army, so has their evolution into our Aviation formations. Combat Aviation brigades saw exponential growth over the last five years with the addition of the RQ-7B Shadow and MQ-1C Gray Eagle.

U.S. ARMY COMBAT READINESS CENTER COURTESY PHOTO

Individual failure led to the extensive damage pictured here of a Gray Eagle that was not deiced prior to attempted flight resulting in an overrun and fence impact.

Yet, this rapid and somewhat unfettered demand is costly, particularly with safety. Since FY19, UAS mishap rates for the Shadow and Gray Eagle have increased. As a result, the U.S. Army Combat Readiness Center heightened efforts to bring awareness to the safety issues currently affecting UAS.

Mishaps fall into three causal categories: ***Materiel, Environmental*** and ***Human***. In years past, materiel failures accounted for the majority of UAS mishaps. However, human factors UAS mishaps are increasing significantly.

Human error/factors represent a substantial portion of our UAS mishaps. Mishaps are rarely simple and seldom result from just one cause or action of a single individual. Rather, mishaps are caused by a series of events resulting from multiple latent failures or hazardous conditions that result in an individual's active failure. UAS leaders and safety personnel recognize that these latent failures and active failures are interrelated. Once understood, we can then successfully identify the obscured causes that lead to active failures in an effort to develop more effective risk control measures to mitigate or eliminate potentially hazardous conditions. Human factors are broken down into five categories of "system inadequacies" – ***Leader Failure, Support Failure, Training Failure, Standards Failure,*** and ***Individual Failure***.

Since FY17, Shadow flying hours have declined steadily. In FY17, the fleet's total cumulative flight hours peaked at 77,286. By the end of FY21, it had flown approximately 30,700 flight hours. During that five-year period, Shadow experienced an average of a 21% reduction in flying hours annually. Inversely, the Class B-C mishap rates nearly doubled. The alarming statistic was the increase in human error mishaps. From FY19-21, 40% of all Shadow mishaps were attributed to human error, compared to the previous three years where human error accounted for 17% of mishaps.

Prior to FY21, Gray Eagle experienced a steady rise over the previous five years' in-flight hours with a steadier Class A-C mishap rate that saw increases and decreases revolving around new version/upgraded aircraft. However, there was a 30% reduction in flight hours with no corresponding reduction in the mishap rate. The human error attribution also remained unchanged. Over the last five years, an average of 41% of all Gray Eagle Class A-C mishaps were attributed to human error.

With most UAS mishaps, failure to meet performance-based standards or leader failures such as inadequate supervision remain the primary causal factors. However, human error failures can be corrected by leadership action, primarily analyzing mishap details and taking supervisory action to correct the deficiencies. From the top down to the immediate supervisor, maintaining high standards, instituting them within the training program and reporting all mishaps will lead to reduced failures and mishaps. Following training, applying direct supervision and spot checks on how the unit personnel are conducting flight operations and aircraft maintenance reinforces the commander's intent to have a safe, high-performing unit capable of successfully executing its combat mission. Leader emphasis can and will reduce human error failures.

CW3 Nathan Koch is a member of the Aviation Division, Directorate of Assessments and Prevention at the U.S. Army Combat Readiness Center, Fort Rucker, Alabama.

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Army National Guard Rotary Wing Aviation – Supporting the Multinational Force and Observers (MFO) Sinai Peacekeeping Mission

By COL Joseph W. Bishop

The MFO-Sinai's primary purpose is to provide a peacekeeping force, overseeing the terms of Egypt and Israel's peace treaty.

U.S. ARMY PHOTO BY SGT BRIAN CALHOUN, 108TH PUBLIC AFFAIRS DET.

SPC Nicholas Wodoslawsky and SPC Kyle Brogden, UH-60 crew chiefs with the Army National Guard provide a passenger/safety briefing. The Soldiers were preparing to be transported as part of the air-assault training exercise supporting the Infantry battalion at McCrady Training Center in Eastover, South Carolina.

Since the establishment of the MFO-Sinai in 1981, the United States Army and the ARNG have contributed a mix of forces to enable MFO-Sinai Task Force mission success.

A critical and essential element to the MFO Task Force is the Aviation capability. The U.S. Army provides rotary and fixed wing aircraft in support of the MFO Task Force mission across the Sinai Peninsula. In fact, ARNG Aviation has a successful history of fixed wing Aviation support to the Task Force with providing C-23 Sherpa aircraft from 2010-2014. The ARNG C-23 support ended in 2014 and was transferred to the United States Army Reserve as the Army divested the ARNG C-23 aircraft.

The Active Army operates an Aviation Table of Distribution and Allowances (TDA) that fulfills the rotary wing mission for the MFO Task Force. Although the TDA authorizations are more than adequate, the extremely high personnel turnover rate due to unaccompanied one year tours is an ever increasing challenge. This higher turnover creates a situation of continual Aviation operational "train-up" of newly arriving crewmembers. In order to address the high turnover rate, the Army looked to the Reserve Component, specifically the ARNG to conduct the Task Force rotary wing mission beginning in 2022.

The ARNG has a proven and successful track record utilizing a methodical process for identifying, preparing, mobilizing, and deploying Aviation capabilities to meet world-wide U.S. Army Aviation needs. As with any other mobilization and deployment, a collective unit mission approach will be utilized to ensure unit success. The collective mobilization approach, unlike individual reporting and departing in and out of a TDA, will posture and prepare personnel for all aspects of the mission, effectively eliminate gaps in train up and crew / mission progression.

The ARNG completed a mission analysis and determined the best type of units that can satisfy the mission are a general support aviation battalion (GSAB) and the assault helicopter battalion (AHB). Additionally, the deploying units will be augmented with the appropriate maintenance support capability. The ARNG units that will support the MFO-Sinai mission in 2022 have been notified and begun preliminary preparations. As with all mobilizations, the units will report to a mobilization site, as selected by the Army, and conduct final training and preparations for their new mission.

The ARNG has had a presence with ground forces in the MFO-Sinai mission over the last two decades and will now be joined by rotary wing aviation. Aviation Soldiers from two States will join members of other States to make up a significant portion of the 2022 MFO-Sinai Task Force.

The ARNG is postured and well suited for the MFO-Sinai mission. The benefits of an ARNG Aviation mobilization are two-fold. First and foremost, ARNG Aviation can off-set world-wide U.S. Army Aviation demands and secondly, the Aviation mission provides the units an operational and doctrinal employment; a true win–win.

The ARNG expects the MFO-Sinai rotary wing support to become an enduring mission within the Army's Global Force Management Allocation Plan. Therefore, efforts are underway to identify and program follow-on units in 2023 and beyond, planning for a process of effective unit to unit Aviation mission handover to ensure continuity of Aviation support.

ARNG Aviation - Warfighting Capable, Governor Responsive!

COL Joseph W. Bishop is the Chief of Aviation and Safety Division for the Army National Guard.

Developing the Aviation Technical Professional

By CW3 Abraham Garcia

The future of Army Aviation is officially upon us with the newest update to FM 3-04 (Army Aviation) last year which envisions Aviation organizations under Multi-Domain Operations (MDO) conducting Large Scale Combat Operations (LSCO) in austere environments.

To sustain this emerging operational environment, Aviation maintenance organizations must transition their reliance to organically capable maintainers and lessen external civilian or contractor support. This paradigm shift of organically driven maintenance requires investment into developing greater technical proficiency in leaders and Soldiers to sustain enduring fleets while preparing the force for modernization efforts currently underway.

U.S. ARMY PHOTO

(left to right) WO1 John Page, WO1 Nicolas Bernardy, and WO1 Betran Noralez inspect the main rotor of a UH-60 Black Hawk as part of the aviation maintenance logistics training in WOTD.

Today's Technical Training

The Warrant Officer Training Division (WOTD) within the 128th Aviation Brigade is supporting this transformation by enhancing technical proficiency for the Aviation Maintenance Technician (AMT). Aviation Maintenance Technicians (151A) are technical experts, systems integrators, and managers of Aviation maintenance sections. These technicians serve in critical logistic positions for Aviation organizations such as Component Repair, Production Control, Quality Control, Armament Officer, and Technical Supply OIC. To prepare these officers for these positions, the 128th AB is now providing some of the most advanced institutional technical training available to 151As by incorporating technical experts to the Warrant Officer Basic Course (WOBC) and Warrant Officer Advanced Course (WOAC) curriculum. These advanced technical training experts include the Defense Logistics Agency (DLA) which provides strategic logistics training; Army Logistics University (ALU) to provide advanced logistics management functions; Aviation Missile Command (AMCOM) to provide in-depth corrosion prevention techniques; Program Executive Office Aviation (PEO AVN) to provide real-time weapon systems management updates; Army Futures Command (AFC) on Aviation modernization initiatives; and Headquarters Department of the Army (HQDA G44) to provide strategic Aviation readiness training. Additionally, these officers are mentored by senior 151As over an 18-week course culminating in a capstone exercise which challenges their physical and mental competence.

Tomorrow's Technical Professional

A Critical Task Site Selection Board (CTSSB), completed earlier this year by the 128th AB, captured the training requirements for WOBC students to modernize training curriculum for future 151As. A focus of this training, under the MDO concept, is developing technical expertise by refining critical management skills needed to efficiently transform Aviation maintenance capabilities during the LSCO environment. Improved Aviation technical training being analyzed for incorporation into the new WOBC curriculum is Project Management Professional (PMP) processes from the Project Management Institute (PMI) to facilitate advanced leadership skills; Enterprise Aviation (EAVN) processes as part of the strategic readiness initiative; Additive Manufacturing (AM) management for improved supply chain capabilities at the point of need; Logistics Assistance Representatives (LAR) University curriculum for improved technical expertise at the unit; and Prognostic and Predictive Maintenance (PPMx) processes for reduced maintenance burdens.

Investing in revolutionary advanced technical training for 151As provides Army Aviation an invaluable commodity to meet the emerging demands of the branch. These technical experts will provide first class management of critical enabling functions within Aviation sustainment while mentoring subordinate maintainers to meet the unique challenges of expeditionary maintenance. As Army Aviation continues to evolve and modernize to meet worldwide challenges, the Aviation Maintenance Technician remains the technical professional enabling Aviation's combat multiplier capabilities.

"Born Under Fire!

CW3 Abraham Garcia is the chief of academics for the Warrant Officer Training Division, Co. A, 1-210th Aviation Regiment, 128th Aviation Brigade, Joint Base Langley-Eustis, VA.

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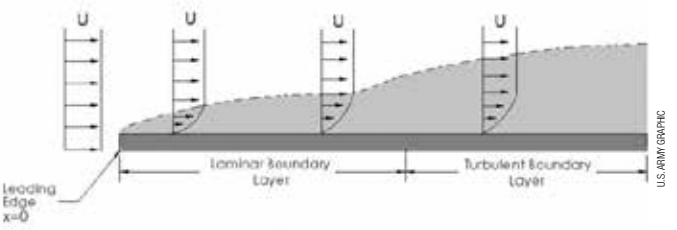
Rotor Blades and Boundary Layer

By Mr. Fred Banks

Have you ever wondered why, if you leave your coffee cup on the roof of your car it falls off (either when you make your first turn or stop, or when you get going fast enough), but no matter how fast you drive, you can't blow the dust off your car?



U.S. ARMY GRAPHIC


U.S. ARMY PHOTO

The reason is ***boundary layer***. What exactly is a boundary layer? When air moves over a surface, the air at the surface itself does not move relative to the surface due to shear stress along the surface. This is known as the *no slip condition*. But as the distance from the surface into the air mass increases, the air moves faster relative to the surface until it achieves the speed of the free stream of air. This is known as achieving the *free stream velocity*. The distance from the surface until the velocity profile achieves free stream velocity is the boundary layer. At the leading edge of the surface, the boundary layer begins with near zero thickness, but it gradually increases along the length of the surface. The flow remains *laminar* (meaning smooth, flowing in regular paths) until something causes it to become *turbulent* (meaning not smooth, with irregular fluctuations and mixing). Turbulent boundary layers are thicker than laminar ones. Often the trigger causing transition from laminar to turbulent flow is surface roughness. Dust, dirt, and other surface imperfections or residue contribute to surface roughness, and the closer to the leading edge that the source of transition exists, the thicker the boundary layer is thereafter. Once the flow transitions from turbulent to laminar, it seldom returns to laminar.

Loose objects on the surface that are thicker than the boundary layer are exposed to the free stream velocity and create aerodynamic drag proportional to the square of the free stream velocity. When the drag exceeds the forces holding the object in place, the resultant force moves the object downstream within the air mass. As the object begins to move, the force required to maintain its motion decreases. This is why your coffee mug slides off the roof of the car. But fine dust is made of much smaller particles than the thickness of the boundary layer, so the velocity the dust particles see is much lower than free stream velocity. The resultant drag on the dust particles is not enough to overcome the forces holding the dust in place. Therefore, you can't just drive faster to blow the dust off your car.

So, what does this have to do with Aviation? Boundary layers also generate drag themselves, and the thicker the boundary layer, the more the drag. In helicopters, the thickness of the boundary layer contributes to the profile drag of the rotor blades in the plane of rotation. The thicker the boundary layer, the more power required to maintain rotor RPM. Additionally, turbulent boundary layers affect the point on the airfoil's lift curve where stall occurs, often causing stall at lower pitch angles of the airfoil. In terms of roughness, helicopter rotor blades are generally smooth or perhaps slightly rough, so the effects of boundary layer are generally minor throughout most of the operating envelope of the aircraft. But when operating at high gross weight, high forward airspeed, and high density altitude, predicted values of maximum level flight speed (V_H) and onset of retreating blade stall may occur at airspeeds a little less than anticipated.

To mitigate against these adverse effects of boundary layer, mandatory maintenance procedures include washing of rotor blades on a scheduled basis to remove dust, dirt, and other surface contaminants. Following the wash procedures at the appropriate intervals will help maintain rotor performance. Additionally, leading edge erosion can cause an even more pronounced adverse effect. When you see leading edge erosion, bring it to the attention of your maintenance officer to assess whether it is within limits or if remedial action should be taken.

Fred Banks is the Associate Director for Technology for U.S. Army Combat Capabilities Development Command Aviation and Missile Center's System Readiness Directorate.

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Pulmonary Embolism

By LTC Theresa M. Long, M.D., F.S., M.P.H.

Q: I am a 37-year-old CH-47 pilot. I have done multiple overseas deployments. Until my most recent redeployment, I was in excellent health. I was a marathon runner, with no chronic medical problems other than seasonal allergies.

The only medications I take are birth control pills and seasonal allergy medications as needed. A few days after reaching state-side I started having some shortness of breath and was subsequently diagnosed with a pulmonary embolism. What is a pulmonary embolism and how is it going to affect my flying career for both the Army and civilian sector?

FS: Pulmonary embolism (PE) is a medical condition where a blood clot from a larger vein travels to the lungs and blocks the blood flow to the lungs. With decreased blood flow to the lungs, less blood will be oxygenated, which leads to shortness of breath.

There are a number of risk factors that predispose people to form blood clots in their legs or other body parts with larger veins (deep vein thrombosis, DVT).) Avoidable risk factors include smoking, obesity, supplemental estrogen (as seen in birth control pills, patches, rings, injections, and implants). Pregnancy also increases a risk of developing a blood clot. Prolonged immobility, such as bed rest after surgery or during prolonged air or road trips can decrease the flow of venous blood in the lower legs and contribute to the formation of blood clots. Certain cancers such as brain, ovarian, pancreas, colon, stomach, lung and kidney and some cancer treatments increase the risk of blood clot formation. Traumatic injury or surgery also increase an individual's risk of developing a DVT or PE. Some individuals are genetically predisposed to form blood clots because they have deficiencies or abnormalities in the proteins involved in the blood clotting cascade, such as Leiden factor V deficiency.

If a DVT or PE is small and caught early, it can be treated relatively easily with oral medication in an outpatient setting. However, PE can be life-threatening – one third of undiagnosed PEs cause death. When a blood clot cuts off the circulation to an area of the lung for a prolonged period, that portion of the lung will infarct or die, resulting in permanent damage.

Unfortunately, long redeployment flight and oral birth control most likely increased your risk of developing a blood clot. As you go through the treatment for PE, doctors will confirm that you don't have any complications or other factors that predispose you for a blood clot. All of these factors will be taken into consideration for safety of flight risk assessment in consideration of requesting and granting a waiver for a single non-recurrent thrombolytic event.

Treatment Options

Many treatment options are available after an individual has a DVT or PE, both nonsurgical and surgical. Most PE are treated with an anticoagulant, also called a blood thinner. Anticoagulants will prevent the existing clot from enlarging while dissolving it, and prevent additional clots from forming. Thrombolytic (clot dissolvers) could be given within hours to dissolve a large, life-threatening clot, but it could cause severe bleeding. Hence, thrombolytic medications are reserved only for cases that meet certain criteria.

Clot removal can be a lifesaving surgical intervention, necessary for very large clots. In cases where a patient is unable to take anticoagulant therapy or has had recurrent blood clots while taking anticoagulants, a filter can be surgically implanted in the body's main vein (inferior vena cava) to keep clots from going from your legs to your lungs.

Prevention

Risk mitigation is the best strategy for prevention of DVTs and PEs. Some preventive measures include drinking plenty of fluids and avoid alcohol consumption to prevent dehydration. Moving legs, flexing ankles every 15-30 minutes, getting up and moving around and or wearing compression stockings will increase the blood flow, preventing a clot. These strategies are especially important during a prolonged air or ground travel that you experienced with your redeployment travels.

Waivers

Per Army Aeromedical Policy Letters, a waiver for DVT or PE will be considered on a case-by-case basis for acute, nonrecurring conditions after anticoagulation therapy has been stopped. When history and laboratory assessment are normal, with no predisposing factors, such as an underlying cancer or blood clotting disorder identified, a waiver might be feasible. If the individuals develop complications such as pulmonary hypertension, requires on-going anticoagulation medications beyond aspirin, or surgical intervention these conditions are also disqualifying and would require a separate waiver.

For your civilian career, the FAA will need documentation in accordance with 14 CFR § 67.401. The FAA regulations allow for pilots to be granted a Special Issuance certificate to fly while taking medications used in the treatment and prevention of pulmonary embolisms and deep vein thromboses, provided that no other complications exist.

I hope this information was helpful.

Questions?

If you have a question, email it to *AskFS@quad-a.org*; we will try to address it in the future. See your unit flight surgeon for your personal health issues. The views and opinions offered are those of the author and researchers and should not be construed as an official Department of the Army position unless otherwise stated.

LTC (Dr) Theresa M. Long is a flight surgeon at the School of Army Aviation Medicine., Fort Rucker, AL.


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U.S. ARMY UAS PMO PHOTO BY RYAN LOZIER

Project Manager Unmanned Aircraft Systems (PM UAS) –

Aggressively Chasing Technology Improvements by Accelerating Capability through Prototyping and Demonstrations

By COL J. Scott Anderson

Soldiers at Pelham Range at Ft. McClellan, AL launch the Army's Short Range Reconnaissance (SRR) system on April 5th, 2021, demonstrating system capabilities during a limited user test.

Army modernization is under way with the goal of transforming the force from a counterinsurgency (COIN) focused, low intensity conflict, ready organization, to one that can face emerging threats and defeat near peer competitors across multiple-domains while conducting large scale combat operations. To achieve this goal, the Army identified six priorities: Long Range Precision Fires, the Next Generation Combat Vehicle, Future Vertical Lift (FVL), Network, Air and Missile Defense and Soldier Lethality. The FVL strategy consists of three pillars, Future Long Range Assault Aircraft, Future Attack Reconnaissance Aircraft and Future Unmanned Aircraft Systems. The Army identified 2035 as the marker to have an MDO ready force and along the way will conduct an "azimuth" check in 2028 to evaluate progress.

Fortunately, PM UAS is uniquely aligned within both the aviation and maneuver communities to deliver capability at a rapid pace ahead of Army readiness goals. Taking advantage of recent acquisition reform efforts and the emphasis on prototyping and demonstrations which enable "trying before buying", PM UAS teams have multiple prototyping efforts underway and have achieved measurable success with demonstrations.

Here are examples of how PM UAS is aggressively chasing technology improvements using prototypes and demonstrations to field capability faster and reduce program risk for the Army.

Short Range Reconnaissance (SRR)

SRR is a small, approximately 3lb, quad copter designed to provide greater situational awareness for the Army's maneuver platoons. PM UAS, working together with Defense Innovation Unit, developed a program built around fielding the latest technology upgrades, tranches, every three years. In order to deliver on that timeline, PM UAS is using rapid prototyping via a Middle-Tier Acquisition authority. Rapid prototyping allows the PM to work with industry on the requirement and retaining multiple vendors in the competition for longer periods of time, increasing opportunity and lowering risk for the PM.

Rapid prototyping allows the Army to utilize multiple Soldier Touch Points in order to gain instant feedback from the user. These Touch Points are an invaluable tool for the PM. Prototyping increases the flow of new technology into programs and involves the user throughout the process.

The SRR Tranche 1 fielding decision is nearly complete, and the team is already conducting user evaluations for Tranche 2. Army maneuver platoons will begin to see SRR in their formations in FY22.

Future Tactical Unmanned Aircraft Systems (FTUAS)

FTUAS is the replacement system for Shadow RQ-7B in brigade combat teams. Early on in the effort, PM UAS, working

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closely with the FVL CFT, developed a Buy, Try and Inform strategy. A slight variation of the Buy, Try and Decide approach. PM UAS selected and procured four different UAS systems and then fielded them across five different BCTs in order to conduct a series of year-long demonstrations. The demonstrations were a team effort with help from TRADOC, FORSCOM, AFC, and the test community in order to gain feedback from Soldiers and inform the requirements document for FTUAS.

The demonstrations were a tremendous success. The PM, working across the community, saw 115 Soldiers trained, and 1,500 hours flown across 500 flights. Each demonstration culminated in a CTC rotation, either JRTC or NTC. The demonstrations officially concluded with a rodeo at Fort Benning where all four systems and Soldiers from each unit returned to share their experiences. Ultimately, this led to the approval of the requirements document this past August. PM UAS looks to build on that success as the work is underway to deliver the program of record. PM UAS will seek to again use recent acquisition reform capabilities and rapid prototyping to deliver FTUAS. The rapid prototyping allows for multiple vendors to participate and multiple Soldier Touch Points which will facilitate immediate feedback.

PM UAS will deliver FTUAS in FY25 and will potentially deliver an early increment as soon as FY23, if funding is approved to accelerate the program.

