NETWORK I RECOGNITION I VOICE I SUPPORT February 29, 2020

SUPPORTING WARFIGHTERS Around The Globe



Gray Eagle ER

THE MULTI-DOMAIN SOLUTION

Gray Eagle Extended Range provides the warfighter persistent and reliable mission support in Multi-Domain Operations. Providing over 40 hours of endurance with a modular architecture that integrates multiple advanced payloads for standoff in a contested environment. Gray Eagle Extended Range is a combat proven system that supports Army forces today and into the future.





©2019 GENERAL ATOMICS AERONAUTICAL SYSTEMS, INC.

Leading The Situational Awareness Revolution











Contents

February 29, 2020, Vol. 69, No. 2

TO THE FIELD

- 8 Aviation Branch Chief's Corner By MG David J. Francis
- **10 Branch Command Sergeant Major Update** By CSM Brian W. Hauke
- 12 PEO Aviation Update By Mr. Patrick H. Mason
- **14 PEO Aviation Command Chief Warrant Officer Update** By CW5 Travis Dixon
- **16 Combat Readiness Center Update** By COL Jason L. Miller
- **18 Reserve Component Aviation Update** By CW2 Jonathan Olson
- 20 128th Aviation Brigade Update By CPT James C. King III
- 22 AMRDEC Tech Talk By Mr. Wyndon Tysor
- 24 Ask the Flight Surgeon By MAJ (Dr.) Roger Williams & CPT (Dr.) Gurdeep Buttar

SPECIAL FOCUS - Rotary Wing PM Updates

- 26 AH-64E Supporting the Army's Vision By COL Talmadge Sheppard
- **30** Mission Accomplished, More to Achieve By COL AI M. Niles Jr.
- 36 The Multi-National Aviation Special Project Office Providing Affordable Non-Standard Aircraft, Building Global Relationships, and Enabling Multi-Domain Operations By COL John Vannoy, Dr. Wayne Hudry, and Mr. Andy Greer
- **34 Utility Helicopter Program Office Update** By COL Calvin Lane
- **36** Focused on the Finish By COL Gregory S. Fortier
- **38 Delivering the Next Generation Tactical Assault Aircraft** By COL David C. Phillips





Contents

February 29, 2020, Vol. 69, No. 2

SPECIAL FOCUS - TRADOC Capability Managers Update

40 The Enduring Fleet in Multi-Domain Operations By COL Michael Demirjian, MAJ Steve Cusack and MAJ Justin Goldman

SPECIAL FOCUS - Futures Command

42 Army Aviation's Near-Term Solution to a Long-Range Precision Munition Problem By CW5 Steven Dermer

FROM THE FIELD

- **44** Adapting Training for Large-Scale Combat By CW4 Milton Mercado and CW3 Christopher Munz
- **46** Time to Change the Army Aviation Commissioned and Warrant Officer Promotions Paradigm By Mr. George Johnson

DEPARTMENTS

AAAA NEWS

AAAA President's Cockpit	6
AAAA VP Chapter Affairs	
Chapter News	
AAAA VP Membership	
New Members	
AAAA Family Forum	
AAAA Legislative Report	
AAAA Scholarship Foundation	59

ARMY AVIATION COMMUNITY NEWS

Advertisers Index	63
Art's Attic	68
Briefings	69
Calendar	64
Fallen Heroes	61
Hall of Fame	69
Historical Perspective	
Industry News	63
People on the Move	64
Spotlight	47

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: aaa@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.









BELL 360 INVICTUS First to the Fight



Publisher / William R. Harris Jr.

Editor / CW4 (Ret.) Joseph L. Pisano Sr. editor@guad-a.org

Associate Editor / CW5 Adam Jarvis adam@quad-a.org

Director of Design & Production Anne H. Ewing magazine@quad-a.org

Web Edition / Trudy Hodenfield trudy@quad-a.org

Contributing Editor / Mark Albertson mark@quad-a.org

Family Forum Editor / Judy Konitzer judy@quad-a.org

Advertising Director / Robert C. Lachowski bob@quad-a.org

Advertising Manager / Erika Burgess erika@quad-a.org

Marketing Director / Jennifer Chittem jenn@quad-a.org

Social Media Manager / Chelsea Jarvis chelsea@quad-a.org

> **Circulation Department** Deb Cavallaro Debbie Coley Elisabeth Mansson Sue Stokes

Web Master / Mary Seymour mary@quad-a.org

Editorial Address

593 Main Street, Monroe, CT 06468-2806 Tel: (203) 268-2450 / Fax: (203) 268-5870

> Visit our website for additional articles and updates.