Air Launched Effects (ALE)

Another highly anticipated effort within PM UAS is ALE. ALE is a group 2/3 UAV that will come in small (up to 100 lbs.) and large (up to 250 lbs.) variants. ALE launching from either a manned or unmanned platform will provide increased survivability, reach and lethality for aviation formations. In an MDO environment, ALE can prevent valuable manned and unmanned platforms from getting targeted by threat air defense systems, help locate and destroy them. ALE will launch from multiple platforms and have the ability to carry several different payload types.

Working with the FVL CFT and the Aviation Missile Technology Consortium and utilizing Other Transaction Agreements, PM UAS tendered agreements with ten Industry partners across the system areas. The team evaluated the subsystem prototypes over the last 12 months and shaped the S&T investments across the enterprise. PM UAS will deliver a working prototype system (air vehicle, payload and mission system) no later than FY24.

Scalable Control Interface (SCI)

SCI is a signature effort in modernizing the UAS portfolio. It is a role-based software effort designed to facilitate distributed control across the battlefield on existing Army battle command systems: Command Post, Mounted and Mobile. It anticipates using the Software Acquisition Pathway to rapidly deliver capability. Although not a prototype approach, the Software Acquisition Pathway allows for rapid continuous technology upgrades every two years.

Additionally, PM UAS is using demonstrations with various industry partners that support the development and understanding of use cases and requirement definition. The good news is these demonstrations can be small and tightly structured events that focus on the technology. Ultimately, for SCI, these demonstrations prevent missteps, and enable rapid fielding of these transformational capabilities.

The Results

So far, the results are very positive. Industry is receptive and wants to participate, and they've adapted to the changing acquisition landscape. Soldiers too are embracing the opportunity and want to be part of the solution. For many years using the standard DoD 5000 model, PMs selected a single vendor to provide capability and ultimately lost leverage. Is there a learning curve? Absolutely, both for PMs and for industry; however, this approach helps mitigate and lower risk before the Army commits to procuring a capability. The bottom line is we want to ensure the technology is ready and what we deliver to Soldiers is the most advanced technology available.

COL Scott Anderson is the project manager for Unmanned Aircraft Systems assigned to the Program Executive Office Aviation at Redstone Arsenal, AL.

U.S. ARMY YUMA PROVING GROUND PHOTO BY AMY TOLSON

An Area-I Air-Launched, Tube-Integrated, Unmanned System, or ALTIUS, is launched from a UH-60 Black Hawk at Yuma Proving Ground, AZ., March 4 where the U.S. Army Combat Capabilities Development Command Aviation & Missile Center led a demonstration that highlighted the forward air launch of the ALTIUS.

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AP-RDD – Restructuring the Organization and UAS Updates

By COL John A. Morris III and Patrick O'Brien


U.S. ARMY PHOTO BY HUNTER M. MARSHALL


GENERAL ATOMICS PHOTO

Top left: New AP-RDD Director, COL John A. Morris, receives an engine brief from General Atomics.
Top right: MQ-1C Gray Eagle Extended Range UAS conducts long endurance reconnaissance.

Over the past few months, Aviation Platforms-Requirements Determination Directorate's (AP-RDD) structure changed and grew to include management of the current unmanned aircraft systems while still maintaining responsibility for all future aircraft requirements like Future Long Range Assault Aircraft (FLRAA), Future Attack Reconnaissance Aircraft (FARA), Future Tactical Unmanned Aircraft System (FTUAS), and Air Launched Effects (ALE). This change is the first step in an eventual transition from AP-RDD to an Army Capabilities Manager for Unmanned Aircraft Systems (ACM UAS). Both FLRAA and FARA programs are progressing towards Milestone B. Once achieving Milestone B, both programs will transition to the ACM Lift and ACM Recon Attack respectively. Since this subject is focused on UAS, here is the current status of existing and future Army UAS.

FTUAS

AP-RDD, in close coordination with the Future Vertical Lift (FVL) Cross-Functional Team (CFT), developed the FTUAS Abbreviated Capability Development Document (A-CDD). The buy-try-inform assessment and Soldier touchpoints informed the FTUAS A-CDD. The assessments, touchpoints, and field exercises generated valuable data that Army senior leaders and requirements developers used to codify the requirements for the next generation UAS capability for the Brigade Combat Team (BCT). Soldiers operated four commercial off-the-shelf systems across tactical UAS platoons within five different BCTs, demonstrating the expeditionary vertical take-off and landing (VTOL) capability. The "FTUAS Rodeo," the capstone event at Fort Benning in March 2021, brought together all the participating units and systems to show case the FTUAS capability in front of Army senior leaders. The Soldier-led demonstration was a resounding success in less than ideal weather conditions, and showed why this capability is necessary in the BCT.

The current fielding plan for FTUAS is Increment 1 in FY23 and Increment 2 in FY25. FTUAS is set to become a program of record (POR), enabling MDO ready units in 2035 and beyond. Increment 1, predecessor of the POR, is a commercial off-the-shelf purchase and is programed to be fielded to eight BCTs, providing a quick reaction capability to Army global response forces. As further technology advancements emerge, the Army looks to expand on the requirements with a more capable Increment 2 POR with first units fielded in FY25. Increment 2 is anticipating a contract award in 4th quarter FY24.

Gray Eagle

The MQ-1C Gray Eagle (GE) UAS, operated by highly-trained Soldiers, continues to provide outstanding support to ongoing overseas contingency operations. Concurrently, AP-RDD, in conjunction with key GE UAS stakeholders, is exploring what capabilities (aircraft, sensors, and munitions) can be developed in a cost-conscious manner to enable the system to meet emerging large-scale combat operations. The intent of this focused modernization effort is to inform Army senior leaders on what reconnaissance, surveillance, and lethal/non-lethal effects the GE UAS delivers in contested near-peer/peer battlespace. GE UAS modernization enables this legacy platform to remain a viable member of the Army Aviation team well into the future.

Shadow

RQ-7Bv2 BLK III fielding upgrades have begun for combat aviation brigade and Special Forces units. BLK III upgrades include enhancement to the engine, which improves power, reliability and reduces the audio signature of the air vehicle. Additionally, Shadow BLK III brings payload upgrades that provide a high definition/laser designation capability and increases the target recognition range. BLK III upgrades also include a small mission computer with a dual processor which allows for future expansion processing requirements. Shadow BLK III continues to enhance its capabilities to meet the needs of the combat aviation brigade formations.

The operational environment in 2035 and beyond will be fundamentally different and requires Army Aviation to innovate and modernize to win on the future battlefield. Army Aviation is moving to regain overmatch through the efforts of FVL CFT, in partnership with the Aviation Capabilities Development & Integration Directorate (AV CDID). The primary effort is the FVL Eco-System, comprised of the Future Attack-Reconnaissance Aircraft (FARA), the Future Long-Range Assault Aircraft (FLRAA), Long Range Precision Munition (LRPM), and Air Launched Effects (ALE).

Air-Launched Effects

ALE will function as a critical component of the Eco-System by extending the reach of its sensors, enabling penetration and dis-integration of Integrated Air-Defense Systems (IADS) from survivable standoff. ALE is two capabilities small and large, with functions including: detect/identify/locate/report (DILR), decoy, disrupt, and lethal. The program received Army Requirement Oversight Council (AROC) approval in May 2020 for the A-CDD and expects the Milestone B CDD in 2025. The FVL CFT recently executed Experimentation Demonstration Gateway Exercise (EDGE) 2021, in preparation for Project Convergence 21 (PC 21). EDGE 21 provided superlative insight into the employment of the FVL Eco-System, including the aerial launch of both ALE small and large. The ALE provided an over the horizon capability, extending the reach and lethality of the ground commander in order to accomplish their mission.

PM UAS is executing their ALE risk-reduction effort to identify one vendor each for the mission system, payload and air vehicle, which will be integrated in the final product. Aurora has been awarded the Systems Integrator contract for the next phase of the risk-reduction and development effort. In the near term, ALE efforts are related to demonstrations during PC 21, and science and technology (S&T) efforts to further define the Eco-System Advanced Teaming behaviors. Requirements developers at Fort Rucker, Alabama continue to collect data from the numerous efforts to inform capabilities as the team begins to frame the ALE CDD in preparation for Milestone B in 2025. The FVL CFT, S&T, and acquisition communities are working closely with the test & evaluation community in order to bring the transformational capabilities to life as seamlessly as possible.

COL John A. Morris is the director and Mr. Patrick O'Brien, the deputy director of Aviation Platforms-Requirements Determination Directorate of the Aviation Capability Development and Integration Directorate (CDID), U.S. Army Futures Command located at Ft. Rucker, AL.

Significant Improvements for Army UAS Training

By CW4 Timothy Starnes, Mr. Raymond Rivera, and Mr. Charles Rossman

In continual efforts to address the operational needs of the Army's Unmanned Aircraft Systems (UAS), several major improvements been executed within the 2nd Battalion, 13th Aviation Regiment. Over the last 24 months, the Battalion has redesigned the UAS Operator and Repairer Programs of Instruction (POI) to facilitate the split of these Military Occupational Specialties (MOS) that went into effect on 1 October 2020. The two UAS 15W and 15E MOSs have split into 4 MOSs centered on system-specific qualifications. In conjunction with preparing the POIs for the MOS split, the Battalion reorganized Course Management Plans for UAS Operator and Repairer Courses to align with U.S. Army Aviation Center of Excellence (USAACE) training. Additionally, under continuous efforts to expand capabilities for Gray Eagle UAS to conduct flight operations in Class A airspace without chase aircraft, USAACE directed an Instrument Flying Rules (IFR) expansion was added to the Gray Eagle UAS Instructor Operator (IO) Course. These parallel efforts have established a capability for improved management of UAS personnel, providing foundational UAS training synchronized with USAACE POIs, and the furtherance of National Airspace System (NAS) integration for Army UAS.

MOS Split

To accommodate the enlisted UAS MOS split, affected UAS MOS producing courses required significant revisions. Beginning in FY21, Shadow and Gray Eagle UAS qualification courses proceed through distinct training programs, based on system-specific qualifications, and will result in Soldiers being awarded one of four UAS MOSs. The 15W UAS Operator MOS was divided into the 15W RQ-7 Operator and 15C MQ-1 Operator MOSs. The 15E UAS Repairer MOS was broken out into the 15E RQ-7 Repairer and 15M MQ-1 Repairer MOSs. These MOS changes required a restructuring of the topics trained in legacy qualification courses to enable 4 separate MOS producing POIs. Under the previous 2 MOS model, 15W and 15E MOS training consisted of a common core phase at the beginning of the courses. Soldiers completed the common core phase and progressed to a system-specific qualification phase. Under the new FY21 training models, common core phases have been absorbed into the system-specific phases of the course. This results in a more seamless training flow for Soldiers, where the overall training received is specifically tailored to the UAS they become qualified to operate or repair. Coinciding with the redesign of these MOS qualification courses, the UAS IO Course POI has been revised to accommodate the MOS changes for Shadow and Gray Eagle Operators.

U.S. ARMY PHOTO BY DUANE AYERS

Mr. Charles Delany instructs PFC Rheinschmidt and SPC Fardelmann as part of the 15W Shadow UAS Operator Program of Instruction at Ft. Huachuca, AZ, Oct. 6, 2021.

U.S. ARMY PHOTO BY DUANE AYERS

SPC Johnsen conducts flight operations on the MQ-1C Gray Eagle System as part of the 15C Operator Program of Instruction at Ft. Huachuca, AZ, Oct. 6, 2021.

Aligning with USAACE Training Programs

As the Battalion worked through necessary changes to our POIs facilitating the MOS splits, we have embarked on a parallel effort to align the CMPs associated with these POIs to mirror USAACE training programs. These significant changes consisted of a complete restructuring of the sequence training events occurring within our UAS Operator and Repairer POIs. UAS course flows now synchronize with USAACE concepts applied to flight training. The reorganization of training events into contact and tactics stages have been applied to all UAS Operator qualification courses. The MQ-1 Operator Course contains

an additional IFR stage, which occurs after Soldiers complete the tactics stage of the course. The contact stage is where a Soldier learns basic aviator knowledge topics and flight tasks associated with the UAS they are receiving a qualification to operate. Tactics stage introduces Soldiers to the doctrinal employment of the system in a combat environment and serves as a culminating performance stage in the course. The IFR stage covers all of the IFR related academic topics and flight tasks which permit the safe integration of the UAS into the NAS. Proficiency Progression Points (P3) have also been associated with each flight task required to be trained in the Operator Qualification courses, in the same way these are applied to flight training courses under USAACE. The academic topics that were in the common-core phase of training have been embedded within the overall POI timeline which improves retention of critical knowledge, skills, and attributes throughout all stages of these courses.

Gray Eagle UAS IO Course IFR and Gunnery Training

Beginning with the first class having graduated the Gray Eagle Qualification Course in FY18, and with every graduation since, MQ-1 UAS Operators have received a UAS IFR Qualification as part of their training. This training allows operators to conduct Gray Eagle flight operations in Class A airspace under a Certificate of Authorization or Waiver (COA) issued by the Federal Aviation Administration without the need for chase aircraft. While this first step was critical to establishing a capability inherent with the MQ-1C UAS, more was required to sustain this capability. Starting in FY17, the Battalion was directed by the USAACE Commanding General to develop the MQ-1 IO Course IFR training program in conjunction with adding an IFR qualification to the MQ-1C Qualification Course. The initial form of this training consisted of an internal training program, approved by the Directorate of Evaluations and Standardization under USAACE authority, to facilitate IFR training in the qualification course. The critical skills, knowledge, and tasks identified in this training were used to develop the formal MQ-1 IO Course IFR training program. The end result is a 3 week IFR expansion to the MQ-1 UAS IO Course, which is covered over the last 3 weeks of the course. In addition to the 3 weeks, 2 days were added into the first 4 weeks of training to capture more robust Aviation Gunnery training requirements that remain a persistent demand for MQ-1 UAS Operators across the U.S. Army. The 3 week expansion for the MQ-1 IO Course permits the sustainment of critical capabilities at the unit level through their UAS IOs, while ensuring a standardized baseline of performance across MQ-1 UAS units.

These initiatives establish a strong U.S. Army Aviation foundation, fostering progress for these UAS programs and enabling efficient management of UAS personnel. Improvements in the critical training elements presented here, facilitate greater degrees of performance at the unit level, including improved integration and employment across multiple domains.

CW4 Starnes and Mr. Rivera serve as the Aviation Standardization Officers, and Mr. Rossman serves as the Training Committee Chief for the 2nd Bn., 13th Avn. Regt., 1st Avn. BDE., U.S. Army Aviation Center of Excellence at Fort Huachuca, AZ.

U.S. ARMY PHOTO

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Harnessing Relationships and Opportunity – An AOB's Approach to Building and Maintaining Readiness

By LTC Travis Betz and MAJ Brian Alliston

Top Left: AN-TPN-31 air traffic navigation, integration and coordination system (ATNAVICS) function in support of training at Ft. Rucker, AL.

Top Right: SGT Bang operates the mobile tower at Stinson Stage Field, Ft. Rucker, AL.

In October 2019, 1-58th Airfield Operations Battalion (AOB) assumed an enduring mission to support CJTF-HOA by providing Airfield Management and Air Traffic Services to support the strategic objectives of AFRICOM-East Africa. 1-58th AOB successfully spearheaded the mission and returned to home station where they shifted their focus to manning and training for the next mission by building and maintaining sustained readiness. With the Army's implementation of the Regionally Aligned Readiness and Modernization Model (ReARMM), the unit is currently in their 8-month training window as they prepare for a known mission. Subordinate to the 164th Theater Airfield Operations Group (TAOG), 1-58 AOB's mission is to provide airfield management and air traffic services within a theater of operations. Comprised of a Headquarters Company, Airfield Management Element (AME), and an Air Traffic Control (ATC) Company, the AOB establishes an airspace information center for airspace management and interfaces with the theater airspace system (TC 3-04.6). To provide ATC services, the AOB employs four tactical systems: the Mobile Tower System (MOTS), the Tactical Terminal Control System (TTCS), the Air Traffic Navigation, Integration, and Coordination System (ATNAVICS), and the Tactical Airspace Integration System (TAIS). As the unit resumed training post-deployment, they encountered challenges unique to a tactical unit sharing the same training area as the United States Army Aviation Center of Excellence (USAACE) at Fort Rucker, AL. They address these challenges by harnessing mutually beneficial relationships with organizations across the USAACE footprint and maximizing the opportunity to build fully manned and qualified (FMQ) ATS systems in preparation for known mission requirements, effectively turning training obstacles into training opportunities.

To meet readiness objectives, the AOB employs its tactical systems in the nation's busiest training airspace around Fort Rucker. Considering that the USAACE conducts 1.8 million flight operations per year, which equates to 24% of the Army's flying hours, one might assume that the home of Army Aviation is the perfect place to train on these systems. However, with USAACE's monumental task of producing aviators and air traffic controllers to meet the needs of the Army, they require well-defined, timeline sensitive, programs of instruction (POI) focused on generating the future Aviation force. To integrate into this congested training environment, AOB leaders and subject matter experts engaged in multiple relationship-building efforts with resident organizations to develop and coordinate "win-win" training opportunities. The following paragraphs highlight the ways 1-58 AOB is integrating with the USAACE community to train on its ATC systems.

MOTS Training

The need to employ the MOTS at an airfield with the traffic density required to progress controllers and build proficiency is met through a robust partnership with the 1-11th Aviation Regi-

ment. Working with the organization responsible for providing air traffic support to the USAACE flight training mission, the AOB is capitalizing on existing ATC resources to leverage training opportunities. The two units developed a synergistic training effort, where AOB Soldiers enter a fixed base FAA-rated training program to gain proficiency and experience while supplementing 1-11th's manning to create a more robust capability. On average, 1-11th is manned at 77%, so the initiative is leveraged at times to sustain flight training operations during periods of high personnel transition. When the AOB partially deploys, controllers not included on the mission have a place to maintain proficiency and generate readiness, as well as assist the USAACE flight school mission to generate combat aviators. In exchange, the AOB provides tactical system training for the 1-11th control tower operators utilizing flight student traffic at the local Fort Rucker stage fields.

TTCS Mission Training

Training controllers for the TTCS mission to provide tactical tower services at temporary landing sites is accomplished by coordinating with the flight school's Basic Warfighting Skills (BWS) section and USAACE G-3 Air to determine optimal remote training areas to position the TTCS and receive maximum traffic. The opportunity provides the traffic density required to train while enhancing flight school training.

ATNAVICS

ATNAVICS crews, tasked with providing ground-controlled radar services, found that employing and training this system in the local training area was prohibitive. Over time, the team built an enduring relationship with the city of Marianna, FL. Located 50 miles to the Southeast of Fort Rucker, Marianna Municipal Airport (KMAI) enables the unit to establish radar approaches into their local procedures. A challenge to training outside of the Fort Rucker local flying area is the increased enroute time required to reach Marianna and the limited time flight instructors have per training period. This often makes the location prohibitive to USAACE flight training; however, to address this the AOB coordinates with the Civil Air Patrol (CAP) to provide the necessary traffic density. Coordinating with Fort Rucker's Cairns Army Radar Approach Control (ARAC) to coordinate airspace control of Marianna traffic, CAP can now complete Instrumental Flight Rules (IFR) approaches under Visual Flight Rules (VFR) conditions.

While this article focused on 1-58 AOB's #1 priority of building FMQ ATS systems, the battalion must also ensure its Soldiers and equipment are continually ready and deployable. This is achieved through continually training to master critical Warrior Skills and maintain their pacing items and fleet at -10/20 standards. And since the battalion is deploying in third quarter this year, there is also an emphasis on unit cohesion through Foundational Training Days and the Soldier and Family Readiness Group (SFRG). While there are challenges being the only deployable FORSCOM unit on a TRADOC post, the battalion benefits greatly from the support reaped from teammates across the USAACE footprint. Through relationship building with resident facilities, local municipalities, and the Civil Air Patrol, 1-58 AOB is achieving the training standards required to meet and exceed their readiness objectives.

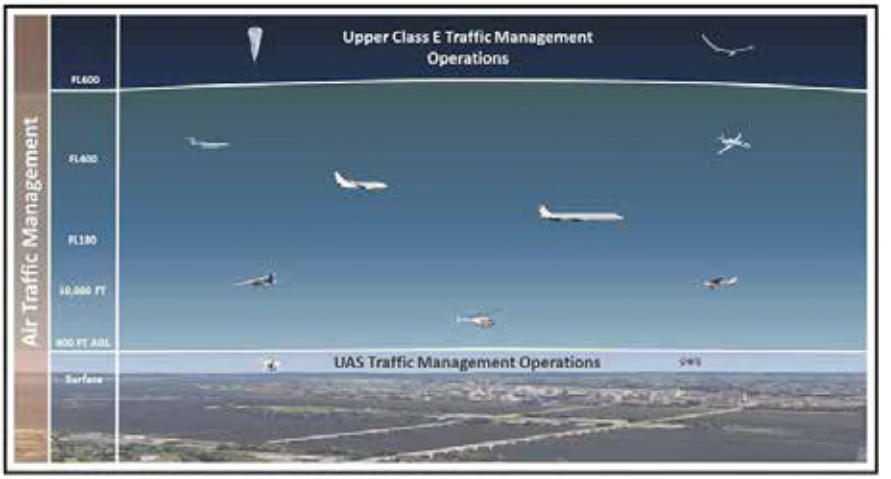
LTC Travis Betz is the commander and MAJ Brian Alliston the executive officer for the 1-58th Airfield Operations Battalion, Fort Rucker, AL.

U.S. ARMY AERONAUTICAL SERVICES AGENCY

Updating Our Airspace

By LTC Ralph Becki

The National Airspace System (NAS) has experienced many changes over the course of its existence. Most changes have been small, incremental modifications to existing policy. Change is historically slow and costly. As an example, our rule-of-thumb for establishing a new restricted area is two to five years and millions of dollars. That's if it's possible, and after the formal request packet is built and submitted to the Federal Aviation Administration (FAA) for approval. But right now, efforts are underway to make significant changes to existing policy and leverage modern systems to make airspace control measures more dynamic. While in this period of intensified reform, it is imperative we take action to facilitate our own destiny. Airspace is on the precipice of major change and now is the time to identify your requirements to meet future needs such as long range fires, Future Vertical Lift (FVL), and operations in Upper Class E airspace.



Future Airspace Needs

Rapid changes in technology affect nearly every aspect of how the Army operates, and the NAS is no different. While not all airspace measures were built to accommodate today's weapons, professionals from all across the Department of Defense (DoD) and the FAA are working to expand regulations to meet our needs. Hypersonic weapons is one of the areas pushing the envelope wider on current airspace policy and practices. These weapon systems require long corridors to stretch their legs and test their capabilities. And while overland testing is largely considered to be more economical, there are no pre-established corridors within the NAS for this purpose. This relegates most testing over water at a higher cost. In order to address this, the Mountain Desert Corridor proposal is being worked by a team under the direction of the Office of the Secretary of Defense. This proposed corridor system would connect existing test sites that offer launch and impact locations. The FAA is working with the Department of Defense to create these new enablers and keep pace with new requirements. We need to consider these same airspace corridor requirements to support the development, testing and fielding of FVL in the early 2030s.

On the Unmanned Aircraft System (UAS) front, we've recently seen the Army's first flight in "Upper E" airspace above FL600. This "Army first" under Army Futures Command's watch is a series of extended duration, high altitude operations across a large swath of the NAS to test a sensor payload using a UAS pseudo satellite. In the planning phases of this operation, existing airspace requirements didn't allow for the flight to occur. It was only after an FAA/DoD Safety Risk Management Board was convened that the concept of the operation was cleared to go forward. The FAA is developing an updated "Upper E" Traffic Management (ETM) concept, but is several years out from its implementation. In cases like this where policy lags behind technology, the mission can be reviewed to establish that it can safely meet the intent of existing policy. With the proper mitigations in place to satisfy FAA safety concerns, the Army was able to venture into what will be a far more popular section of airspace in the very near future.

Process To Get There

The trend we see is that existing airspace policy for the NAS sometimes is not optimized for new technologies. The Army, as a proponent for new technologies, occasionally finds itself challenged to freely execute tests and training. But this gap can be resolved through the Airspace Community of Interest. Everyone can be a key link in identifying the future airspace needs of the Army and it starts with your local flying area. If you've identified an airspace regulation that requires review, your first contact should be your installation's Air Traffic and Airspace (AT&A) Officer. Every installation/garrison, as required by AR 95-2, has an AT&A designated. Your AT&A knows the appropriate airspace system composition; the rules, regulations, and procedures by which it is managed and how the Army interfaces with the airspace managers and other users of the airspace systems. He or she

can help identify and define airspace requirements; develop, coordinate, negotiate, and process proposals to satisfy requirements.

Your AT&A will assist you and work with the Department of the Army Representative (DAR) to the FAA. The DAR maintains close liaison with U.S. Army organizations to ensure that HQDA and FAA policies and procedures are followed and that problems between the Army and other airspace users are understood and addressed. The DAR is the first point of liaison to the FAA and other DoD airspace users. DARs are regionally aligned to FAA Service Centers and are experts in evaluating airspace change requests against the current and existing policies. If they aren't able to build the airspace you need using existing policy, then the request is sent to the US Army Aeronautical Services Agency (USAASA) to examine if the Army should pursue a policy change to meet the new requirements.

At this point in the process, USAASA will typically present their issue to other DoD airspace users and the FAA through the Policy Board on Federal Aviation (PBFA). The PBFA is the vehicle that all of DoD uses to share airspace matters and to approach the FAA with a unified front to address defense matters. The PBFA meets throughout the year and has subgroups that typically convene quarterly. The participants from within the PBFA keep the lines of communication open all the time to exchange questions and internally prioritize issues for the FAA to approach. The PBFA allows DoD to collectively approach the FAA with a unified voice to make changes to NAS policy.

Closing

As new technologies emerge, we see more and more that the limits of existing policy aren't always a match for new requirements. This creates friction when old policies deliver a "no" answer to a new airspace request. While an existing policy or regulation may not allow access today, that doesn't mean that the policy can't be changed. The other thing to keep in mind is that the Soldiers and Civilians drafting airspace policy are well versed in airspace and Air Traffic Control matters, but may not be aware of airspace requirements to support all the emerging military technologies. This makes it challenging for organizations updating airspace requirements to understand what future airspace needs will look like. We need input from the field and Program Managers on what is required to support the testing, fielding and operating new equipment in the next five to 10 years. As an Army, we can collectively help ourselves by expanding the dialogue between airspace policy makers and the developers of emerging technologies. It's up to us to identify emerging airspace needs now to shape the next generation of airspace policies. When you are integrating new technology, grab your AT&A and make sure your counterparts at USAASA know how they can help you. We must act now to ensure that airspace policy meets our future needs.

LTC Ralph Becki is the Airspace Branch Chief at the U.S. Aeronautical Services Agency, Fort Belvoir, VA.

The Fixed Wing Project Office and Army Fixed Wing Aviation – Focus on the Future Fight, a Joint Fight

By COL James DeBoer and Ms. Tracey Ayres

U.S. ARMY PEWO PHOTO

Top Left: The ARES technology demonstrator aircraft is scheduled to begin flying test missions in 2QFY22.

Top Right: ARTEMIS demonstrated a 200% increase in mission endurance and nearly a 500% increase in range for OCONUS flights.

After two decades of operations predominantly focused on counter terrorism/counter insurgency, the Army is pivoting to focus on near-peer competition in INDOPACOM and EUCOM theaters. The Army's current Guardrail and Airborne Reconnaissance Low (ARL) fleets cannot pace the emerging requirements. To be an effective partner in near-peer competition and conflict, the Army must modernize its aerial Intelligence, Surveillance and Reconnaissance (ISR) capability.

The Army needs a layered, multi-domain approach to ISR in order to compete in battlespace and ensure resiliency in combat. By integrating high-altitude platforms with deep sensing capabilities, this aerial ISR layer compliments other layered, multi-domain intelligence collection systems to mitigate each other's shortcomings and ensure multiple dilemmas for the adversary. The Army Aerial Intelligence, Surveillance and Reconnaissance (A-ISR) strategy emphasizes the need for the rapid development of modernized sensors and enhanced platform capabilities.

High Altitude, Deep Sensing – Why We Need It

The Army is developing, and eventually fielding, Long Range Precision Fires (LRPF) capable of ranging hundreds to thousands of miles. These fires will require targeting information at unprecedented battlefield depth and speed.

Modernizing Army A-ISR is imperative to ensure LRPF are not limited by the ability to provide targeting information. Failure to modernize A-ISR means the Army will have no organic capability for support to Multi-Domain Operations. As a result, Land Component Commanders will lack the early detection and assessments. The early detection and assessment of threats will allow the Army, and its allies, to gain a decisive advantage in the early phases of Large Scale Combat Operations and Multi-Domain Operations.

The Army has taken a unique approach in developing the high altitude capability; it has teamed with Leidos for the Airborne Reconnaissance Targeting Exploitation Mission-Intelligence System (ARTEMIS) and L3Harris for the Airborne Reconnaissance and Electronic Warfare System (ARES) to test the two technology demonstrators in support of a learning campaign for the High Accuracy Detection and Exploitation System (HADES) multi-domain sensing system. The technology demonstrators represent two categories of jet engine business class aircraft, and the data collected will shape the HADES program of record (POR) requirements. Using two categories of aircraft will better aid the Army in understanding capability versus cost trades.

Coming Up Short

The current fleet of A-ISR aircraft have limited speed, range, altitude, power and payload carrying capacity for deep-sensing in support of the Joint Maneuver Force, to include enabling the emerging LRPF. The current fleet of turboprop aircraft cannot quickly traverse expansive geography nor do they have the payload carrying capacity to provide economical, efficient delivery of collection capability or the room for growth. They do not have the electric power required to operate the payloads, collect and process the data, and then disseminate it. The current fleet's lower flight altitudes limit deep sensing capability, while the tech demonstrators have significantly increased targeting ranges. The higher the platforms fly, the further they can collect intelligence for many sensors.

Even though the Guardrail and ARL fleets cannot achieve performance required for increasingly complex operating environments, airborne SIGINT and SAR/MTI missions remain a validated requirement levied on the Army from the Joint Staff. Demand for this capability continues to out-pace organic and joint-supply across the Department. Demands for both capabilities in these theaters are significantly growing as priorities are shifting

Demonstration in Theater and Exercise

The competition and battlefield geography of INDOPACOM and EUCOM Areas of Responsibility (AORs)

are expanding rapidly. To gain performance data in the AORs, ARTEMIS was deployed to INDOPACOM from July – December 2020 where it accumulated more than 500 flight hours and then deployed to EUCOM from May – September 2021, accumulating an additional 700 hours.

In INDOPACOM, ARTEMIS completed tasked missions and successfully demonstrated. In the course of numerous OCONUS flights, ARTEMIS demonstrated a 200% increase in mission endurance and nearly a 500% increase in range – both of which enabled +50% increase in field-of-view for vital intelligence collection compared to the legacy fleet. This performance increase allowed the Army to experiment with cross-command A-ISR support from a single basing location and rapid global repositioning for emerging collection requirements. It also demonstrated the ability to support multiple, geographically dispersed problems with less overall aircraft resulting in significant cost savings to Army and Department of Defense. ARTEMIS then relocated to Europe in a single day; turboprop A-ISR aircraft often take up to 10 days to move to Europe.

ARTEMIS also participated in the Army Exercise Experimentation Demonstration Gateway Event 2021. ARTEMIS successfully flew six scenario based targeting and collection flights and accumulated another 40+ flight hours. During one flight, ARTEMIS identified targets and transmitted real-time data from the aircraft to the intelligence processing, exploitation and dissemination center in Fort Gordon, GA. The data was then used to task other assets to attack and destroy the targets of a theoretical adversary with significant Anti-Access/Area Denial capabilities.

ARTEMIS is currently supporting Project Convergence 21, the Army's new campaign of learning, multi-domain exercise, designed to aggressively advance and integrate the Army's contributions to the Joint Force.

The ARES technology demonstrator aircraft is scheduled to begin flying test missions in 2QFY22. The modified Global Express 6000 based system has an altitude range of up to 51K ft., 12+ hours of endurance and a 6000+ nm range. The modernized mission architecture included on ARES will facilitate HADES real time sensor to shooter capability. The current technology demonstrators have significantly more electrical power generations and payload to support future growth that may include radar, cyber, EW, ALE, etc.

The Fixed Wing Project Office, in cooperation with the Sensor Aerial Intelligence Project Office, will work to develop a potential HADES POR. HADES will provide multiple aircraft-organic sensing capabilities on a single business jet platform. Additionally, HADES will likely later incorporate manned-unmanned teaming by developing, integrating and networking sensor capabilities on unmanned platforms that, as a system, will form a survivable deep sensing suite. The HADES objective is domination of competition A-ISR collection requirements to provide indications and warning, and survivable collection capability that enables Army and joint fires.

COL James DeBoer is the project manager for the Fixed Wing Project Office, Program Executive Office, Aviation; and Ms. Tracey Ayres supports that office as a strategic communications lead with KBR. Both are located at Redstone Arsenal, AL.

Modernizing the Army's Aerial ISR Fleet

By Mr. Dennis A. Teefy

The Project Director Sensors-Aerial Intelligence (PD SAI) has a long history of developing and delivering sensor capabilities for the Army's aerial intelligence, surveillance, and reconnaissance (ISR) fleet. As the Army's lead agency for lifecycle management of airborne ISR sensors, PD SAI partners with manned and unmanned platform program offices to provide layered solutions to the intelligence and tactical communities. Informed by stakeholders, PD SAI and the Army's aerial platform program managers team together to modernize and field the Army's premier Aerial ISR systems, enabling timely dissemination of intelligence products to meet current and future warfighter needs.

The Army's portfolio of systems is being adapted to support the Army ISR Task Force modernization strategy. PD SAI and its partners, Project Manager (PM) Fixed Wing (FW), PM Unmanned Aircraft Systems (UAS), and PD Aerostats, will maintain the current fleet of systems until divested, modernize enduring sensors as required, and develop and field new systems optimized to meet future threats.

The SS-4000 sensor prosecutes ELINT emitters and can detect non-communications signals.

Modernization of Enduring Fleet

Thinking of the future, PD SAI is modernizing the sensors of a portion of the fleet of manned and unmanned systems. PD SAI is methodically updating sensors on the platforms to provide potential sensor solutions for Multi Domain Operations (MDO).

The Army's first upgraded airborne electronic intelligence (ELINT) capability is the ***SS-4000*** sensor. The SS-4000 is a state-of-the-art sensor capable of collecting against modern threat emitters. This enables collection and exploitation by Soldiers against modern threats. This newly acquired information is then provided to Army leadership for intelligence preparation of the environment or targeting.

The ***Common SIGINT Chassis-Army (CSC-R)*** incorporates a combined modular open system approach (MOSA). This ports existing communications intelligence (COMINT) capabilities to hardware-independent software baselines, which minimizes hardware costs and facilitates rapid and continuous integration of new capabilities. Additionally, a new SIGINT

An MQ-1C Gray Eagle Maintainer (15M) and an Army Field Service Representative (FSR) work together to perform a diagnosis on a CSP through a portable workstation.

server is also being added, focused on resource management to provide a level of autonomous capability.

PD SAI is also upgrading the ***Common Sensor Payload (CSP) High Definition (HD)***, an electro-optic/infrared (EO/IR) camera payload on UAS, with Target Location Accuracy (TLA). The TLA payload is designed to enhance UAS's ability to geo-locate high value targets in support of the Army's Long Range Precision Fires (LRPF) capability. The CSP TLA payload will improve the payload's ability to conduct real-time targeting and can quickly pass that information to other units, shortening the sensor-to-shooter timeline from minutes to seconds.

Sensors for Campaign of Learning

The Army is currently undergoing a campaign of learning for the Multi Domain Sensing System (MDSS) user requirement. MDSS is a layered approach to address the Army's Aerial ISR needs. The mid-tier aerial ISR layer is codified in the High Accuracy Detection and Exploitation System (HADES). The Army is pursuing HADES to provide a multi-faceted deep sensing capability at higher altitudes, longer ranges, and with longer endurance to address the demands of future MDO against peer- and near-peer adversaries.

The Army is using the Airborne Reconnaissance and Targeting Multi-Mission System (ARTEMIS) and Aerial Reconnaissance and Electronic Warfare System (ARES) as tech demonstrators for HADES. PD SAI is partnered with PM FW to evaluate the ISR sensors on the demonstrator platforms to help inform HADES program requirements. PD SAI will collect and analyze feedback about how the sensors operate on the demonstrators at the altitudes, speed, and ranges that HADES is expected to perform.

One of the successes from the campaign of learning was the installation of the SS-4000 sensor on ARTEMIS. PD SAI and the Army were able to determine the potential increased capabilities of cross-decked sensors when integrated on higher altitude, faster airspeed, and longer endurance platforms.

MDSS HADES Sensor Evaluation

PD SAI is currently evaluating sensors to support MDSS through Other Transaction Authority (OTA) agreements to develop, build, and integrate prototype ELINT and COMINT sensors. PD SAI selected two contractors to provide candidate SIGINT sensors. Based on how the sensors perform in the lab, one COMINT sensor and one ELINT sensor will go through an additional development phase to be optimized to fill gaps and add additional capabilities to support a future HADES program.

The Army is also partnering with other government agencies to leverage the best of breed for ISR sensing. PD SAI is evaluating those sensors and identifying their applicability to the threats and targets of interest identified in the MDSS HADES requirements document.

Finally, PD SAI and PM FW are working together to conduct a systems-engineering effort to initiate the development of the HADES system architecture. By developing an open standards architecture and defining key interfaces and inter-system dependencies for HADES for both the platform and the sensor, the Army will increase interoperability, prevent vendor lock, and allow for future sensor modernization.

PD SAI is responsible for the delivery of the Army's premier Aerial ISR sensors to enable timely dissemination of intelligence products to meet current and future warfighter needs. To do this, PD SAI fosters a culture that grows the capabilities of our workforce, embraces change, executes tactically, and looks forward strategically. Using focused acquisition discipline, PD SAI will continue to deliver capabilities to meet the current threat and provide focus on meeting the emerging threats and requirements through delivery of systems to the field. PD SAI is poised to support Army Senior Leaders decisions on the future of the Aerial ISR Fleet.

Mr. Dennis A. Teefy is the Project Director, Sensors–Aerial Intelligence in the Program Executive Office Intelligence, Electronic Warfare & Sensors at Aberdeen Proving Ground, MD.

Delivering Capability – OSA-A

By LTC Scott Messare

After 20 years of conflict, Afghanistan was closed in August of 2021. The final C-26 deployment concluded in April of 2021 supported by the Massachusetts and Georgia ARNG. Also pictured is a C-12 and crews from the Arizona and Indiana ARNG who were the final OSA-A unit to redeploy from Afghanistan.

Operational Support Airlift Activity (OSA-A) is a multi-component battalion headquarters in the National Capital Region (NCR) that provides direct flight support to prioritized air movements as well as oversight of the Army National Guard (ARNG) Fixed Wing (FW) program. Among other functions, they are critically involved in advocating for, alignment of, and/or adjudicating sparse training and flying resources. OSA-A does this to optimize, sustain and mobilize aircrews and their planes in order to satisfy Combatant Command wartime requirements. They are a one-off, economy of force organization with global reach capacity.

As an organization, OSA-A has evolved significantly since it was established in the 1990's. Their most significant and recent structural changes were solidified in 2016 as a result of FRAGO 1 to EXORD 195-16. This directive formed the current Activity construct from the legacy OSA Agency, reducing the staff size from a brigade sized HQ to a battalion sized HQ. The regulatory roles and responsibilities remained the same. It also served to realign the Activity under the United States Army Aviation Brigade (TAAB) and the Military District of Washington (MDW).

Operational Execution

The OSA mission is to execute time sensitive contingency fixed wing support. While in the Continental United States, (CONUS), the primary focus is to generate and sustain proficient aircrews ready for mobilization in support of wartime mission requirements. In peacetime, OSA provides mission flight support to priority passengers and cargo movements, domestic operations flight support, and homeland defense mission support, while simultaneously providing training value to aircrews. This could not resonate more than during the period beginning March 2020 in which the OSA enterprise demonstrated incredible responsiveness to overcome the movement challenges brought on by a degraded COVID-19 environment. It was during this time that the airline industry came to a standstill, and the OSA enterprise was postured to answer the call. Some have labeled this period as an isolated event; however, COVID-19 represents any scenario that results in degraded confidence to safely operate or travel on the commercial infrastructure.

From March 2020 to August 2021, OSA-A scheduled 2,663 COVID related missions that were supported by all components. OSA-A's Flight Detachment (OFD) and the ARNG State Flight Detachments (SFDs) supported 1,208 missions. The remaining missions were supported by the U.S. Army Reserve (USAR) Flight Detachments.

Program Oversight

As an Army National Guard Staff, OSA-A provides FW oversight for Operations, Training and Mobilizations, total Army OSA scheduling,

ARNG FW Aviation Resource Management Surveys (ARMS), ARNG FW standardization management, and the facilitation of fleet maintenance, modernization and logistics support in conjunction with the Fixed Wing Program Office. These roles are delegated by the Director of the Army National Guard in Army Regulation 95-1 to the OSA-A Commander. As such, the primary objective of OSA-A is to deliver capability to Combatant Commanders in the form of a ready pool of ARNG pilots and airplanes that are optimally resourced with the available, time, funds, training and hardware to satisfy these global wartime missions safely.

The organization provides end-to-end training management for 307 authorized ARNG FW aviators, as well as program oversight for a fleet of 57 Army aircraft across 52 State Flight Detachments, one FW training site and three mobilized locations worldwide. Separately, on average four aircraft are, at any discrete time, conducting depot level maintenance, modification, upgrade or refurbishment, which accounts for approximately 20 airframes annually across the ARNG FW fleet.

The bottom line is that OSA-A provides the ARNG FW program with focus. It enables a top down assessment of scarce resources i.e.: training quotas, airframes allocations, maintenance, standardization, flying hours, funding allocations etc. and enables deliberate optimization of those resources at the right time. One of the most deliberate outputs from this multi-discipline assessment is the OSA-A Aircraft Share Plan. By assessing requirements and priorities of the force as they relate to mobilization and readiness, these separate oversight disciplines distill into a quarterly Aircraft Share Plan. The goal is to ensure all ARNG detachments are supported with adequate airframes to train and mobilize as efficiently as possible.

In support of sustained mobilization efforts, the ARNG FW force supports roughly 60% of the Global Force Management Allocation Plan (GFMAP) OSA requirements with 46% of the total Army OSA fleet. This is a testament to the tremendous professionals across the enterprise to step up to the plate and deliver exceptional results.

At OSA-A we invest in people across the enterprise to achieve lasting results. We strive for excellence in training, readiness and oversight. We are postured to safely respond as an individual, as a team, as a FW force, and we remain vigilant to retain capacity for today's fight and the one beyond the horizon.

Fly Safe – Fly OSA-A!

LTC Scott Messare is the commander of the Operational Support Airlift Activity (OSA-A) of The Army Aviation Brigade (TAAB), Fort Belvoir, VA.

The U.S. Army's Jet Training is Modernizing and Moving to Florida

By COL Michael Bean, MAJ(P) Nicholas A. Steele, CW5 Ross Glidewell, and CW5 Chris McGorrian

The Department of Defense's (DoD) Aviation operations incorporate a large variety of both fixed and rotary wing aircraft necessary to provide a multitude of capabilities to include fire support, reconnaissance, transportation, aerial re-fueling, and air/battle space coordination. When it comes to viewing the Army, however, most people probably associate this Service with primarily rotary wing platforms. Very few people realize the Army also operates several fixed-wing platforms as well, to include a few jet aircraft used for transportation and military intelligence missions.

U.S.ARMY PHOTO PROVIDED BY LTC WAYNE L. SCHAITEL

USAJTD IP Instructor CW4 Adam Kuntz (left) and Nicholas Carter, M7 Maintainer (center), instruct AQC Students on the use of the emergency exit on the UC-35B.

Background

In 1997 the United States Army received its first fixed wing jet aircraft and established an Army Jet Training program at Dobbins Air Reserve Base (ARB) in Marietta, GA. The UC-35 is a modified Cessna Citation 560 and serves as a non-standard Army aircraft primarily used for VIP transport and priority cargo requirements for inter-theater operations. This platform has the capability to operate in austere areas not supported by civilian airline services and can carry up to eight passengers.