ARMYAVIATIONmagazine.com

On The Cover

PAID ADVERTISEMENT: SES is a recognized leader in training, system modification, and integration of rotary wing, fixed wing, and unmanned aircraft. With more than 150 aircraft in work on any given day, SES provides total fielding support and logistics solutions to DoD and our coalition partners. *Caption provided by the advertiser.*

Briefings > Late Breaking News - Announcements

First AvIP Hike in 20 Years!



New pay charts posted by Army Human Resources Command show the Army just increased its Aviation Incentive Pay rates for the first time in more than 20 years. Aviators with more than 10 years of aviation service can receive a \$1,000 per month incentive pay - the max by law. The rates begin to decrease after a pilot has more than 22 years of aviation experience, except for warrant officers, who stay in the "Over 10" category until retirement or they're no longer in aviation. Aviation Branch Chief, MG Dave Francis said in a news release, "The Army understands the high demands on the aviation force and their families. This increase in AvIP, the first for Army pilots in over 20 years, will result in an increase of pay for most pilots in the regular Army, Army National Guard, and Army Reserves." AAAA has continuously supported the flight pay effort over many years.

Mason Assumes PEO Aviation Charter



Patrick Mason accepts the Program Executive Office for Aviation charter from Dr. Bruce Jette (left), Assistant Secretary of the Army for Acquisition, Logistics and Technology, during a Jan. 14, 2020 change of charter ceremony at the Redstone Test Center hangar, Redstone Arsenal, AL. Mason, who retired from the Army with more than 30 years of service in 2016, was sworn into the Senior Executive Service in June 2017 and assumed duties as the senior civilian and deputy under outgoing PEO MG Thomas Todd. See also People on the Move, page 64 this issue.

Rubio Now Eligible for NASA Mission Assignments

LTC (Dr.) Francisco "Frank" Rubio, a U.S. Army flight surgeon and pilot, has completed his initial astronaut candidate training and is now eligible for mission assignments. Originally from Miami, Rubio joined the



2017 Astronaut Candidate Class. He earned a bachelor's degree in international relations at the U.S. Military Academy at West Point, NY, and a Doctor of Medicine from the Uniformed Services University of the Health Sciences in Bethesda, Md. Rubio has accumulated more than 1,100 hours as a UH-60 Black Hawk helicopter pilot, including 600 hours of combat and imminent danger time during deployments to Bosnia, Afghanistan, and Iraq. A board certified family physician, he was serving as a surgeon for the 3rd Battalion, 10th Special Forces Group (Airborne) at Fort Carson, CO before coming to NASA.

USAACE Announces Parker Award Recipients



COL Scott D. Wilkinson, 160th Special Operations Aviation Regiment (Airborne) commander, receives the LTG Ellis D. Parker Award from MG David J. Francis, USAACE and Fort Rucker commanding general, on behalf of the 4-160th SOAR(A) for top honors in the Combat category and Overall Aviation Battalion of the Year for fiscal year 2019 during the Aviation Senior Leaders Forum at Ft. Rucker, Jan. 29, 2020. Top battalions in the other categories are: Combat Support -6-101st General Support Aviation Battalion, Ft. Campbell, KY; Combat Service and Support - 638th Aviation Support Battalion (Task Force Taz), Camp Buehring, Kuwait; and Table of Distribution and Allowances category - Special Operations Aviation Training Battalion (SOATB), Ft. Campbell.

Dominate the future of multi-domain operations

Enabling generational leaps in survivability systems. Evolving ahead of the threats.

Learn more at: **baesystems.com/oews** Explore a career at: **jobs.baesystems.com**

BAE SYSTEMS

Planning for the Future

I.S. Army Aviation Center of Excellence commander and Aviation Branch Chief, MG Dave Francis hosted a superb Army Aviation Senior Leaders Forum at Fort Rucker. AL a few weeks ago.

His fellow general officers and SESs from across the Aviation Enterprise as well as active, Guard and Reserve brigade commanders, command chief warrant officers, and command sergeants major all participated in this annual state of the Branch conversation. Special thanks to MG Francis for including us "gray beards" who are still involved in supporting Army Aviation in retirement. It was a great way to kick off what looks to be an exciting 2020 indeed. We heard from our Army Chief of Staff, fellow Army Aviator GEN Jim McConville, as well as many very senior leaders of our Army and of Army Aviation.