Ten years later, in 2007, the Department of the Army G-3/5/7 Aviation (DAMO-AV) identified the need for a UC-35 specific training institution and tasked the United States Army Reserve Command (USARC) with proponency and full management responsibility for the planning, programming, and execution of the Army's UC-35 program. Operating out of Dobbins ARB, the United States Army Jet Training Detachment (USAJTD) consists of a Commandant, Non-Commissioned Officers (NCOs), and standardization instructor pilots (SP) from both the Active Component (AC) and the U.S. Army Reserve. USAJTD cadre are responsible for conducting academic and flight instruction for up to 36 initial aircraft qualification courses (AQC) and 18 instructor pilot qualifications (IPC) per fiscal year. The USAJTD is a United States Army Aviation Center of Excellence (USAACE) accredited institution supporting the Army's UC-35 jet community.

(left to right) USAJTD Instructor CW4 Adam Kuntz; UC-35 IPC Students CW3 Matthew Goldsberry and CW3 Max Jackson, both from United States Army Priority Air Transport (USAPAT) battalion; and USAJTD Instructors CW5 Ross Glidewell, and CW5 Christopher McGorrian pose for a graduation photo.

Updating Training

The USAJTD provides the highest level of excellence in training, safety, logistics, and support for the Army's UC-35 community. During this past year the USAJTD updated the UC-35 AQC Phase 2 academic course structure and materials to maintain this level of excellence as a training institution. The updated UC-35 AQC Program of Instruction (POI) and Course Management Plan

(CMP) include approximately 27 additional hours of systems and academics to reinforce the training students received during phase 1 of the UC-35 AQC and builds on lessons learned from the flight simulator training with 17 crucial hours operating the actual aircraft. The revised POI provides graduates with confidence and proficiency in the aircraft, ultimately resulting in rapid progression to RL1 upon return to their operational units. The USAJTD also streamlined the Instructor Pilot Course (IPC) POI and CMP by taking advantage of technology and adding an additional 5 hours of academics. This all creates graduates that are instilled with a sense of confidence and are ready to become leaders in the UC-35 community.

POI updates include the addition of enhanced Training Aids, Devices, and Simulators (TADS) used to instruct students on the Universal UNS-1 Flight Management System (FMS), augmenting the Phase I simulator training and provides a high degree of specificity during academic instruction. In AQC Phase II students get additional practice with Wide Area Augmentation System (WAAS) and Area Navigation (RNAV) training scenarios in the classroom environment prior to executing them in the aircraft allowing students to benefit from several focused iterations to supplement the actual flight training.

The USAJTD also established and maintains a MilSuite page as a portal for follow on training that is updated with the latest training materials and software for the UC-35 community. The portal is located at *https://www.milsuite.mil/book/groups/us-Army-jet-training-detachment.*

Move to Clearwater, FL

In addition to the improvements being implemented to the content of the UC-35 training, the facilities and training location are being upgraded as well. The USAJTD will be transitioning from Dobbins ARB to Clearwater, FL in early 2022. This move will benefit the Army in several ways. The most obvious being the newer aviation support facility (ASF) which includes improved office space, classrooms, maintenance facilities, and fight operations support. Moving to Clearwater will also reduce Army training costs and student travel time, allowing students to make the short drive from Orlando to Tampa, instead of traveling to Marietta, GA, to attend phase 2 of the UC-35 AQC. Factoring in the consolidation of USAR Aviation resources, closure of ASF Dobbins, and the cancellation of support contracts the move to Clearwater is a savings to the Army.

Improving the UC-35 Community

The USAJTD routinely fields maintenance contract questions and best practices from the field and provides SME verification and recommendations for the UC-35 accidents and incidents, training, and interpretation of publications relating to the UC-35 fleet. As the UC-35 Proponent organization, the USAJTD is a critical part of the UC-35 Fleet Maintenance and Modernization. The USAJTD routinely consults with Fixed Wing Program Management (FWPM), Aviation Engineering Division (AED), Cessna - Textron, TRADOC Capability Manager - Lift (TCM-Lift), U.S.M.C. UC-35 Branch, Directorate of Evaluations and Standardization (DES), Directorate of Training and Doctrine (DOTD), and end user units.

The USAJTD liaised with the USMC, PMFW, AED, and Cessna – Textron to develop an iPad-capable performance planning app (CESNAV) for the UC-35 Community at zero cost to the U.S. Army or USMC. This app allows flight crews to compute takeoff, landing, climb, and cruise performance data quickly and accurately under rapidly changing conditions and aircraft weights. The USAJTD was instrumental in the product selection and training development of the recent MOD4+ which enables CPDLC, SELCAL, ADSB, and satellite internet capability to modernize the fleet IAW ICAO 2020 standards vice relying on state exemptions to operate noncompliant aircraft in foreign airspace.

The USAJTD also had a key role in a fleet maximum gross weight increase (SB560-32-40) to increase the range and payload for operational units to meet the needs of Senior DOD Leadership and Members of Congress.

The team at the Jet Training Detachment, with an eye on modernization, sees a bright and relevant future for the program, the airplanes, and the Army in 2022 and beyond.

COL Michael Bean is the Director of Army Reserve Aviation and Watercraft at the U.S. Army Reserve Command (USARC) G3/5/7, Ft. Bragg, NC; MAJ(P) Nicholas Steele is the Commandant and CW5s Glidewell and McGorrian are instructors at the USAJTD currently located at Dobbins Air Reserve Base in Marietta, GA.

FWAATS – Home of the C-12 and C-26 Fleet Experts

By CW4 Joseph Weekly

The Fixed Wing ARNG Aviation Training Site (FWAATS) hosts some of the most diversely experienced instructors found in today's fixed wing fleet. Multiple deployments to nearly every combat and austere location offered by the US Army has allowed instructors to broaden their flight experience. Our flight instructors offer graduate level academic flight instruction as well as entry level qualification for those meeting the necessary prerequisites. Below is a list of some of the most value added courses offered at FWAATS as well as a short description.

Instrument Flight Examiner Course

Instrument flight is perhaps the most challenging flight regime to master for the fixed wing aviator. With an increased reliance on a smaller number of ground based navigation facilities, knowledge on how best to utilize these systems is at a premium. In keeping with the Army's need to prepare for Near-Peer and Large Scale Combat Operations, FWAATS has increased its focus on the fundamentals of instrument flight that may be required with the increasing likelihood of GPS Navigation degradation. Recent trends in reduced experience and limited flight time has highlighted the lack of Basic Instrument navigation skills. Advancements in Flight Management Systems and fleet modernization has increased reliance on automation and systems management. FWAATS focuses on rebuilding and developing basic instrument fundamentals which will prove invaluable in any future conflict.

FWAATS PHOTO

Classroom training at the FWAATS facility.

The course begins with an in depth examination of all DOD Flight Information Publications and instrument flight fundamentals. Weather fundamentals is taught and evaluated along with a review of Terminal Approach Procedure development. Upon completion of ATC procedures and operations, students are then evaluated daily in the aircraft while performing instrument flight tasks. By the time the course is complete students have successfully demonstrated the skills necessary to perform the most thorough instrument flight evaluation they will ever experience. They also have developed the skillset necessary to instruct others on how to correctly execute instrument procedures. The final stage consists of students performing evaluations in accordance with the appropriate Aircrew Training Manual.

Fixed Wing Qualification Course

The Army National Guard and Army Reserves provide a unique level of combined civilian and military professionals to the armed forces. The Fixed Wing Qualification courses take advantage of this unique experience. For those aviators meeting the requirements and are already fixed wing professionals on the civilian side, these courses optimize this experience. Offering a shorter, more exhaustive version of the traditional qualification course allows units and the Army to save both time and money. These units are able to take advantage of the benefits provided by hiring a proficient aviator from the civilian market.

FWAATS PHOTO

A Beechcraft C-12 and Fairchild C-26 inside the FWAATS hangar at Bridgeport, WV.

Following intense training at an authorized flight simulator location students report to FWAATS to begin the flight portion of the course. Each day starts with a review of aviation fundamentals including aerodynamics, regulations, planning and execution, and aircraft systems. Students then spend the afternoon flying and practicing the skills necessary to establish proficiency in the aircraft. These skills include airborne maneuvering, approach and landing, instrument flight tasks, and a heavy focus on emergency procedure response. Upon completion of this course, aviators return to their units capable of completing RL Progression in a shorter time; saving their unit time and valuable flight hours.

C-12 Maintenance Test Pilot Course

The MTP course at FWAATS is the only formal training available on fixed wing maintenance test flight procedures. It offers valuable comprehensive knowledge on aircraft systems and their interrelationship. The course begins with academic instruction and graduate level material concerning aircraft systems and DOD forms and regulations. Afternoons are structured in such a way as to cover the topic discussed during academics and perform the related maintenance flight procedures on that system. The ability of FWAATS to provide an organized method of instruction and demonstration cannot be replicated anywhere else.

Given the limited number of flight hours available in today's C-12 fleet, FWAATS provides a safe, experienced, and structured learning environment. Graduates can then return to their unit and provide other colleagues with the insights and procedures learned at the course.

Instructor Pilot Standardization Course

What if you could send one of your instructors to a course and allow them to practice any instructor related tasks of their (or your) choice for no more cost than TDY expenses? That is what IPS course provides. This is an underutilized course consisting of Standardization Instructor Pilots instructing and mentoring other Instructor Pilots.

Limited flight hours, reduced budgets, and minimal manning have all contributed to the atrophy of Instructor level proficiency. Units with reduced flight hour budgets cannot afford to send their instructors out to practice tasks when those flight hours are already ear marked for ATP currency. From Detachments returning from deployments where no Annual Proficiency and Readiness Test have been conducted for an extended time, to a newly qualified instructor needing more iterations, these are the perfect candidates for this course.

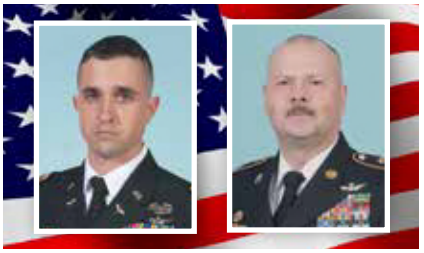
Whether the attendee arrives with a predetermined plan or prefers to cover all tasks, the instructors at FWAATS can provide invaluable insight and guidance. For those Instructors looking to prepare for an extensive Standardization Instructor evaluation this course is an ideal opportunity. This course is tailored to the individual attendee offering unequalled flexibility and the ability to ensure each student pilot receives training designed specifically for them.

The FWAATS is a time tested organization that provides invaluable qualification and graduate level training to all Components of the Army. The experience and diversity of backgrounds in the instructor staff allows for training that is second-to-none and produces highly trained and qualified fixed wing aviators that are prepared for flying in all environments and weather conditions across the globe.

CW4 Joseph Weekly is the C12 Section Chief at the Fixed Wing Army National Guard Aviation Training Site (FWAATS) located in Bridgeport, WV.

2021 National Functional Award Winners
Army Aviation Association of America

Outstanding Logistics Support Unit of the Year
Sponsored by AAAA



Commander: MAJ Ernest G. Carlsen *Senior NCO: CSM Scott W. Fleming*

628th Aviation Support Battalion
Task Force Roadrunner
Camp Buehring, Kuwait

The 628th Aviation Support Battalion (ASB), Pennsylvania Army National Guard, distinguished itself while deployed in support of Operations Inherent Resolve and Spartan Shield. As the logistics hub for the 28th Expeditionary Combat Aviation Brigade (ECAB), the 628th ASB's influence ultimately spanned 5 countries and 12 locations utilizing over 600 Soldiers within the CENTCOM AOR. Based in Camp Beuhring Kuwait, the 628th ASB safely executed 25 aircraft phases, convoyed in excess of 175,000 miles and provided distribution, ammunition, fuel, medical and communication resources to the 28th ECAB and its customers.

In addition to their doctrinal mission, the 628 ASB successfully leveraged Temporary Enabling Force (TEF) missions due to decreased force management levels within the region. These TEF missions greatly improved multiple Iraq based U.S. military sites through non-doctrinal use of Soldiers' skills in order to provide equipment inventories, container consolidation and non-standard maintenance activities that placed millions of dollars of government supplied equipment and supplies back into rotation to be reused and reissued.

The 628th ASB successfully accomplished its assigned mission, and more, all while battling the COVID-19 pandemic and hostile conditions/threats. The remarkable performance by 628th ASB Soldiers clearly identifies them as the 2021 AAAA Outstanding Logistics Support Unit of the Year.

Army Aviation Materiel Readiness Award For a Contribution by an Individual
Sponsored by AAAA

Kevin A. Belden

Kevin A. Belden is the DigiFlight Task Lead for the AH-64 Operator New Equipment Training Team where he oversaw the training of 1,175 United States Army and Allied Nation aviators in the AH-64E. From October 2020 to August 2021, and during the height of the COVID worldwide pandemic, Kevin coordinated, orchestrated, and managed the training of 202 aviators in the AH-64E at three separate combat aviation brigades. He managed the training of 198 aviators in the AH-64E V4.1 software upgrade and coordinated the academic training of 349 aviators in the Advanced Precision Kill Weapon System, all while most of the United States Army was locked down due to the pandemic. He drafted the first AH-64E Operator and Maintenance Test Pilot -64D to -64E Qualification Program of Instruction and Course Management Plans for the Version 6 upgrade. He drafted the Operator and Maintenance Test Pilot Training Support Plan for the AH-64E Version 6 New Equipment Training. He was the primary coordinator in the oversight and development of the U.S. Army and United Kingdom AH-64E Version 6 training; including academics, course questions, exams, and simulation scenarios. His focus, professionalism and sheer determination make him the only choice for the 2021 AAAA Materiel Readiness Award for a Contribution by an Individual.

Army Aviation Materiel Readiness Award For a Contribution by a Small Business
Sponsored by AAAA

Pinnacle Solutions, Inc.
Huntsville, Alabama

Pinnacle Solutions Inc. provides materiel readiness support to the U.S. Army's RQ-7Bv2 Shadow Unmanned Aircraft Systems Training Battalion, the 2nd Battalion, 13th Aviation Regiment at Fort Huachuca, Arizona. Pinnacle's efforts supported 360 Army Aviation Unmanned Operator students in completing 1,733.8 hours of flight training from 1 August 2020 to 31 July 2021. The Pinnacle team averaged a Fully Mission Capable rate of 91% for all associated aviation system equipment, far exceeding the Army standard of 80%; and supports 63 end items valuing $36,174,156, the equivalent of four fully fielded Shadow UAS units. The local fleet is made up of 15 aircraft, 10 ground control stations, 10 ground data terminals, 8 launchers, and 12 tactical automatic landing systems. The Pinnacle team balances FMC rates between end items on two airfields during Sunday – Friday, 24 hours a day to meet the training mission, while sustaining an aviation class A-C accident rate of zero per 100,000 flying hours for the Shadow UAS, leading the Army with a laser focus on aviation safety. This focus and dedication to the training mission identifies the Pinnacle Solutions team as the winner of the 2021 AAAA Materiel Readiness Award for a Contribution by a Small Business.

2021 National Functional Award Winners
Army Aviation Association of America

Army Aviation Materiel Readiness Award For A Contribution By An Industry Team

Sponsored by AAAA

PM Apache NETT
DigiFlight / VTG Defense / System Studies & Simulations, Inc.
Huntsville, Alabama

PM Apache's New Equipment Training Team's accomplishments in 2021 are of a scope and breadth almost unheard of. The Apache NET Team, comprised of retired Apache standardization instructor pilots, maintenance test pilot examiners, senior non-commissioned officers, abd support staff provided training for the newest aviators to brigade commanders and maintainers in the same class. During this training, conducted at the unit's home station they: flew approximately 1,890 flight hours in direct support of AH-64E qualification training for the U.S. Army; provided ATP flight training support for four U.S. Army units that were critically short instructor pilots; ferried approximately 49 Apache helicopters from Mesa, AZ, Joint Base Lewis-McChord, WA, Ft. Drum, NY, and Ft. Bragg, NC to their next destination; ferried eight Apache helicopters for foreign military customers from Mesa to the seaport in Houston, TX for overseas shipment; and trained 222 U.S. Army aviators and 361 maintenance and support personnel on the AH-64E. Further, they assisted the fielding of the AH-64E to three units at the height of the COVID-19 pandemic. Their accomplishments and dedication to the Army, Army Aviation and the Soldiers who fly and maintain the AH-64 clearly earned for them the 2021 AAAA Materiel Readiness Award for a Contribution by an Industry Team.

Army Aviation Materiel Readiness Award For A Contribution By A Major Contractor

Sponsored by AAAA

M1 Support Services
Denton, Texas

M1 Support Services made outstanding contributions to the Materiel Readiness of the United States Army Aviation Center of Excellence. M1's USAACE mission is to "provide quality maintenance and logistics support services for aircraft assigned to the U.S. Army in support of initial entry and graduate aviation training requirements at Ft. Rucker, Alabama." The company safely executed a 201,749 flight hour program, involving 575 aircraft in a high OPTEMPO environment where maintenance operations occur 24 hours per day, 7 days per week. They managed the equivalent assets of five aviation brigades distributed among five airfields, three centers of operation, dozens of stage fields, and one live fire range – an incredible accomplishment using the equivalent of one "brigade" of employees. 2020-2021 witnessed strategic level changes to the composition of the USAACE training fleet: 100% divestiture of TH-67 fleet, 30% reduction of UH-60L fleet, 21% increase in AH-64E fleet, and a 27% decrease in the total Initial Entry Rotary Wing fleet size while increasing the IERW Flight Hour Program by 50%. M1 responded to the challenge by leading stakeholder collaboration to solve complex interdependent problem sets, committing to continuous improvement initiatives, and applying their core value of innovation. This focus and dedication identify them as the 2021 AAAA Materiel Readiness Award for a Contribution by a Major Contractor.

Unmanned Aircraft Systems Soldier of the Year Award

Sponsored by General Atomics Aeronautical Systems, Inc.

SGT Damian P. Del Rae
Company F, 2nd Battalion,
160th Special Operations Aviation Regiment
Fort Campbell, Kentucky

SGT Damian Del Rae is a standout innovator in a company known for being at the forefront of Army UAS modernization. In the past twelve months, he was selected to lead the mission planning cells for the company's two most significant training events, during which groundbreaking UAS advancements were made. He has managed significant events such as establishing the company's first expeditionary tactical operations center (TOC) out of an Expando Van. In addition, when the company took the lead on developing tactical solutions to counter a near-peer threat, as the lead planner in the planning cell, he assisted in the development and testing of these tactics to include flying at 500 feet above ground level (AGL) and using terrain masking. Further, during this same training event, the company was tasked to test flying in National Airspace, something usually only accomplished by Air Force UAS. Once again, he eagerly accepted the challenge and made all necessary coordination, resulting in the first flight in National Airspace by a 160th Special Operations Aviation Regiment (SOAR) UAS. SGT Del Rae consistently performs above standard with limited guidance. His incredible ability to identify problems, develop innovative solutions, and execute flawlessly clearly identify him as the Army Aviation Association of America's 2021 Unmanned Aircraft Systems Soldier of the Year.

2021 National Functional Award Winners
Army Aviation Association of America

Unmanned Aircraft Systems Operations Technician of the Year Award
Sponsored by AAAA

CW4 Joseph M. Whittaker
Company E, 2nd Battalion,
160th Special Operations Aviation Regiment
Fort Campbell, Kentucky

CW4 Joseph Whittaker's performance as a 160th SOAR (ABN) Fully Mission Qualified UAS Operations Technician, Standardization Officer, and as Echo Company, 2nd Battalion Operations Officer is unmatched. He has deployed to the CENTCOM Theater as the Army Special Operations Aviation UAS OIC at a site conducting 24-hour operations in support of Joint Special Operations Forces. While there, he also played a key role in fielding a unique signals intelligence capability to four ARSOA MQ-1C Gray Eagle Extended Range aircraft. His efforts directly supported 10,095 flight hours, 16 kinetic strikes, and several high-profile missions in support of SOF objectives. Additionally, he was selected to plan, resource, and lead UAS support to Special Operations Aviation-Advanced Tactics Training during which he planned a multi-week exercise created to train and validate combined ARSOA rotary wing and UAS tactics, techniques, and procedures for integration into multi-domain operations while operating in a contested environment. He integrated and executed events for ARSOA UAS to penetrate and neutralize a complex integrated air defense system network and led his team of ARSOA UAS aircrews to navigate a highly complex EW/A2AD environment using unconventional UAS TTPs to avoid detection and provide SIGINT. CW4 Whittaker's achievements identify him as the Army Aviation Association of America's 2021 Unmanned Aircraft Systems Operations Technician of the Year.

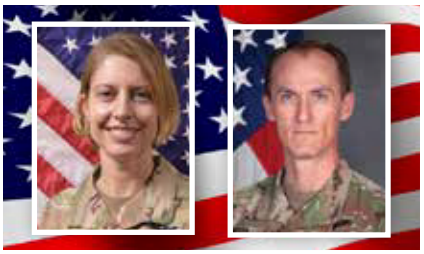
Unmanned Aircraft Systems Unit of the Year Award
Sponsored by Textron Systems

Commander: MAJ Joshua B. Kassel *Senior NCO: 1SG Tony J. James*

Company E, 2nd Battalion 160th Special Operations Aviation Regiment (Airborne)
Fort Campbell, KY

During the past year, Echo Company simultaneously manned two forward deployed sites supporting operations in the Central Command and the Africa Command area of responsibility. Overseas, the Company's notable contribution to the mission has included four successful enemy engagements, the major re-posturing of a UAS deployed site in theater, and support to successful search and recovery operations of civilian personnel detained by violent extremist organizations. While managing two deployed locations, the company is committed to support stateside Special Operation Forces on a continuous basis. Notably, the company participated in two special operations battalion level exercises supporting both special operations ground force objectives and special operations advanced aviation tactics training goals. The company has been instrumental in the development and implementation of MQ-1C future capabilities, tactics, and techniques to include support to over twenty System Integration Management Office initiatives regarding system testing and validation. This detailed integration and involvement continued to solidify Echo Company as the leader of MQ-1C tactics, techniques, and procedures across all services and domains. The support provided by Echo Company across the globe this year has truly embodied the Nightstalker's creed "Night Stalkers Don't Quit" and has earned them the 2021 Army Aviation Association of America's Outstanding Unmanned Aircraft System Unit of the Year Award.

Fixed Wing Unit of the Year Award
Sponsored by FlightSafety International



Commander: LTC Erin P. Davis *Senior NCO: CSM Jonathan D. Wood*

15th Military Intelligence Battalion (Aerial Exploitation)
Fort Hood, TX

The 15th MI BN (AE) is tasked to maintain globally responsive Intelligence Weapons Teams (IWT) capable of exceptional manned and unmanned Aerial Intelligence, Surveillance, and Reconnaissance (A-ISR) support to combatant commanders. Over the past year, the unit supported anti-terrorism and border defense operations in four different countries while maintaining a rigorous training regimen from home station. During this time, the unit flew more than 19,000 flight hours while managing an extensive Aircrew Training Program and supporting named operations. Significant highlights from this period include: the implementation of Remote Split Operations and enabling the team to control deployed MQ-1Cs from home-station; MC-12 support to the U.S Customs and Border Patrol on the Southwest border; support to the Presidential Inauguration and Address to a Joint Session of Congress; and the involvement in multiple force modernization tests and demonstrations. The unit coordinated numerous personnel, aircraft, and equipment movements. Overcoming the logistical challenges created by COVID-19, the unit conducted eight overseas MC-12 ferry flights, more than $100 million of critical equipment withdrawn from Afghanistan, and creatively deployed five detachment rotations into a theater. The accomplishments of the Soldiers, civilians and Defense Industry partners of 15th MI BN (AE) clearly identify them as the 2021 Army Aviation Association of America's Fixed Wing Unit of the Year.

Donald F. Luce Depot Maintenance Artisan Award

Sponsored by AAAA

Mr. Lauro Moya Jr.
Corpus Christi Army Depot
Corpus Christi, Texas

Mr. Lauro (Larry) Moya distinguished himself as a Work Leader painter and subject matter expert at Corpus Christi Army Depot. Mr. Moya was instrumental in the planning and movement phases of the Airframes paint operation from two locations to the new Aircraft Corrosion Control Facility (ACCF), a project eight years in the making. He took charge of twelve team members and, as a result of his technical skill and leadership, ensured the safety of personnel, protected the environment, and achieved quality of the assets during the relocation and release for production of the ACCF. He was directly responsible for the first UH-60L and UH-60V RECAP aircraft coated with the class N primer being ahead of schedule – a milestone for CCAD and the Army in the removal of heavy metals from painting operations. He ensured shut down of the old paint facility met all safety and environmental requirements. Mr. Moya is a shining example of the talent and dedication upon which the future of the depot will rely. He is a mentor and leader, who motivates his teams, subordinates and peers through his actions and his accomplishments clearly identify him as the 2021 AAAA Donald F. Luce Depot Maintenance Artisan of the Year.

NSA '47 and Army Aviation, Part I

By Mark Albertson

WIKIPEDIA COMMONS PHOTOs

Left: General Sir Bernard Law Montgomery, who believed that prosecuting the land war necessitated the Air Staff being included in the planning of a ground campaign.

Right: General James M. Gavin, early supporter of the air mobility of ground forces, following World War II.

Editor's Note: This is the first article in a four part series.

The future of our Armed Forces is in the air. All the fighting men and everything they need to fight with in the future and live on as they fight must be capable of movement by air. . .

Major General James M. Gavin.[1]

Demobilization followed the cessation of military operations with the conclusion of the global conflict. Beginning in 1945 to March 31, 1947, the U.S. Army downsized from 89 divisions to 10. Most of which were left understrength. The Navy shrank from 1,000 ships to approximately 300. The U.S. Army Air Forces declined from 213 combat groups to 63; and of these, only 11 were up to full strength.[2] A corresponding drop in military spending from 1946--$42 billion; 1947, $14 billion and 1948, $10 billion,--reflected the contraction. As a percentage of GNP, defense spending declined from 20.7 percent in FY 1946 to 4.4 percent in FY 1947.[3]

The above adversely impacted the Air Observation Post. September 2, 1945, fixed wing aircraft organic to the Ground Forces amounted to 1,600 machines; by 1947, 200 planes, an 87.5 percent reduction.[4] Yet there were adjoining issues of a decisive nature fueling the ongoing soap opera of Roles and Missions between the airmen and foot sloggers.

Centralized Control I

The recent global, industrialized war underscored a new reality: That airpower had reached a level of sophistication beyond that which should be controlled by ground forces. The rapidly changing technological nature of modern war demanded a command structure thoroughly imbued with a professional responsibility able to wield modern airpower; in conjunction with those able to wield ground power and sea power. Yet a game-changing aspect of this maturation in American military doctrine is how the Nation progressed to eschew its colonial roots and abandon the Citizen-Soldier concept for defense.

For the National Security Act of 1947 demonstrated unequivocally that the notion of an American People's Army based on the Founders' expression of a weak standing army backed by a state-controlled militia system, overseen by governors, had been overtaken by America's standing in the world – that of a superpower, which required a peerless and sophisticated professional armed force able to compete on the world stage so as to enforce its global interests. And a byproduct of this more than 150 year progression has been Army Aviation.

The strategic aspect of airpower as a major motivation towards a separate air force has been discussed in previous articles; but, of inducement, too, was the centralized control of aerial assets, be it for the strategic or tactical employment of airpower. Regards to the latter, Army Air Forces' employment of aircraft in support of ground troops at the beginning of World War II proved lacking. Blame may be heaped upon the lack of attention paid to the requirements necessary for the tactical employment of airpower. At the same time, one must not lose sight of the fact that money for de-

fense was in noticeably short supply during the 1920s and '30s. Yet money or the lack thereof had little bearing on centralized control of aircraft in principle.

In 1942, the centralized control of aerial assets under an air officer was doctrine; of course, the air officer operated under the auspices of the Army commander in theater.[5] However for Operation: TORCH,[6] control of American and British air forces were under separate commands, that of Brigadier General James H. Doolittle and Air Marshal Sir William Welsh. Neither of these commanders was beholden to General Eisenhower, overall TORCH commander.[7] The British, however, relied on the centralized control of airpower. British General Sir Bernard Law Montgomery held to the idea that the Army and RAF planners must coordinate their efforts if the Army was to be successful.[8]

The reader should pay close attention to clarifications found in Endnotes 5 and 8 for the significance of Centralized Control – the same was the lifeblood of the airmen's agenda for a separate service.

In the next issue, Part II, the continuation of Centralized Control will help to lay the groundwork for NSA '47 and Army Aviation.

ENDNOTES:
1 – See page 178, "Airborne Armies of the Future," The Field Artillery Journal, Vol. 37, No. 3, May-June 1947, by Major General James M. Gavin, USA.
2 – See page 2, Army Aviation: The Interwar Years, 1945-1950, A History of Army Aviation Logistics, 1935-1961, Study Number 5, by Dr. Howard K. Butler.
3 – See pages 1 and 2, Butler.
4 – See page 5, "Ground Forces Organic Aviation" Army-Air Force Relations: Close Air Support Issue, by Alfred Goldberg and Lieutenant Colonel Donald Smith.
5 – See page 3, Chapter 2, "Combat Aviation," Section 1, "Organization: General," Point 5, War Department Basic Field Manual, FM 31-35, Washington, D.C., April 9, 1942. "In addition to his duties as commander of support aviation, the air support commander acts as an advisor to the ground commander."

Point 6: "Aviation units may be designated in support of a major ground force. The control is centralized in an air support commander who assigns the attack missions as the needs of the ground unit(s) develop… Designation of an aviation unit for support of a subordinate ground unit does not imply subordination of that aviation unit to the supported ground unit, nor does it remove the combat aviation unit from the control of the air support commander. It does permit, however, direct cooperation and association between supporting aviation and the supported ground unit and enables combat aviation to act with greater promptness and meeting requirements of a rapidly changing situation. Aviation units may be attached to subordinate ground units. This is exceptional and should be resorted to only when circumstances are such that the air support commander cannot effectively control the combat aviation assigned to the air support command."
6 – Anglo-American invasion of French Northwest Africa, November 8-9, 1942.
7 – See page 5, "The Doctrinal Background," Interservice Rivalry and Airpower in the Vietnam War, by Dr. Ian Horwood.
8 – "…with the close touch between Army and RAF staffs the coordination of the Air Plan with that of the Army cannot be effective as it should be, and in an emergency may well fail. It involves the whole of the air action—the employment of the fighter force for air superiority and protection at the right time and place; the employment of the heavy bomber force and careful selection of bombing objectives best calculated to assist the military aim; and not least the careful planning of air reconnaissance without which the close air support squadrons for the attack of ground units cannot operate with maximum efficiency. The Air Force must therefore be involved not just in response to army requests for support, but at the highest staff levels from the very beginning, when the army plans were actually formulated. The Air Staff at headquarters of Army formations should be regarded as part of the General Staff and not as something separate dealing with black magic." See pages 592 and 593, Chapter 15, "Executive Tiger," Volume 2, Monty: The Making of a General, by Nigel Hamilton.

Mark Albertson is the award-winning Army Aviation Publications Historian and a contributing editor to ARMY AVIATION magazine.

AAAA **Chapter** Affairs

By LTC (Ret.) Jan Drabczuk

I greatly appreciate the support from LTC Jeremy DeGier, North Star Chapter VP and MAJ Jon Andrews, Chapter Treasurer, for authoring and sharing this information to our membership.

The North Star Chapter

Serving Minnesota Army Aviation Soldiers and their Families since 1991! The North Star Chapter affiliates with the 34th Infantry "Red Bull" Division encompassing the 34th Expeditionary Combat Aviation Brigade (ECAB) "Red Devils" units. Additionally, the chapter combines efforts of the State Army Aviation Office, Camp Ripley, and the two Aviation facilities in Minnesota to support the Army Aviation community.

Facilities in St. Paul, MN, St. Cloud, MN, and Camp Ripley, MN, maintain and operate UH-60 A/L/M Black Hawks, CH-47F Chinooks, and RQ-7 Shadows. The last three years have tested the Minnesota Army Aviation community.

The 34th ECAB melded approximately 2,000 coalition service members from more than ten states and two partner countries to become Task Force Red Devils in 2019. Senior leaders tasked Task Force Red Devils to provide Aviation support to fifteen locations within five different countries. After being validated by First Army at North Fort Hood, Texas, Task Force Red Devils deployed to the Middle East. The unit assumed the Aviation support mission for Operation Inherent Resolve (OIR) and Operation Spartan Shield (OSS) on January 2, 2020. The realistic premobilization training empowered the task force to overcome future challenges.

Within a week of the transfer of authority, Task Force Red Devils reinforced the U.S. Embassy in Baghdad, assisting with the evacuation of nonessential personnel. Simultaneously, the task force established Aviation operations in five countries and successfully executed their response plan to Shia Militia Groups and Iranian missile strikes. Task Force Red Devils proved itself tested for combat!

The task force supported the closure of six different bases throughout the U.S. Central Command area of responsibility. North Star Chapter members were part of a team executing more than 14,000 flight hours, 1,500 operations, 200 medical evacuation missions, and 14,000 hours of unmanned aerial attack and surveillance operations. The task force also transported approximately 22,000 personnel, 600 distinguished visitors, and 4.5 million pounds of cargo. Courageous acts do not go unrecognized.

Task Force Red Devils displayed exemplary work ethic and measured success. Spotlighting excellence, the greater Army Aviation community recognized Task Force Red Devils units and individuals with the following awards: 2020 Outstanding Unit of the Year Award (AAAA), 2020 John J. Stanko ARNG Aviation Unit of the Year (AAAA), 2020 Outstanding Logistics Support Unit (AAAA), 2020 Unmanned Aircraft Systems Unit of the Year (AAAA), 2020 Medicine Award (AAAA), Ellis D. Parker Logistics Award (USAACE), and the 2020 Army Exceptional Organizational Safety Award (USACRC).

Chapter Activities and Future Goals

The North Star Chapter maintains 135 active members through demanding military operations. Most of its membership includes Soldiers, family members, and retirees. The chapter hosts fundraising events that support the annual scholarships awarded to its members. They work with organizations like Tee It Up for the Troops. This local non-profit golf organization donates to their scholarship efforts. Aside from golf outings, the chapter has hosted skeet shoot events and sponsors the annual 34th ECAB Ball. This formal outing is held in December to promote esprit de corps and showcase individual achievements from the past year.

Industry partnerships include working with United Technologies Corporation (UTC), a significant contributor to defense research and development. UTC has often provided funds and sponsorship to annual events. The chapter also works with companies like Honeywell that offer facility tours and learning opportunities to their members not otherwise available to the public. The preceding events showcase what industry does for the Military and helps teach crewmembers more about the equipment that they support.

Summary

The North Star Chapter is proud to serve Aviation Soldiers, their families, and Minnesota communities. The chapter continues to support the Soldiers and families of Bravo Company, 1-171st General Support Aviation Battalion (GSAB) (Chinooks), as the unit currently serves in support of OSS and OIR. The chapter's goal is to become a Master Chapter again and help support their community.

Feel free to contact me if you need help for your Chapter, Executive Board support, would like your chapter featured in the AAAA magazine or to obtain clarification of National procedures.

LTC (Ret.) Jan S. Drabczuk
AAAA VP for Chapter Affairs
jan.drabczuk@quad-a.org.

AAAA Chapter News

Lindbergh Chapter Scholarship Fundraiser Golf

CHAPTER COURTESY PHOTO

The Lindbergh AAAA Chapter held its 2021 Scholarship Fund Raiser Golf Tournament, returning to the Falls Golf Club in O'Fallon, MO for the event. Thirty-two golfers took to the course for a round of golf on an almost Fall-like day. Based on some of the scores there might have been a ringer or two on the course, but a good time was had by all, and the beverage and snack cart was kept busy. MG(Ret) Tim Crosby joined us to officiate at an Award ceremony where he inducted four chapter members into the Honorable Orders of St. Michael and Our Lady of Loreto. During the dinner the golf awards were presented and a raffle for some AAAA merchandise conducted. The event was a big success with over $2,500 raised for the Scholarship Fund. Plans have started for the 2022 event.

ORDER OF ST. MICHAEL INDUCTEES

Aviation Center Chapter

CHAPTER PHOTO BY MR. OTIS WHITE

SGM (Ret.) Johnnie N. Forehand is inducted into the Bronze Honorable Order of St. Michael by COL Jason C. Caldwell, U.S. Army Aviation Center of Excellence (USAACE) Director of Simulation (DOS) on September 1, 2021, at Ft. Rucker, AL. Forehand was recognized for 47 years of service to Army Aviation, over 27 years in uniform, 9 years as a contractor supporting aviation training, and 11 years as a DA Civilian, culminating as a simulation IT specialist and contract oversight representative in the DOS.

CHAPTER PHOTO BY CSM JAMES FINNEY

Mrs. Amanda Gray (second from right) is inducted into the Honorable Order of Our Lady of Loreto on September 10, 2021, by LTC Katie Slingerland, 1-145th Aviation Regiment Commander, assisted by Ms. Emily Finney (right), spouse of CSM James Finney, at Ft. Rucker, AL. Gray was recognized for her work as the battalion Soldier and family readiness group (SFRG) facilitator on the occasion of her husband's change of command and upcoming PCS to Shaw Air Force Base, SC. Also pictured is Ms. Tricia Kirk (second from left).

Lindbergh Chapter

ALL LINDBERGH CHAPTER PHOTOS BY MR. RAY SCHMITZ

Mr. Michael J. Scimone, president, Georgian Aerospace, LLC, is inducted into the Gold Honorable Order of St. Michael by AAAA National President, MG (Ret.) Tim Crosby (right), and chapter president, Mr. David Weller, on September 19, 2021, during the chapter scholarship fund raiser golf tournament at the Falls Golf Club, O'Fallon, MO. Scimone was recognized for his exceptional meritorious support of Army Aviation and Aviation in general. His career has spanned 37 years during which time he was responsible for the design, integration, and flight testing of propulsion systems in several Army and Special Operations aircraft. He continues to be a leader in aircraft systems integration and is a strong and active supporter of AAAA and the Army Aviation Heritage Foundation.

During the same event, his wife, **Mrs. Diane K. Scimone**, was also inducted into the Honorable Order of Our Lady of Loreto

in recognition of her volunteer work in direct support of Army Aviation and the Army Aviation Heritage Foundation, and continued support and assistance to her husband in his aviation related efforts.

CHAPTER PHOTO BY SAM RUBITES

Also, during the same tournament, **Mr. Gilmore C. Stone**, president of Airpath Instrument Company in Bridgeton, MO, was inducted into the Silver Honorable Order of St. Michael by AAAA National President, MG (Ret.) Tim Crosby (right), and chapter president, Mr. David Weller. Stone, an Army aviator who left military service as CW3 with combat service in the Reserves and National Guard was recognized for his achievement in growing his business into the only company certified to provide magnetic compasses to the DoD. And for serving as President and Lifetime Member of the Gateway Chapter of the Army Aviation Heritage Foundation & Flying Museum.

Stone's wife, **Mrs. Tam T. Stone**, was inducted into the Honorable Order of Our Lady of Loreto during the same event in recognition of her continued support and assistance to her husband in his aviation related efforts.

OSMs Continued on next page

OSMs *Continued*

Tennessee Valley Chapter

CHAPTER PHOTO BY CARRIE WALTERS

MAJ John N. Holcomb is inducted into the Bronze Honorable Order of St. Michael by LTC Olin Walters, Product Manager, Tactical Unmanned Aircraft Systems, on July 9, 2021 in Madison, AL. Holcomb was recognized for his dedicated support of Army Aviation for over 14 years and his being instrumental in the successful execution of the FTUAS demonstration event. He moves to Poway, CA where he will be the Defense Contract Management Agency Contract Manager for General Atomics.

CHAPTER PHOTO BY KENNETH G. RUTLAND

Ms. Jennifer A. Potts, Deputy Project Manager, Army Data and Analytics Platforms (ARDAP) inducted **COL Robert J. Wolfe** (left), Project Manager, ARDAP and **LTC(P) William A. Reker,** Product Manager, Global Combat Support System-Army (GCSS-A) as Knights of the Honorable Order of St. Michael on September 9, 2021 at the GCSS-A Aviation Logistics site, Redstone Arsenal, AL. Ms. Potts is a long standing AAAA member of the Tennessee Valley Chapter and officiated on the chapter's behalf for their accomplishments in support of Army Aviation on the occasion of PM ARDAP transitioning GCSS-ARMY to PM Defense Integrated Business Systems (DIBS), PEO EIS.

CHAPTER PHOTO BY DARRELL D. AMES

Ms. Sarah Proffitt Bogardus is inducted into the Honorable Order of Our Lady of Loreto by COL Jay Maher, project manager Apache Helicopters, on August 19, 2021 at Redstone Arsenal, AL. Bogardus was recognized for her dedicated support to Army Aviation Soldiers and families as the Family Readiness Group Leader for the 2nd Battalion, 4th Aviation Regiment.

CHAPTER PHOTO BY MICHELLE H. MILLER

COL Johnathan Frasier (right), outgoing Project Manager, Aviation Mission Systems and Architecture, and his wife, **Amy Frasier,** were inducted into the Silver Honorable Order of St. Michael and the Honorable Order of Our Lady of Loreto, respectively, by chapter treasurer, COL (Ret.) Gerald Davis on September 8, 2021, at Bob Jones Auditorium, Redstone Arsenal, AL. COL Frasier was recognized for his support to Army Aviation over 24 years culminating in the conversion of the Aviation Systems Project Office into the AMSA project office; and Mrs. Frasier was recognized for her unfailing support to Army Aviation Soldiers and families during the same period. Also pictured are (from the left) MG Anthony Potts, Program Executive Officer, Soldier and SFC Richard Sosa.

CHAPTER PHOTO BY MICHELLE H. MILLER

Mr. Ray K. Sellers is inducted into the Silver Honorable Order of St. Michael by AAAA National President, MG (Ret.) Tim Crosby on September 24, 2021 at Redstone Arsenal, AL. Sellers was recognized for his accomplishments as the Program Executive Office Aviation Chief of Staff and while serving as the first deputy project manager of the Future Attack Reconnaissance Aircraft (FARA) project office and establishing the initial program acquisition strategy.

CHAPTER PHOTO BY CW5 (RET.) CLAY CARNES

On October 17, 2021, during a Celebration of His Life held in Huntsville, Alabama, **CW5 (Ret.) Lee Tutin's family** received his posthumous induction into the Silver Honorable Order of St. Michael from COL Kevin Chaney, Project Manager, Aircraft Survivability Equipment. Lee passed away in January 2021 from COVID-19 complications. He was recognized for his accomplishments while on active duty, to include as the ASE subject matter expert in HQDA G-3/5/7; and, following retirement, over 10 years of service in PM ASE, culminating as the deputy product manager for Missile Warning. May he rest in peace. Pictured (left to right) are his son, **Dustin**; daughter, **Kathryn**; spouse, **Robin**; and COL Chaney.

Thank You to Our Scholarship Fund Donors

*AAAA recognizes the generosity of the following individuals, chapters and organizations that have donated to the Scholarship Foundation from October 2020 through October 2021. The list includes donations received for all scholarships, as well as the General Fund which provides funding to enable the chapter, corporate, heritage and individual matching fund programs as well as national grants and loans. Donors marked with an * are partially or totally donating to the newly established Families of the Fallen Scholarship. Every penny donated to the Scholarship Foundation goes directly to a grant or loan as a result of the Army Aviation Association of America subsidizing ALL administrative costs!*

AAAA Iron Mike Chapter
AAAA Johnny O Cluster Chapter
AAAA Keystone Chapter
AAAA Lindbergh Chapter
AAAA Minuteman Chapter
AAAA Mount Rainier Chapter
AAAA North Star Chapter
AAAA North Texas Chapter
AAAA Old Tucson Chapter
AAAA Oregon Trail Chapter
AAAA Rio Grande Chapter
AAAA Southern California Chapter
AAAA Tennessee Valley Chapter
AAAA Thunder Mountain Chapter
AAAA Thunderbird Chapter
AAAA Washington-Potomac Chapter
AAAA Wright Brothers Chapter
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Molly Alger & Jay Dirnberger
Amazon Smile
Cody Anfinson
Laura & Jonathan Arena-IHO Anthonette Bobra Harris
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Keirn C. Brown Jr.
Matthew L. Brown-IHO CW5 Lee Tutin, Ret.
Regina & Robert Bublitz-IHO CW5 Lee Tutin, Ret.
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Combined Federal Campaign
Becki Chambers-IHO Anthonette Bobra Harris
Cirone Friedberg LLP-IHO Anthonette Bobra Harris
Richard Clemens-IHO Susan Yellen
Kevin S. Cochie
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John M. Curran
Walter L. Davis-IHO Anthonette Bobra Harris
Todd DiGeronimo
Jan S. Drabczuk-IHO Anthonette Bobra Harris
Patrick M. Dzialek
Joseph M. Ernest-IHO CW5 Lee Tutin, Ret.
Fidelity Charitable
Michael C. Flowers-IHO COL Harry Townsend
Jeffrey and Vanessa Fowler
Vanessa & Jeffrey Fowler-COL Joseph A. Hoecherl
Michael E. Freeman-IHO Harry Townsend
Brian Gagliano
Paul and Jenny Gale
Lonnie Germainre-IHO Anthonette Bobra Harris
Leslie H. Gilbert-IHO "The Originals" Cub Club
CW5 Steven C. Goetz, Ret.
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Kristen Gustitis-IHO CW5 Lee Tutin, Ret.
David R. Haag-IHO CSM Isaac B. Sheffield
Robert G. Hansen
Joanne Hansrote-IHO Anthonette Bobra Harris
William R. Harris Jr.
Thomas Harrison-IHO Susan Yellen
Thomas M. Harrison
Thomas M. Harrison-IHO Anthonette Bobra Harris
Kellie Hauenstein-IHO Maxwell Harris Guida
James & Joyce Hesson
James & Joyce Hesson-IHO Harry Townsend
David Hoffman
LTC Stephen J. Huebner, Ret.
Laura and Tom Huff
Michael L. Hutton
James E. Hyers
JACS Aircraft Certification Specialists
Jack A. James-IHO T/Sgt. Karl P. Danckwerth Sr.
Arlo & Mary Janssen
Aric & Layne Jensen
Carl H. Johnson
COL Larry M. Jonas, Ret
Constance and Herbert Jones
Joseph Joseph-IHO CW5 Lee Tutin, Ret.
James Krueger
James Leary
William Leary-IHO LTC Michael McMahon
James M. Lee
Abby Letts-IHO Anthonette Bobra Harris
Lockheed Martin
Jerry J. Luccarella
Timothy A. Lunger
AAAA MacArthur Chapter
Daniel T. Madish
Elisabeth & Hans Mansson-IHO Anthonette Bobra Harris
Melinda Marinello-IHO CW5 Lee Tutin, Ret.
Tommy L. Marks
Charles & Joyce Marotta-IHO Morgan Rae Kurowsky
Theodore E. Mathison
Stephen T. Mauro-IHO COL Paul Kelly
Randy McCormick
Jeremiah F. McNamara
MD Helicopters
Dirk A. Megchelse, Sr.
LTC Jerry P. Mellick, Ret.
Michael E. Moody-IHO CW5 Lee Tutin, Ret.
Dora & Donald Moore-IHO CW5 Lee Tutin, Ret.
Rene & Ronald Moring-IHO CW5 Lee Tutin, Ret.
Stephen Mundt-IHO Susan Yellen
Don Munsch
Donald T. Munsch, Munsch & Co. Aeromechanics
Network for Good
Cathy C. Newsom-IHO Alfred J. Cargen
Northrop Grumman Systems Corporation
Jane Osborne-IHO Anthonette Bobra Harris
Ostovich Enterprises Inc.
Army Otter Caribou Association
The OV-1 Mohawk Association
Ellen Pappano-IHO Maxwell Harris Guida
Margaret Pappano-IHO Maxwell Harris Guida
William F. Parker-IHO Susan Yellen
Linda and Danney Pickard
Pinnacle Solutions Rise Up Reach Out Fund (Community Foundation of Greater Huntsville)
Pisecki Foundation
Marc L. Rassler
Gary S. Rast
Kenneth D. Reynolds-IHO CW5 Lee Tutin, Ret.
Marilyn & Jay Rickmeyer
David F. Riley
Keith Roberson (Fidelity Charitable)
Gil H. Robertson-IHO CW5 Lee Tutin, Ret.
S. Harry Robertson
Robertson Fuel Systems
Susan & Theron Ruff-COL Joseph A. Hoecherl
Henry C. Ruth, III Ret.
Alex and Eli Ryan-IHO CW5 Lee Tutin, Ret.
S3 Inc-System Studies and Simulation, Inc.
Judy & Charles Scheibly-IHO COL Joseph Hoechrel
Jeff J. Schloesser-IHO Anthonette Bobra Harris
Malinda & Edward Schmidt-COL Joseph A. Hoecherl
Shashy Family Charitable Fund
Mary & William Shelt-IHO Families of the Fallen
Susan & E.J. Sinclair-IHO Anthonette Bobra Harris
Susan & E. J. Sinclair-IHO CW5 Lee Tutin, Ret.
Susan and E.J. Sinclair-IHO Susan Yellen
Teresa C. Snyder-IHO CW5 Lee Tutin, Ret.
Evelyn A. Soucek-IHO Peter B. Teets
Evelyn A. Soucek-IHO Standley Fishfader
Kathryn & Joseph Sparks-COL Joseph A. Hoecherl
John G. Speckman
Scott Springer-IHO Anthonette Bobra Harris
Pamela and Joseph Taylor-COL Joseph A. Hoecherl
Cynthia M. Trujillo-IHO CW5 Lee Tutin, Ret.
Wendy C. Turgeon-IHO Anthonette Bobra Harris
Teresa Tutin-IHO CW5 Lee Tutin, Ret.
Jill and James Tyler-COL Joseph A. Hoecherl
VA Peninsula Chapter of 100 Black Men Inc.
William H. Van Alystyne-IHO Anthonette Bobra Harris
Vietnam Helicopter Pilots Association
AAAA Voodoo Chapter
Margaret Wilson-IHO CW5 Lee Tutin, Ret.
Wreaths Across America
Michelle F. Yarborough-IHO Angela R. Freeman
Michelle Yarborough
Michelle Yarborough-IHO Anthonette Bobra Harris
Michelle Yarborough-IHO COL Harry Townsend
Michelle Yarborough-IHO CW5 Lee Tutin, Ret.
The Zieff Family Fund Inc.-IHO Anthonette Bobra Harris

IHO - In Honor Of

For more information about the Foundation or to make a contribution, go online to quad-a.org; contributions can also be mailed to AAAA Scholarship Foundation, Inc., 593 Main Street, Monroe, CT 06468-2806.

AAAA **Membership Update** By CW4 Becki Chambers

The Membership Corner

Did you know that a simple swab of the inside of your cheek has the potential to save someone's life? MSG Chris Cashell has been holding events to increase the number of members in the Department of Defense marrow registry at every location he's been stationed at. Altogether, he estimates he has facilitated the registration of between 4,000 and 5,000 people.

I challenge everyone, and that means YOU, to put a reminder on your calendar right NOW, to stop by the marrow registry booth at Summit in Nashville to register. The dates are 3-5 April 2022. Less than 10 minutes out of your life could possibly save someone else's life.

The following is an article about a registration event Chris spearheaded at Hunter Army Airfield.

CW4 Becki Chambers

The Army has seven values it instills in Soldiers: loyalty, duty, respect, selfless service, honor, integrity, personal courage. Selfless service is a value the Soldiers of the 3rd Combat Aviation Brigade take seriously as Soldiers enrolled in the Department of Defense marrow registry at Hunter Army Airfield, Georgia, Sept. 13-17.

The marrow donor registry effort was led by MSG Christopher Cashell, a Soldier assigned to the Headquarters and Headquarters Company, 3rd Combat Aviation Brigade.

U.S. ARMY PHOTO BY SGT ANDREW MCNEIL

MSG Christopher Cashell (right), event organizer, COL Eric Vanek (center), and CSM Jake Huff, 3 CAB commander and CSM, respectively, managing and assisting with registration

U.S. ARMY PHOTO BY SGT ANDREW MCNEIL

70 Soldiers from D Co 3-160th SOAR volunteered to register during a unit function.

Cashell conducted briefs educating Soldiers on what being on the registry entails and helped facilitate Soldiers joining the registry. "Joining the registry is a simple way that a Soldier can potentially help save someone's life. It may be a few months after registration, a few years, or they may never get the call, but if you can help save someone's life how can you say no," Cashell said.

The Soldiers who choose to participate filled out paperwork and conducted a cheek swab. The tissue gathered from the swab would allow medical professionals to determine if that Soldier was a match for someone in need of marrow. Once on the registry, the Soldiers' information remains in a database until their sixtieth birthday.

"I joined the registry in 2019," said MAJ Michelle McDevitt, the executive officer for the 603rd Aviation Support Battalion. "I saw a video on Facebook for a young man who needed bone marrow. He did not have any matches within his family and was trying to have more people register and promote the cause for others in need. I joined the registry so that if I was ever a match I could assist."

Medical professionals from the registry informed McDevitt this year that she was a match for an individual in need of marrow. Being a match is the first step, she will have to continue with labs and further testing to make sure they are a compatible match, McDevitt said.

Soldiers who join the registry demonstrate selfless service by showing they are willing to help complete strangers. When a Soldier matches and is able donate their marrow, they can save a life.

"If you have the opportunity to help someone it is a great thing to do," McDevitt said. "I am grateful for my health and see this as a chance to give back."

CW4 Becki Chambers
AAAA Vice President for Membership

New AAAA Life Members

Air Assault Chapter
COL Kyle Hogan
Aloha Chapter
Michael J. Campbell Jr.
Aviation Center Chapter
LTC William Murray
Colonial Virginia Chapter
CW3 John Blessing
Flint Hills Chapter
1LT Michael Catron
Idaho Snake River Chapter
SSG Jared R. Crossman
1SG Brian D. Johnson
SGT Richard P. Manning
MAJ Bryan C. Reid
CW3 Kyle R. Sam
SFC Michael J. Signorio
1LT Katherine R. Smith
Jimmy Doolittle Chapter
CW4 Graves Wilson
Keystone Chapter
COL Keith S. Norris, Ret.
Narragansett Bay Chapter
CW4 Richard Hassman
North Star Chapter
CW3 James Franklin Crigler
Old Tucson Chapter
CW2 Robert Asbell
Phantom Corps Chapter
James Stackleather
Rising Sun Chapter
SSG Frederick G. Hofmeister
Tennessee Valley Chapter
COL James E. Braman, Ret.
Kevin M. Rotenberger
CW5 Alan F. Ruzicka, Ret.
Thunder Mountain Chapter
Alexandra Vallington

New AAAA Members

Aloha Chapter
Michael J. Campbell Jr.
Arizona Chapter
LTC Paul G. Harrell
Jim Jackalone
James Mayo
Monica Montgomery
Aviation Center Chapter
2LT Alexander J. Aleu
Ryan Chambers
2LT Nicholas B. Cooper
2LT Cole Costigan
2LT Kathleen R. Erickson
LtCol Hein Faber
2LT Susannah E. Gray
2LT Ryan P. Greaney
2LT Terry L. Hancock
WO1 Jaron R. Heidner
2LT Joshua T. Hipenbecker
CPT Kent D. Homrighausen
2LT Cameran C. Hyinel
WO1 Alexander M. Kucko
2LT David C. Mackey
2LT Matthew R. Malsam
WO1 Cedric D. McGowan
LTC William Murray
2LT Nicholas T. Pattrick
CW5 Lemuel Proffitt
2LT Kaytlin A. Quijas
2LT Brett D. Reynolds
2LT Kyle N. Riester
MAJ Sara Turinsky
WO1 Thomas S. Wilson
Bavarian Chapter
CW2 Steven Jarrard
Cedar Rapids Chapter
CPT Ryan England
Marcus Ferguson
Central Florida Chapter
CSM Robert Fortenberry, Ret.
Colonial Virginia Chapter
Eric Case
Lauren Casey
Dennis Crusenberry
PJ Cummings
SSG Matthew R. Ferdon
Taylor Herrell
Krystle Jimenez
John McFarland
Natalia Rectenwald
Connecticut Chapter
Andy Adams
Spencer Elani
Rajindar (Raj) P. Kaushik
Delaware Valley Chapter
2LT Marley Golato
Empire Chapter
1LT Devin Borland
SSG Mchael Landauer
Armour Mack
CW2 Jeremy Southcott
CW2 Jared Twigg
Flint Hills Chapter
Robert Carpenter
1LT Michael Catron
Steve Cyrus
Timothy Johnson
Maggie Koops
Jeremy Rauch
Logan Schraeder
Alexa Schreck
Mark Torline
Mike Voegeli
Darin Weers
Follow Me Chapter
CAPT William Toler
Great Lakes Chapter
Katie Huber
Greater Atlanta Chapter
Tim Horne
Michael Paulk
Griffin Chapter
CW4 Joe Lorman
Grizzly Chapter
Kristin Caldwell
High Desert Chapter
COL Mark Young
Idaho Snake River Chapter
SSG Jared R. Crossman
SGT Richard P. Manning
MAJ Bryan C. Reid
1LT Katherine R. Smith
Iron Mike Chapter
CSM Shane Adams
CPT Hunter Goad
CW5 Jared Hirtle
CW2 Alex Stephens
Jersey Chapter
Jay Romeo
Jimmy Doolittle Chapter
WO1 Jimmie Graham, Ret.
CW4 Graves Wilson
Keystone Chapter
SSG Jeremiah Cortes
Matthew C. Johnson
SGT Eric Keldani
1SG Scott Sheroky
AMY TROCH
Lonestar Chapter
LTC Matt Brown, Ret.
Jeff Diamond
MacArthur Chapter
Joseph Pipczynski
SGT Russel Schwartz
Mid-Atlantic Chapter
CW5 Jeramy Cosner
Claire Heininger
MAJ Luke Mazgaj
Emily McGuirk
Minuteman Chapter
Ike Song
Morning Calm Chapter
1LT Jacob Griffith
Mount Rainier Chapter
Kelsey Arnold
Jason K. Darley
Carissa Eastman
Frank Graham
Emilee Monteroso
SSG Adam Ruddy
Steve Tatman
Narragansett Bay Chapter
CW4 Richard Hassman
North Country Chapter
CPT Derek Powers
North Star Chapter
Spencer Bellenger
Jake Braegelmann
Scott Bures
SFC Caleb T. Oberg
MAJ David Wagner
North Texas Chapter
Jeremiah A. Adkins
Michael Arrington
Juerg Bartlome
Mike Buder
John Busch
Joseph Cenci
Alan Codlin
CSM Doug DuPont
Troy Gentry
Aubrey Hinds
Martin Holland
Justin L. Johnson
Robert D. Laney
Harrison T. Mancino
Clayton Messinger
Bernadette Nanni
Gerard Nanni
Cliff Qualls
Donald R. Ruby
Kashida M. Spencer
Chris Stoke
Matthew C. Thompson
Becky Withrow
Old Tucson Chapter
CW2 Robert Asbell
Thomas B. West
SFC Jon Wingler
Oregon Trail Chapter
SSG Jack Greenberg
Phantom Corps Chapter
1SG Garnette S. Bailey
CPT Daniel C. Beck
MAJ William T. Fleming
1LT Jaceb L. Jessup
SFC Cameron E. Letcher
CPT Trevor J. Schmitt
SGT Michael Simpson
SPC Thomas D. Sparks
James Stackleather
CPT Daniel R. White
Pikes Peak Chapter
Jake Littlehales
Rio Grande Chapter
SPC Guadalupe Baeza
Neil Percifull
Rising Sun Chapter
SSG Frederick G. Hofmeister
Savannah Chapter
SSG Wilson Sierra
ShowMe Chapter
CW5 Marcus Moore
Southern California Chapter
Andy Beers
Rob Creighton
Linda O'Brien
Susan Ortiz
Jeff Saucedo
Jen Waterman
Mike Zelin
Stonewall Jackson Chapter
Troy D. Eck
Steve Hedrick
Alison Keller
CW2 Edward Plucinski
CW3 Narciso Rivas Prieto
Tarheel Chapter
SPC Cameron Achilles
CW5 John Karmire
1LT Robert McClelland
Tennessee Valley Chapter
LTC Paul Anderson, Ret.
David Berghoff
Dave Brodzinski
Walter Castleberry
Craig Chappen
Lance Classen
Joel Craig
Mo Crannell
LTC Garnett Crask
Tamela Gibbs
Shawn Gierisch
Dustin Hicks
Scott Hill
Alan Hislop
Max Klein
Matt Ko
Cynthia Lee
Brian Murphy
Danny L. Parker
CSM Edison Rebuck
Arvesta Roberson
CW5 Alan F. Ruzicka, Ret.
Bob Schassler
CW4 Michael Schwartz
Douglas Simpson
Matthew Tedesco
Ted Towry
Steve Young
Thunder Mountain Chapter
CPT Philip S. Apodaca
John Kohler
CW2 Adam Ledbetter
SFC Jason D. Osborne
SFC Benjamin C. Staniszewski
Alexandra Vallington
Thunderbird Chapter
SSG Galen Cozart
Washington-Potomac Chapter
LTC Matt Baldwin
COL Beth A. Behn
MajGen Garry Dean, USAF Ret.
Hannah Doyle
Ryan Ferguson
Mary Griggs
Stefanie Hale
Tamara Himmelberger
CPT Dale Ireland
Will Johnson
Gregory Kilchenstein
John Soper
Margaret Yee
Wright Brothers Chapter
Mark Shaw
Zia Chapter
Ramon C. Cruz
SSG Joshua Toles
No Chapter Affiliation
Mike Altman
LTC Kevin Aven, Ret.
Liz Considine
Thomas Dannenhoffer
Haralambos Demopoulos
Jackie Feeley
Sean Feeley
Tim Frank
Rocco Giustino
COL Todd Heussner, Ret.
Haydn Jervis
Paul Kendrix
Jared Kohl
Marra McCauley
CW3 Aaron Mongeon
April O'Brien
Mike Oeschger
Adrian Partridge
Austin Reid
Susan Ryman
Joseph Sellers
Skip Shearer
Camoy Williams

Lost AAAA Members

Help AAAA locate a lost member from this list and receive a FREE one month extension to your AAAA membership.
2LT Edwardo S. Alviso
CPT Robert S. Boham
Harold V. Bowie, Jr.
COL Fred E. Brown, Ret.
LTC Jeffery D. Brown
Rickey J. Brown
MAJ James E. Bruckart
E. W. Cavanaugh
LTC Richard G. Cercone Jr.
LTC Tzu-Shan Chang
COL James A. Coar, Ret.
MAJ Harry L. Connors, Jr. Ret.
Bruno Cussigh
SGT Travis Bonham Darnell
1LT Jimmy Joe Doe
Tyler Falconbury
SPC Nicholas C. Ford
2LT Arthur W. Galloway
William H. Gillispie
Michael F. Glass
MAJ Gregory W. Glover
LTC William T. Goforth
Mary H. Gorman
COL Gerhard Granz, Ret.
Dexter Henson
Stephen Hill
COL Jose L. Hinojosa, Ret.
CW4 Delbert Jackson, Ret.
LTC Randy K. Jackson
Allen E. Jants
CW3 Jeffrey J. Jelonek
MAJ Gregory R. Jenkins
MAJ David A. Jobe
LTC Peter D. Kowal
CW3 Vladimir Kultschizky
CW3 Timothy J. Larz
WO1 Joshua Link
MSG David W. Little, Ret.
2LT Alex Mcdonald

AAAA **Family Forum** By Judy Konitzer

We Have One Another

Have you ever had a moment when happy memories flooded your psyche? It happened on a sunny Friday afternoon when our daughter-in-law Laura McCabe Konitzer and son Tom Jr. called to say hi while enroute to Laura's good friend Tracy Moore Ray and husband COL Mark Ray's retirement ceremony at Fort Bragg, NC.

After 25 years of illustrious service to our nation, the Rays were entering a new chapter in their lives, and our children were there to help them celebrate.

I vividly remembered Tracy occasionally watching our children when we were stationed at Fort Campbell in 1992-93, however we didn't have any connection to the girls' friendship at that time. Years later, Laura sang in Tracy and Mark's wedding, and Tracy was a bridesmaid for Laura and Tom. When our oldest daughter Carrie and her husband COL (Ret.) J. Laurence Hutto were stationed at Ft. Bragg, she and Tracy lived in the same neighborhood and struck up a warm friendship. It was amazing for me to realize how much of a coincidence it was for these relationships to flourish, and how much joy it brought me. I have always loved being an Army wife and appreciate the camaraderie and connectivity we share with each other, and it truly reminded me at that moment how special is our bond as an Army Family.

However, while enjoying these special memories, I was also struggling trying to understand events unfolding today, i.e., Covid, the 20-year anniversary of 9-11, the withdrawal from Afghanistan, our nation so politically divided. When thinking about Tracy, I also remembered her father, COL(R) "Sonny" Moore, a familiar figure to our Aviation Soldiers and their families. When my husband Tom was President of AAAA (2005-2007), he encouraged Sonny to begin many major events with a prayer which Sonny continues to do to this day, and he has since been awarded the title Honorary Chaplain of U.S. Army Aviation Branch.

I reached out to Sonny and asked him to share his thoughts about how we can embrace the pride we feel for our Military Soldiers and their families, as well as accept and understand the uncertainty of the future. Here is his reponse:

"World events seem more troubling and confusing than ever before – probably in our lifetimes. We certainly have numerous issues and needs to pray about. Three big needs that I daily pray about are: (1) That our National Leadership will hold true to our National Values. (2) That our Nation and the world can achieve immunity from COVID-19 so that we can more freely live our lives. (3) That all those affected by recent hurricanes, fires, and floods can rebuild their lives and homes.

Considering all we face as a nation, no group is more important or more respected than our military. The military has provided security and stability like no other institution. I am proud to have served 34 years in the United States Army.

Most all the people that I have served with believe like I believe, stood for what I stand for, they are God-fearing servants of our nation. In the middle of all we face today, I try to remember that we have OUR ARMY FAMILY. We are connected in a way that most civilians will never understand. It's really like "money in the bank." I know this because I have experienced this over and over since I first raised my right hand as a 17-year-old boy "to support and defend the constitution of the United States." My Army family stood with me in the loss of my wife of 40 years, through my battle with cancer, and through several deployments. It feels good to have a place to stand with people who stand with you.

Chaplain COL (Ret.) Alvin M. "Sonny" Moore III

Two prominent words in the New Testament are "One Another." We are instructed to love one another-receive one another-care for one another. ONE ANOTHER are two good Army words- that's what we are all about. We have ONE ANOTHER.

Another good word of instruction to all of us during these turbulent times is found in Galatians 6:9 "Be not weary in well doing for in due season you will reap if you faint not." So, Keep Going-Keep Praying for our Nation – and Keep Smiling."

Judy Konitzer is the family forum editor for ARMY AVIATION; questions and suggestions can be directed to her at judy@quad-a.org.
Chaplain COL (Ret.) Alvin M. "Sonny" Moore III is the Honorary Army Aviation Branch Chaplain.

AAAA Salutes the Following Departed...

Mr. Willie D. Harper
Deceased 1/24/2021

MG Warren E. Phipps, Jr., Ret.
Deceased October 26, 2021

AAAA **Awards**

Order of St. Michael Inductees

Silver

Aloha Chapter
CW5 Dana E. Jones
Aviation Center Chapter
CW5 Ralph A. Gilgenast Jr., Ret.
CW5 John H. Yetter, Ret.
Colonial Virginia Chapter
CW5 Jeremy Griffin
LTC Margaret G. Stick
Corpus Christi Chapter
Roy A. Hollins
Greater Atlanta Chapter
CW4 Gary W. Lindroth, Ret.
Iron Mike Chapter
CW5 Clifford J. Evans, Ret.
Keystone Chapter
CW5 Thomas J. Luckenbach
CW5 Dale A. Yoder
Lindbergh Chapter
Gilmore C. Stone
Phantom Corps Chapter
CW5 Stephen S. Napoli
CW5 Brandon J. Schmich
Tennessee Valley Chapter
Ray K. Sellers
Lee Tutin*
No Chapter Affiliation
CW5 Matthew P. Ramey

** Posthumous*

Bronze

Empire Chapter
MAJ Henry Chandler
CW5 Victor Figliuolo
High Desert Chapter
CPT Matthew C. Kim
Iron Mike Chapter
SFC Adam S. Trypuc
Phantom Corps Chapter
CW4 Drew Barcley
CW4 Michael T. Robello

Our Lady of Loreto Inductees

Idaho Snake River Chapter
Pamela Obenauer
Mount Rainier Chapter
Leighann Trodahl
Washington-Potomac Chapter
Masako "Lymi" Behrendt
Ann E. Tatman-Tyree

Knight Inductees

Empire Chapter
SGM Gregory Martin
CPT Philip McGrath
Mount Rainier Chapter
SFC Kenneth Baldon
Phantom Corps Chapter
CPT Nicholas Oblak

IN MEMORIAM

AAPI FILE PHOTO

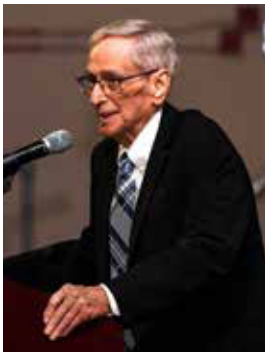
Dr. Samuel Harry Robertson

AAAA sadly announces the passing of Dr. S. Harry Robertson, on Oct. 9, 2021, at Flagstaff Medical Center, Arizona. He was 87.

An aviation legend, he founded Robertson Aviation in 1976 to pioneer crashworthy auxiliary fuel systems, initially for U.S. Army and USAF special operations helicopters. For the past 50 years, he has been a significant figure in Aviation and is recognized as "The Father of the Crashworthy Fuel System." He invented the iconic "Robbie Tanks" which have saved thousands of lives and has received numerous accolades and recognition for his life-saving work. His awards and honors include the Living Legends of Aviation/Ken Ricci Lifetime Aviation Entrepreneur Award, and he is an inductee into multiple Halls of Fame – the San Diego Air & Space Museum HOF, the National Aviation HOF, the U.S. Army Aviation HOF, and OX5 Aviation Pioneers HOF. An avid supporter of AAAA, he was also a member of numerous scientific and professional organizations.

His life will be celebrated at an invitation only event in Tempe, AZ at the Robertson Fuel Systems headquarters.

May he rest in peace.



U.S. ARMY PHOTO

Mr. John Lincoln Shipley

AAAA also sadly announces the passing of Mr. John L. Shipley, on Oct.8, 2021. He was 85.

Over the span of a 60 year career, he has been a driving force behind the tremendous success of Army Special Operations Aviation. A member of the Senior Executive Service, his leadership in bringing new, strategic capability to the Army provided unprecedented capabilities for military operations around the world. He was recognized by senior government leaders as one of the Army's finest acquisition executives, as well as being widely considered to be the founding father of ARSOA acquisition. As the director of the Aviation and Missile Command's Aviation Integration Directorate from 1982 until his retirement in 2019, his efforts resulted in the rapid development, procurement and fielding of such programs as the Armed Kiowa Warrior, the MH-60 Direct Action Penetrator, the MH-47D Adverse Weather Capable, and the mission enhanced MH-6M "Street Fighter." A life member of AAAA, he was inducted into the Army Aviation Hall of Fame in 2004 and the Army Materiel Command Hall of Fame in 2019.

Arrangements had not been announced as of this writing.

May he rest in peace.

AAAA **Legislative** Report

By LTC Kevin Cochie, Retired
AAAA Representative to the Military Coalition (TMC)
kevin.cochie@quad-a.org

Cold Turkey – Continuing Resolution 2022

As this edition hits your mailbox, we will be on the cusp of Thanksgiving, prepping our turkeys for, hopefully, non-socially distanced, limited gatherings. Last month we were on the cusp of a government shutdown due to Congress lagging on the budget process and I suppose we should be thankful we did not actually have a shutdown because on 30 September Congress passed the first short term budget measure to buy them more time. So instead of a government shutdown, we got another continuing resolution! As you learn more and more about how Congress and our government budget processes work, you begin to see the positives in the negatives. One thing is constant and that's our Army Aviation leadership that continues to fight on our behalf for the funding needed for a capable and ready force. With this 30 September measure that was passed, Congress effectively kicked the budget can down the road to mid-December by suspending the national debt limit ceiling.

As we've discussed many times, there are four main actions that lead to the legislation we need to operate our aircraft and procure new technology. We need both the House and the Senate to pass a National Defense Authorization Act (NDAA) and a Defense Appropriations bill. So far, only the House has passed one of these – their version of the NDAA. Notably, the House Appropriations Committee passed their version of the Appropriations bill, but it has not been considered for passage by the entire House. On the Senate side, their version of the NDAA has only passed out of the Senate Armed Services Committee (SASC), but no full Senate action has been taken and the Senate Appropriations Committee has not yet presented a Defense Appropriations bill. So, in summary, only one of the four legislative actions necessary for the Department of Defense to move forward, has been completed.

Naturally, one might ask what the holdup is, but we also have become desensitized with annual iterations of continuing resolutions and political impasses. This year is particularly unique because defense policy and funding is not a high priority at this time. The Biden Administration and Democratic controlled Congress is intent on passing trillions of dollars for infrastructure and social welfare programs by the end of the year. One would think this would be easy because one party controls the White House and both chambers of Congress, but not so much. The agenda is facing opposition and concern from moderate Democrats such as Joe Manchin from West Virginia.

Legislation Next Steps

Hopefully the global supply chain challenges plaguing everything from microchips to treadmills will not hamper a great Army Aviation Thanksgiving. The time to watch Congressional action (or inaction) will be between Thanksgiving and Christmas. The DoD budget situation (Appropriations) will not be resolved by the end of year. The likely best case is that the Senate will pass their version of the NDAA and we get a final bill (Authorization) signed by President Biden by end of year. Both Senator Reed (SASC Chairman) and Sen Inhofe (SASC Ranking Member) have long tenure in the Senate and have the horsepower to get the NDAA done. As you know, this only provides for funding authorization and policy provisions. Rather than watch Defense Appropriations actions during this period, monitor the legislative progress on the Administration's infrastructure initiative. This will set the windsock for the rest of the Appropriations bills to include defense. Without considerable compromise amongst parties and within each party, the budget drama (and continuing resolution) could last well into 2022.

If You Can't Beat 'Em, Join 'Em!

All of us are guilty of Monday morning quarterbacking Congressional actions. We read our daily Politico updates and often talk back to the pundits on our television sets as if they can hear our opinions. What is special about America is that we are free to express these opinions. What is truly special is making a commitment to change which any of us can do. Army Aviation has a long history on Capitol Hill – from staff to Members. House of Representatives Scott Perry (R-PA) and Anthony Brown (D-MD) are both card-carrying Army Aviators. In the Senate, we currently have Tammy Duckworth (D-IL) who served as an Army Aviator. The 2022 mid-term election is just 13 months away and we have our first Army Aviator announcing a run for office. CW5 (Ret.) Michael Durant announced he is running for Senate in the great state of Alabama. Durant, former 160th Night Stalker and alumni from the heroic actions in Somalia would join Duckworth on the Senate side if he is successful in his bid. Bottom line, we have representation on Capitol Hill and there are many of you out there in our Army Aviation constituency that have the courage and leadership to serve in office if you should decide to do so.

UPCOMING EVENTS

DECEMBER 2021

11 The 122nd Army-Navy Game, MetLife Stadium, East Rutherford, NJ

JANUARY 2022

1 Submission Deadline – National Awards and Top Chapter
14 ARMY AVIATION Magazine 2021 Photo Contest Deadline

Industry News

Announcements Related to Army Aviation Matters

Editor's note: Companies can send their Army Aviation related news releases and information to editor@quad-a.org.

L3Harris Awarded USSOCOM Sensors Contract

L3HARRIS GRAPHICS L3HARRIS LOGO.

The U.S. Special Operations Command has awarded L3Harris Technologies a 5-year, $96 million IDIQ contract to procure WESCAM MX™-electro-optical, infrared and laser designator sensor suites and services. L3Harris' WESCAM MX-10D and WESCAM MX-15D sensor systems will provide multi-spectral imaging and designation capabilities for various aircraft within the U.S. Army Special Operations Aviation Command inventory. L3Harris WESCAM MX-Series products have successfully supported U.S. Army aviation programs for more than 20 years. This contract marks the second airborne sensor program win with the U.S. Army in three years. The first was a $454 million, multi-year IDIQ contract that included WESCAM MX-10D EO/IR sensor suites to support the Army's Tactical Unmanned Air Systems Shadow UAV (RQ-7Bv2) program.

Bell Teams With CAE for FLRAA and FARA Training

L3HARRIS GRAPHICS

Bell Textron Inc. announced it has signed a teaming agreement with CAE USA Inc. As a member of Teams Valor and Invictus, CAE will provide maintenance training devices, assist in the development of flight training devices, and deliver other training products including courseware, interactive multimedia instruction, and procedural training solutions for Bell's V-280 Valor, and the Bell 360 Invictus.

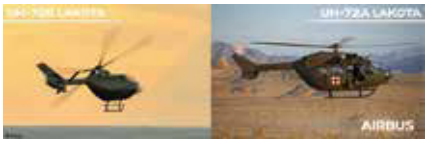
JAGM Full-Rate Production Decision Expected Mid-2022

U.S. ARMY NATIONAL GUARD PHOTO BY SSG GARRETT L. DIPUMA

A U.S. Army AH-64E Apache assigned to 6th Battalion, 101st Combat Aviation Brigade, 101st Airborne Division (Air Assault) fires Hellfire rockets. A full-rate production decision is expected in summer 2022 for the Joint Air-to-Ground Missile, according to MG Robert Rasch, the Army's program executive officer for missiles and space. The JAGM replaces the legacy Lockheed Martin-made Hellfire missile (pictured) used across the services. However, the new weapon encountered problems during initial testing in 2018 when it was fired from the Army's AH-64E Apache and the Marine Corps' AH-1Z Viper helicopters. Both Services have subsequently resolved those problems.

UH-72 Lakota Fleet Passes 1M Flight Hours

AIRBUS GRAPHIC



The Airbus Helicopters UH-72 Lakota fleet has exceeded the one million flight-hour mark, 15 years after the first Lakota UH-72A entered service for the U.S. Army and following the initial delivery of the newest UH-72B to the National Guard, as announced at the Association of the United States Army (AUSA) Annual Meeting in Washington, D.C. By the end of October 2021, the Lakota will be operational for Army and National Guard units in 45 states and territories. It is also flown by the U.S. Naval Test Pilot School and Royal Thai Army, and for U.S. Army combat training in Ft. Irwin, CA, Ft. Polk, LA and Hohenfels, Germany, as well as the test range mission at Kwajalein Atoll in the Pacific.

Contracts –

(From various sources. An "*" by a company name indicates a small business contract)

The Boeing Company, Ridley Park, PA, was awarded a $391,356,885 fixed-price incentive contract for up to five CH-47F renew aircraft; work locations and funding will be determined with each order, with an estimated completion date of Sept. 30, 2025.

General Electric Aviation, Lynn, MA, has been awarded a maximum $283,979,103 firm-fixed-price, requirements-type contract for T700 engine supplies; this is a five-year three-month base contract with one five-year three-month option period; work will be performed in Massachusetts and Ohio, with a Dec. 31, 2026, performance completion date.

Advertisers Index

People On The Move

U.S. ARMY PHOTO BY PHOTO BY U.S. ARMY SGT SARAH K KIRBY

Changes of Command/Responsibility

TAAB Welcomes Nalley

CW5 J. Scott Nalley (left) receives the Command Chief Warrant Officer (CCWO) Sabre for the U.S. Army Aviation Brigade (TAAB) from brigade commander, COL Win A. Adkins during a change of responsibility ceremony at Davison Army Airfield, Fort Belvoir, Virginia, on September 27th, 2021. Nalley succeeds CW5 Michael G. Behrendt who served as the CCWO of the TAAB since April 2019.

Flight School Graduates

AAAA provides standard aviator wings to all graduates and sterling silver aviator wings to the distiguished graduates of each flight class ... *another example of AAAA's* ***SUPPORT*** *for the U.S. Army Aviation Soldier and Family.*

AAAA congratulates the following officers graduating from Flight School XXI at the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.

58 Officers September 9, 2021

Commissioned Officers

2LT Moser, Landon K. -DG
1LT Gradolf, Cullen S. -HG
1LT Ogle, Weston J. -HG
2LT Polczynski, Drew M. -HG
1LT Bochow, Clayton C.
2LT Edbauer, Michael A.
2LT Frazier, Derek M.
2LT Henderson, Jonathan M.
2LT King, Colby A.
2LT Mullen, Nathan S.
2LT Pavliscak, Justin M.
1LT Peck, Dalton M.
2LT Piper, Robert P.
2LT Raatz, Christopher D.
2LT Sewell, Michael S.
2LT Slowiak, Casey C.
2LT Slusar, Brittney L.
1LT Solang, Elijah I.
1LT Strbik, Thomas O.
2LT Swedeen, Caleb F.
CPT Uy, Julian Johnny G., Jr.
2LT Westervelt, Andrew R.

Warrant Officers

WO1 Givan, Grant W. -HG
WO1 Jennings, Preston T. -HG
WO1 Reuter, Walter R., Jr. -HG
WO1 Romero, Jesus -HG
WO1 Allan, Casey D.
WO1 Arredondo, Francisco J. IV -DG
WO1 Batson, Kevin L.
WO1 Brown, Derek C.
WO1 Day, Samuel W.
WO1 Dulay, Sotero J.
WO1 Egle, Zachary W.
WO1 Eigel, Stephen G.
WO1 Forto, Ryan L.
WO1 Hinga, Samuel M.
WO1 Hocutt, Adam M.
WO1 Jackson, Tyler R.
WO1 Johnson, Christopher A.
WO1 Laughlin, Nathaniel T.
WO1 Morgante, David R.
WO1 Neubert, Christopher A.
WO1 Phelps, Lyndsey N.
WO1 Provost, Patrick E.

FSXXI Class 21-022 - Sept. 9, 2021

FSXXI Class 21-023 - Sept. 23, 2021

ALL PHOTOS U.S. ARMY PHOTO, FORT RUCKER PUBLIC AFFAIRS

WO1 Redick, Cameron D.
WO1 Santagata, Max Q.
WO1 Scott, Mathew E.
WO1 Swartzwelder, Brittany M.
WO1 Turner, Shane M.
WO1 Urena-Martinez, Ramon R.
WO1 Vongxay, Patrick A.

56 Officers September 23, 2021

Commissioned Officers

2LT Kifer, Caleb M. -DG
CPT Hode, Blaise G. -HG
2LT Fulghum, Davis M.
1LT Giordano, Montana C.
2LT Golato, Marley V.
2LT Hodsden, William W., III
2LT Kunsman, Richard M.
2LT Paul, Alexander H.
2LT Pipkin, Drake A.
2LT Worley, Titus E.

Warrant Officers

WO1 McDonald, Chase J. -DG
WO1 Bowen, Anthony T. -HG
CW2 Hammond, Justin R. -HG
WO1 Partridge, Steven M. -HG
WO1 Kyper, Alex D. -HG
WO1 Barlow, Adam J.
WO1 Berg, Alex J.
WO1 Burke, Dominic J.
WO1 Cabogos, Djano R.
WO1 Call, Nicholas R.
WO1 Cano, Eric J.
WO1 Capps, Nathan G.
WO1 Cisneros, Lamberto
WO1 Crothers, David P.
WO1 Davis, Blake K.
WO1 Derosier, Brandon J.
WO1 Froehle, Mitchell L.
WO1 Gallant, Christopher J.
WO1 Good, Jack J., III
WO1 Gorczok, Peter B., III
WO1 Han, Dae Woo
WO1 Hermes, Andrew J.
WO1 Herring, Jerritt L.
WO1 Hodgdon, Christopher C.
WO1 Irps, Erik D.
WO1 Ko, Kang H.
WO1 Laird, Garrett W.
WO1 Lewis, John-Mark A.
WO1 Linke, Dakota M.
WO1 Lukins, Joshua D.
WO1 McCaffer, Mark L.
WO1 O'Connell, Jeffrey R.
WO1 Ostrander, Michael A.
WO1 Roa, Brandon C.
WO1 Rose, Jason A.
WO1 Stoudt, Zachary A.
WO1 Thornton, Joshua L.
WO1 Vail, Adam F.
WO1 Voss, William C.
WO1 Ward, Ryan J.
WO1 Wolfe, Tara J.
WO1 Young, Casey P.

-DG: Distinguished Graduate
-HG: Honor Graduate

People On The Move

ADVANCED INDIVIDUAL TRAINING (AIT) GRADUATIONS

AAAA congratulates the following Army graduates of the indicated Advanced Individual Training (AIT) courses at the 128th Aviation Brigade, Joint Base Langley-Eustis, VA and the U.S. Army Aviation Center of Excellence, Ft. Rucker, AL.

AH-64 Attack Helicopter Repairer (15R)

Class 031-21
PFC Cameron Joseph O'Neill * - DG
PV1 Alexander Barron
SGM Qasem Aslam G Hussain
SGM Easa Hasan A M Kaddaw
PFC Biireiegustave Zamble
Class 032-21
PV2 Joshua William Smith * - DG
PFC Jonathan Michael Brownking
PV2 Kevin Counterman
PV2 Michael Joseph Dardis
PV2 Luis Jomar Diazroubert
PFC Rickie Clint Harden
PV2 Michael Robert Kirby, Jr
PFC Austin Timothy Leonard
PV2 Selvin Alfred Recinostejeda
SPC Michael Terrance Shortridge
PV2 Hannah Vanlieshout
PV2 Savannah Danielle Wade
Class 034-21
PFC Camden Ray Stiehl * - DG
SPC Shirin Sidhu Badwal
PFC Nam C Bui
SGM Majid Khalifa H Eshnain
SGM Khalid Humaid O A Al Marashda

CH-47 Medium Helicopter Repairer (15U)

Class 024-21
PFC Makenzie Murphy * - DG
PV2 Joseph Baker
SPC John Canter
PV2 Troy Cornett
PFC Tony Esquijarosa
PV2angenae Gore
PV2 Luke Harkin
PFC Dyllan Kemp
PV2 Nathan Pineschi
SPC Christian Short
PFC Brandan Skrzec
PFC Ericka Crespomelendez
Class 025-21
PV2 Hunter Lee Lafond * - DG
SPC Boucher Colby Chase
PV2 Caballero Nicholas David
PFC Hannah Elisabeth Cogan
PV2 Juan Anton Castillo Martinez
PV2 Joshua David Jurva
PFC Eli Wayne Marshbank
PFC Hannah Nicole Meffert
PV2 Maressa Ramona Olmedo
SGT Jordan Cameron Walsh
PFC Ariel Nicole Yates
Class 026-21
PFC Charles Edward Miller * - DG
SPC Dominic Franco Tovar
SGT Christopher Lee Watson
PFC Nikolai Bautin
SPC Jonas Graham
PFC Cosimo Lasorsa
SGT Kenneth Maddox
SGT Michael Lindgren
Class 027-21
SPC Hilary Hume * - DG
CPL Jesus Almanza
SGT Bryce Herrick
SPC Jiajie Li
PFC Sirr Nuesca
SPC Nicholas Russomanno
PV2 William Rutledge
CPL Austin Sheffler

UH-60 Helicopter Repairer (15T)

Class 057-21
SPC Walker Alan Kramme * - DG
SGT Cassandra Marie Bailey
SPC Gared Enoch Lingle
SPC Ryan Joseph Magerr
PV2 Luis Adolfo Monroy
PFC Peter Moua
PFC Dominic Jason Rieger
PV2 Shelah Joseph Saadoun
PV2 Rebecca Lynne Schwab
PV2 Tieryonna Jushae Utter
PV2 Carsen Marianne Wright
Class 058-21
PFC Christopher Lewis Winters * - DG
SPC Alexander Juan Cancelada
SGT Robert Jose Cedano, Jr
PV2 Xavier Blaze Darling
PFC Richie Rigo Gonzalez
PV2 Jamie Thomas Gustad
SGT James Patrick Lawson
SPC Jimesh Rajeshkumar Patel
PFC William Jonah Sanders
PV2 Daniel Joe Steele, II
SGT Aaron Ray Vitte
PFC Kyle Reed Westbrook
Class 059-21
PFC Alexander P. Barankovich * - DG
PFC William Doty Chestnut, IV
PV2 Robert Logan Faucett
PFC Claude Addison Johnson, III
PFC Shannon Elijha Moore
PFC Levi Allen Norton
SPC Reinaldo Junio Oterocamacho
PFC Johnalbertangelo Patriarca
PV2 Wendell Lenier Sharpe
PFC Richard M Taylor
PFC Blake Gregory Whorton
PFC Herbert Jeffery Williams
Class 060-21
PFC Tianyu Gai * - DG
CPL Patrick Jason Allen
SGT Andrew Carlton Batson
PV2 Justin Aaron Donwerth
SPC Brendan Cassidy Duggan
PFC Thomas Hagan Holmes
SPC Jeremiah Joseph Ignacio
PV2 Sebastian Dewayn Kingston
PFC Brody Johnallen Knott
SGT David Anthony Scott, II
SPC Robert Leroy Talley, Jr
PV2 Randy Ray Villani, Jr
Class 061-21
PV2 Zackery Curran Ellis * - DG
PFC Kamron James Alexander
PFC Haley Nicole Chandler
PV2 Thomas Rob Chattohutchinson
PV2 Sean Tyler Dennis
PV2 Amy Ann Elwell
PV2 Angela Ck Enos
PV2 Sarah Isabel Griego
PV2 Jonathan Dean Manning
PV2 Gabriella Caridad Perez
PFC Gracie Mashay Ragan
Class 062-21
PFC Mason Cole Neumiller * - DG
SPC Michael David Baumgartner
SPC Kaleb Nathanial Bruce
SPC Keaton James Derouchie
PFC Enrique Itzam Juarez Duran
SPC Carlosjuan Aliga Labirua
SPC Carlos Y. Marrero Bermudez
PFC Benjamin Harrison Miner
PFC Nicholas Caleb Neece
SPC Nitipun Panich
PFC Armando Perez, Jr
Class 063-21
AB Aaron Lucas Yost * - DG
AB Nordan Fernandez Machin
SRA John Paul Frazier
AB Bryan Tyler Hankins
AB Patrick Logan Hughes
AMN Brandon Weston Meyers
AB Nathan Anthony Oquendo
A1C Michael Raymond Schmitt
AMN Lane Marcus Shaw
AB Daylen Joseph Swanigan
Class 064-21
PFC Christopher Dylan Palmer * - DG
SGT Jacob Robert Baughman
SPC Lester Phillip Dudley, Jr
PFC Devin Ross Luginbuhl
SGT Christopher Aldo Macpherson
SPC Dakota Christophe Patterson
SPC Mark Alexander Riley
PFC Juan Jose Rios
SPC Danny Taylor Sowell
PFC Arthur William Thomm, III
PV2 Bobby Ray Thompson
SPC Ser Arren Valdez

Aircraft Powerplant Repairer (15B)

Class 013-21
PFC Donovan Matias * - DG
PV2 Evan Matthew Chandler
PFC John Nicholas Crowe
PV2 Stephen Peter Ebenhoe
SGT Lawrence Tyler Odoy
PV2 Rogelio Rodriguez
SPC Dakota Patrick Zimmerman

Aircraft Powertrain Repairer (15D)

Class 008-21
PV2 Lazaro Enzo Alvarez-Diaz * - DG
PFC John Louis Bruner
PV2 Braedon James Churchill
PV2 Patrick John Richard Ellis
PFC Jose Miguel Fuentes
PV2 Christian Deon Hunt
PV2 Ian Anthony Lynch
SPC Zorig Otgonbayar
SGT Phillip James Smith
PV2 Thomas Wilhelms
SPC Nicholas Daniel Zay
Class 009-21
SPC Jeremy Wayne Bliss
SPC Nicholas Jason Cline

Aircraft Electrician (15F)

Class 011-21
PFC Zachary Wayne Justus * - DG
PV2 John Keniher Boteromosquera
PV2 Kielangerrick Acfal Certeza
PFC Lemueljirus Alano Franco
SSG Goran Hreljanovic
SGT Luka Ibrisimovic
PFC Hopeton Stpatrick Kelly
PV2 Keegan Earl Williamson
Class 012-21
SPC Yizheng Wang * - DG
PVT Isaiah Daniel Hoyt
SPC Yerbol Kudabayev
PV2 Ross Morrone
PFC Vutruclam Ngo
PFC Rayvic Parina Roque
PFC Beau Derek Sims
PFC Aaron Michael Snyder

Aircraft Structural Repairer (15G)

Class 009-21
SPC Timothy Bruce Ritter * - DG
SPC Michael Avery Ely
SPC Justin Aaron Gray
PV2 Eric Hays Hillhouse
PFC Jasmyn Mikayla Perez
SGT George Gregory Walker
Class 010-21
PV2 Nathaniel Alejander Belgrave-DG
PV2 Joshua Michael Bennington
PV2 Jasyn Keith Butler
PVT Juan Fernando Escobedo
PVT Stephen Isaiah Graham
PVT Gavin Jacob Hernandez
PV2 Jonathan Seth Hunt
PFC Adamu Hassan Isah
SPC Stephen Andrew Long
PVT Matthew Holland Nicotra
PFC Kenneth Jan Z. Porras
SPC Christopher A Raghu
PVT Michael Lee Rogers
PV2 Gabriel Connor Schemmel
PV2 Joseph Alan Wallace
SPC Jose Alberto Zazueta Garcia

Aircraft Hydraulics Repairer (15H)

Class 013-21
PFC Jordan Davon Adams * - DG
SPC Holly Ann Barrett
PV2 Arath Jesus Bastida

AIT Graduations Continued next page

People On The Move

AIT Graduations *Continued*

PFC Abel Shekwoaga Emmanuel
PV2 Michael Patrick Moyer
PV2 Quent Bennington Wentworth

Avionic Repairer (15N)
Class 013-21
PV2 Savanna Marie Eskridge * - DG
PFC Cindy Melissa Avilesramirez
PFC Bethny Michelle Luce
PFC Zabrina Noem Rodriguez Ayala
SPC Johnpaul Maruya Roque
PFC Elijah Smith Ryan
Class 014-21
PV2 Jacob Edward Burba * - DG
PV2 Jeremiah Samuael Andrews
PV2 Daryn Enrique Chapa
PFC Segman Lee Harriston, Jr
PFC Cayden Zacharyd Hartmann
PFC Hector Luis Orengo Madera
Class 201-21
PFC Charlotte Marie Carlson * - DG
PV2 Buni Ifeanyieloka Amobi
PFC Emily Rose Kierstead
PFC Kaitlyn Desiree Mast
Class 202-21
PFC Christian Arno Copefigueroa
PFC Joshua Devon Cumbie
PV2 Garrett Ryan Everett
PFC Anthony Charles Ghoston, Jr

AH-64 Armament/Electrical/Avionic Systems Repairer (15Y)
Class 011-21
SPC Nadine Jarus * - DG
SGT Saoud Abdulla Al Zoubi
PV2 Blake Bruton
SGT Khalid Jassim Buhadoud
PFC Kristian Dean
PV2 Steve Gomez
PV1 Israel Gowler
SPC Elvin Rodriguezvalentin
PFC Megan Weir
Class 013-21
SPC Kayci Derr * - DG
PFC Jacob Bachtel
PV1 Bryce Cummins
PFC Brittany Dimonwilliams
SPC Daniel Foster
PFC Anna Fox
PV1 Talon Hair
PV2 Charles Jenkins
SPC Jessica Locke
PV2 Kaleb Long
Class 014-21
PFC Dylan Nobrega * - DG
SPC Benjamin Anderson
SPC Joshua Clark
PV2 Brant Huddleston
PV1 Tristan Mackey
SPC Samuel Muniz
SPC James Rowlett
PV1 Jason Royals
PFC Jacob Spataro
PFC Tristan Strongreed
PV1 Caleb Sutton
PV1 Adam Woodlee

- DG: Distinguished Graduate
- HG: Honor Graduate
* = AAAA Member

Unmanned Aircraft Systems (UAS) Graduations

UAS REPAIRER
AAAA congratulates the following Army graduates of the Unmanned Aircraft Systems Repairer Course, MOS 15E, at Fort Huachuca, AZ.

Shadow UAS Repairer Course
7 Graduates, 2 September 2021
PV2 Dustin Pratt -HG
SGT Samuel Evans
SPC Clayton Clarkson
SPC Jaime Coronado
PFC Tanner Goins
PV2 Steven Brown
PV2 Lawson Fraise
7 Graduates, 15 September 2021
PFC Samuel Gilbertson -HG
SFC Bruce Hoffstetter
SPC Christopher Dyche
SPC Nathaniel Quesada
SPC Cory Williams
SPC Drevin Williamson
PVT Nathaniel Meyer

Gray Eagle UAS Repairer Course
16 Graduates, 7 September 2021
PV2 Preston Luke -DG
PFC Thomas Goble -HG
SGT Paul Miller
SGT Jorge Sanchez
PFC Joao Goncalves
PFC Dakota Merrill
PFC Sarah Raley
PFC Dante Smith
PFC Richard Turner
PV2 Apolos Alicea-Diaz
PV2 Caleb Cockram
PV2 Austin Crider
PV2 Anthony Hildreth
PV2 Gabriel Miera
PV2 Riley Phillips
PV2 Skyler Ream

UAS OPERATOR
AAAA congratulates the following Army graduates of the Unmanned Aircraft Systems Operator Course, MOS 15W, at Fort Huachuca, AZ.

Shadow UAS Operator Course
23 Graduates, 2 September 2021
PFC Charles Anderson -DG
SPC Victoria Soesbee -HG
SPC Chandler Harmeson
SPC Evan Mchugh
PFC Macallister Lecheung
PFC Whalen Phipps
PFC Jesse Ross
PFC Adam Seikel
PFC Jacob Stacks
PV2 Braden Blanthorn
PV2 Austin Dalrymple
PV2 Tyler Dooros
PV2 Wyatt Dorweiler
PV2 Ethan Fernandez
PV2 Eli Leon
PV2 Desmond Mellerson
PV2 Ronaldo Mendez
PV2 Iyana Morris
PV2 Joshua Moses
PV2 Liam Robbins
PV2 Logan Russo
PV2 Danny Sills
PV2 Brittany Willis

DG - Distinguished Graduate
HG - Honor Graduate

Art's Attic

By Mark Albertson

Art's Attic is a look back each issue at 25 and 50 years ago to see what was going on in ARMY AVIATION Magazine. Contributing editor Mark Albertson has selected a few key items from each decade's issues. Art Kesten is our founder and first publisher from 1953 to 1987. He is also the founder of the AAAA in 1957 and served as its Executive Vice President. The cartoon, right, was created back in 1953 by LT Joe Gayhart, a friend of Art's and an Army Aviator, showing the chaos of his apartment-office in New York City where it all began.

25 Years Ago

November 30, 1996

Gathering of L-Birds

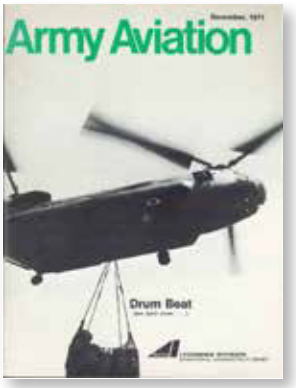
The ILPA or International Liaison Pilot and Aircraft Association has announced the following events for 1997: The Seventh Worldwide Gathering of L-Birds, Keokuk, Iowa, July 26-28, 1997. Fourth East Coast ILPA Gathering (ECIG) in Williamsburg, Virginia, October 1997; and . . . the First European ILPA Member Gathering to convene in France, in 1997. For more information, contact Bill Stratton, (210) 490-ILPA.

Dedication

Colonel James W. Kirkpatrick (left), commander of the Darnell Army Community Hospital and, Medal of Honor holder, Major General Patrick Brady (Ret.), (right), unveiled the monument to Dustoff pilots during the Dustoff Park dedication ceremony held at the Fort Hood, Texas hospital, June 12, 1996. Major General Brady was accorded the Medal of Honor for airlifting 51 seriously wounded soldiers while under heavy enemy fire, January 6, 1968.

"Army Aviation . . . From the Sea. . . "*

"Army Aviation units have operated from Navy ships since World War II. "In both the African and Pacific campaigns, Army fixed wing aircraft were launched from the decks of aircraft carriers to conduct missions against the enemy. "During the Korean War, Army helicopters conducted rescue missions for Navy pilots, mine warfare, and logistics missions in the overwater environment. "During the Vietnam conflict, the Army established the Mobile Riverine Force to operate in the brown water of the Mekong Delta, supported by helicopters flown from Navy ships off the coast. "In 1983, U.S. Army MEDEVAC helicopters flew wounded servicemen to Navy ships during the invasion of Grenada." * See page 49, "Army Aviation . . . From the Sea," *Army Aviation,* November 30, 1996, Major Michael J. Knippel



50 Years Ago

November 30, 1971

New Silhouette on the Horizon!

Profile of Bell's new King Cobra, showcasing a minimum size airframe and reduced silhouette, so as to reduce vulnerability and enhance survivability. The King Cobra's vulnerability to small arms fire is less than the AH-1G.

New Silhouette, continued . . .

LEFT: Business end of the King Cobra, featuring a nose-mounted stabilized sighting system and turret-mounted 20 mm cannon. RIGHT: Wing stores include pod with 19 folding-fin rockets and tubes for four anti-tank missiles.

Flight of Hueys

Near Palzing, Germany, during the second phase of Reforger III. A flight of Hueys lay a smoke screen, just prior to landing airmobile rifle squads.

A First!

The Army Aviation School, for the first time in its history, graduated a class of Army Aviators . . . minus diplomas. This graduating class, in particular, featured eleven officers from the U.S. Air Force and a triad of army officers from the Federal Republic of Germany. The absence of U.S. Army graduates was the result of a time lag caused by a four-week extension of training for those students, from twenty weeks at Fort Rucker in lieu of sixteen weeks.

Army Aviation Hall of Fame

The Army Aviation Hall of Fame, sponsored by the Army Aviation Association of America, Inc., recognizes those individuals who have made an outstanding contribution to Army Aviation.

The actual Hall of Fame is located in the Army Aviation Museum, Fort Rucker, Ala.

The deadline for nominations for the 2023 induction is June 1, 2022

Contact the AAAA National Office for details and nomination forms at (203) 268-2450 or visit www.quad-a.org

Lieutenant Colonel Charles S. Kettles, Retired

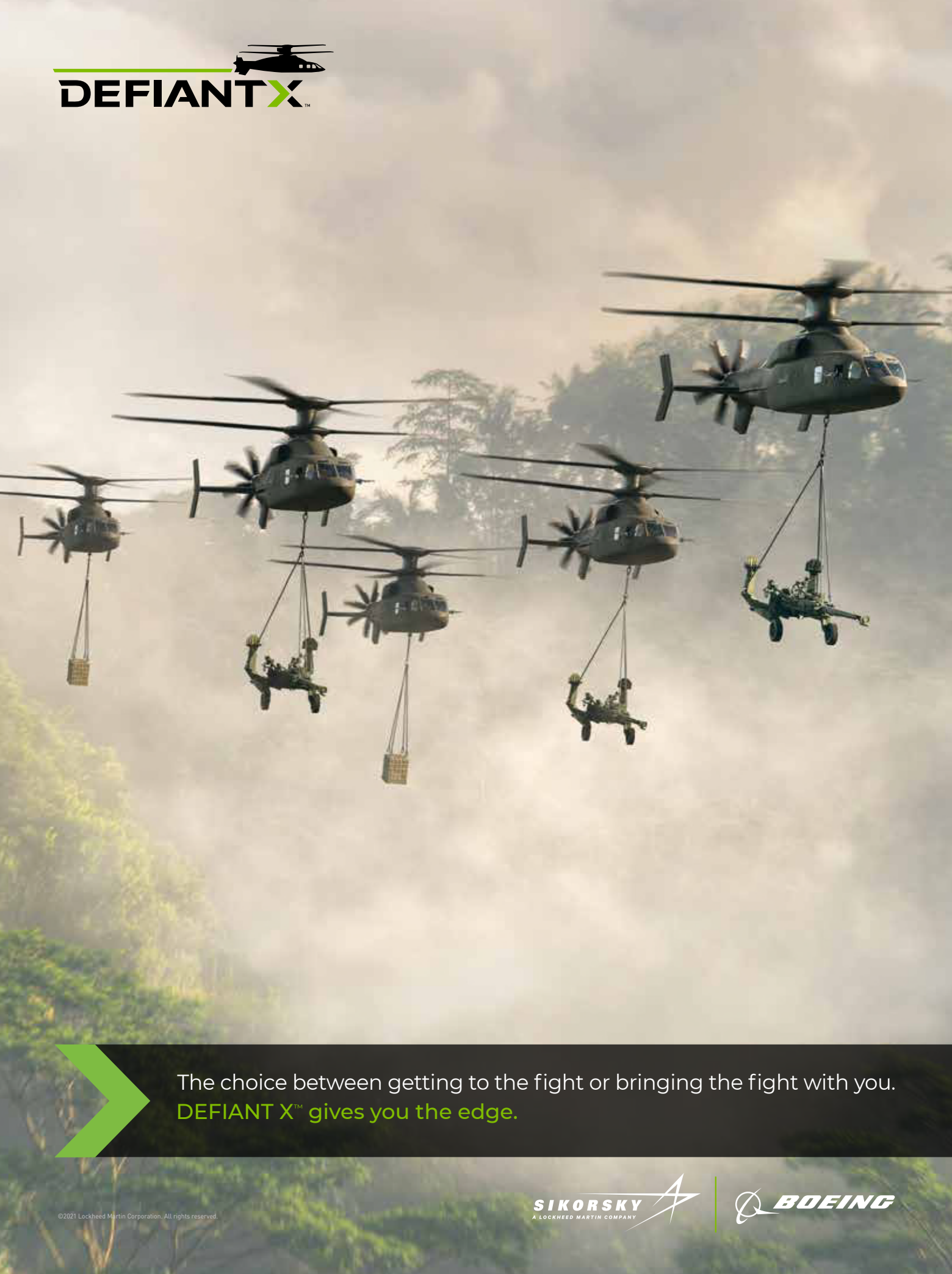
Army Aviation Hall of Fame 2017 Induction – Nashville, TN

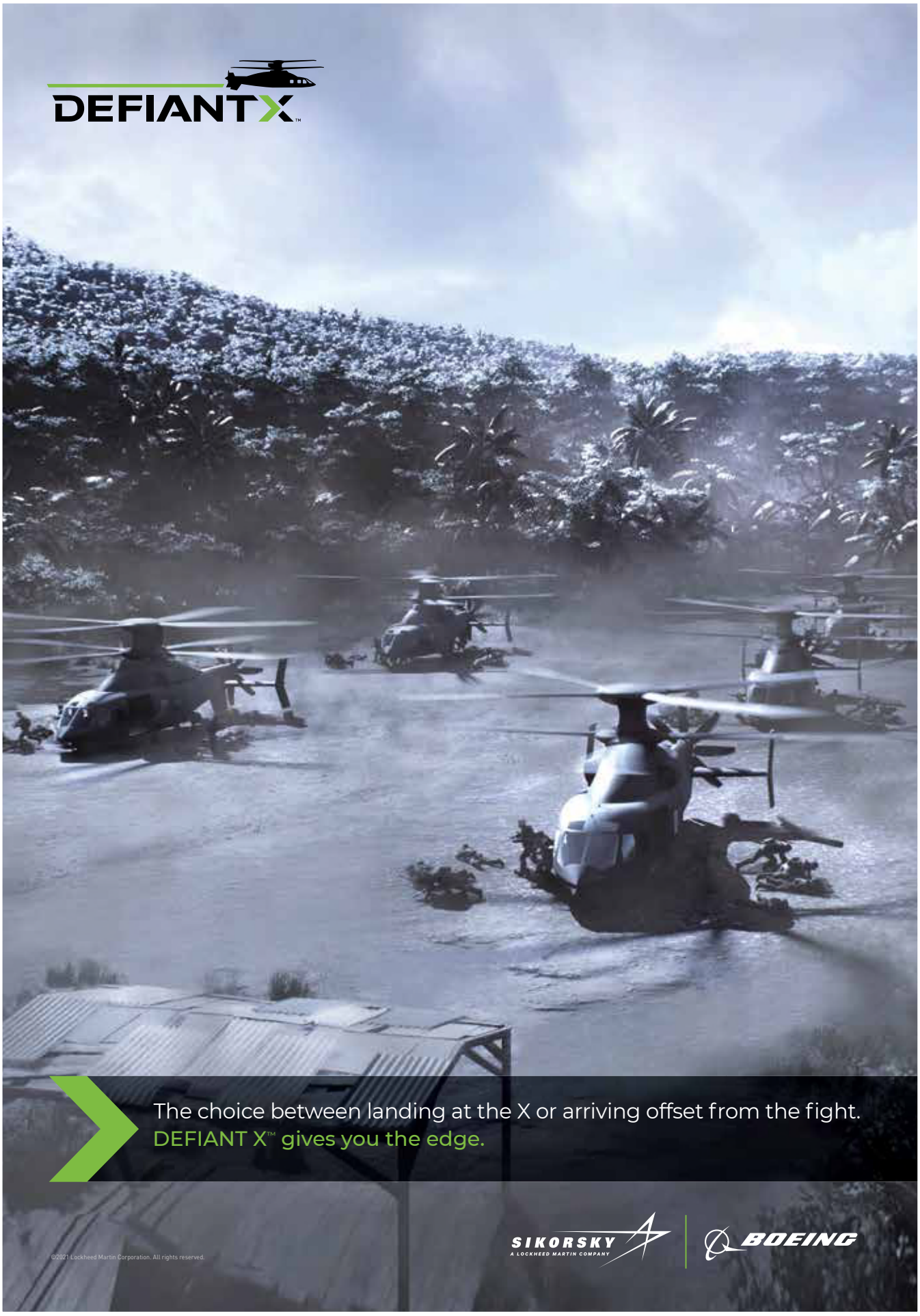
On May 15, 1967, then-Major Kettles volunteered to lead a flight of eight UH-1D helicopters to carry reinforcements to an embattled airborne infantry unit and evacuate wounded personnel. Enemy small arms, automatic weapons, and mortar fire raked the landing zone, inflicting heavy damage to the helicopters; however, Kettles refused to depart until all helicopters were loaded to capacity.

He then returned to the battlefield to bring more reinforcements, landing in the midst of enemy mortar and automatic weapons fire that seriously wounded his gunner and severely damaged his aircraft; but he managed to nurse the damaged aircraft back to base.

Later that day, an emergency extraction was requested for the remaining 40 infantry plus four crewmembers from Kettles' unit whose helicopter was destroyed by enemy fire. He volunteered to return to the deadly landing zone for a third time, leading a flight of six helicopters. During the extraction, he was informed by the last helicopter that all personnel were onboard and departed the landing zone with the Army gunships supporting the evacuation. Once airborne, he was advised that eight troops had been unable to reach the helicopters due to the intense enemy fire.

With complete disregard for his own safety, Kettles passed the lead to another helicopter and returned to the landing zone. Without gunship, artillery, or tactical aircraft support, his lone aircraft was damaged by a mortar round and raked by small arms and machine gun fire. Despite the intense enemy fire, he maintained control of the aircraft allowing the remaining eight soldiers to board and once more flew his heavily damaged aircraft to safety. For his courageous actions he was awarded the Nation's highest award for valor, the Medal of Honor.




DEFIANT X™
The choice between landing at the X or arriving offset from the fight.
DEFIANT X™ gives you the edge.
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BOEING
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