In this issue you will see some of the most interesting and useful topics we heard about at the conference. After Branch Chief MG Francis sets the stage with his lead-in piece, we feature Mr. Pat Mason, our new Program Executive Officer Aviation. We all congratulate Pat and wish him success as he moves up from Deputy PEO to take the reins. His article sets the stage for his six Rotary Wing Program Managers to detail in separate articles what they are doing now and intend to do this year within their charters. Also, in this issue we hear from COL Mike Demirjian on TRADOC Capability Managers and their role in supporting the Requirements and Acquisition process, as well as updates from our Reserve Component Aviation units, our Army Combat Readiness Center, and the 128th Aviation Brigade. Finally, we feature a fascinating article



Brigade command teams attending the Aviation Senior Leaders Forum at Fort Rucker gather in the Museum at the start of the annual Awards Dinner January 29, 2020 featuring AAAA Functional Awards and LTG Ellis D Parker Awards.

on the recent experimentation and proof of principal from the Army Futures Command Future Vertical Lift Cross Functional Team highlighting the SPIKE missile and its employment. It's a great read and underscores the adaptive learning that new capabilities bring to our aviators and operators.

The first few months of 2020 will be exciting for all of us in or supporting Army Aviation. The President's Budget is set for release early to mid-February, and with it will come months of budget hearings and posture statements by our most senior military leaders. The Congress will be eager to understand the details of the budget and its impact on current and planned programs. We at AAAA will do our part as we host the first Army Aviation Caucus of 2020 led by concerned Congressional leaders as well as the Aviation enterprise headed by MG Francis. This will be followed in late March by the Army's downselection of up to two competitors each in the Future Attack Reconnaissance Aircraft (FARA) and the Future Long-Range Assault Aircraft (FLRAA) programs. These decisions will impact the Army and Army Aviation for the rest of this century, and I cannot

emphasize enough their importance.

In addition to all this, your AAAA team is in final preparations for our AAAA Army Aviation Mission Solutions Summit in Nashville, April 22-24. We continue to work closely with our Branch Chief MG Francis and his staff to make this the best summit so far. Our Chief of Staff and fellow Army Aviator GEN Jim McConville will present the keynote address - so, mark your calendars!

Lastly, I need to mention the success of our national Vice President of Membership, CW4 Becki Chambers, along with the critical work from our chapter VPs towards achieving our 20,000 members in 2020 goal. At last count as we went to press, we are now at 19,555 members. Super job! Let's all pitch in and help those who might not know of our Association learn more.

I am certain 2020 will be a great year for our Army and Army Aviation, and I pledge to ensure that AAAA does its part to help our soldiers, families, and senior leaders!

MG Jeff Schloesser, U.S. Army Retired 34th President, AAAA jeff.schloesser@quad-a.org



Advanced thermal management for extreme military environments

Around the globe, military and aerospace systems designers have turned to Meggitt to help them meet thermal and power management challenges with compact, lightweight, and efficient vapor cycle systems, liquid cooling systems and thermal components including fans, pumps and compressors.

Meggitt has developed cooling solutions for the most challenging flight conditions, missions, and extreme environments. From low supersonic flight, to high hot wet hover, to desert and arctic operations, our thermal management solutions are proven and ready to meet the challenge of the more electronic platform and battlefield.

For more information please contact:

Meggitt Defense Systems 9801 Muirlands Blvd. Irvine, CA 92618 Tel: +1 949 465 7700 E-mail: gerry.janicki@meggitt.com

Enabling the Extraordinary

To Fly To Power To Live

www.meggittdefense.com



The Future Fleet By MG David J. Francis



 ${f S}$ uccess no longer goes to the country that develops a new fighting technology first, but rather to the one that better integrates it and adapts its way of fighting...

The National Defense Strategy (2018)

Once again we are at a defining moment for Army Aviation as we move ever closer to fielding innovative capabilities with the onset of Future Vertical Lift (FVL). The threats that we face today, and the ones we will face tomorrow, compel us to re-evaluate and re-write our concepts and update our doctrine in order to remain dominate on the battlefield. For the Army, FVL is a significant step towards addressing the seventeen gaps it has identified.

The last time we aligned our concepts and doctrine at this level of detail was in the early 1980s with the inception of AirLand Battle. During that time Army Aviation fielded entirely new combat platforms, the UH-60 Black Hawk and the AH-64 Apache, which were two of the "Big 5" programs that

contributed to the transformation of the post-Vietnam Army.

The average development time for these two platforms spanned seventeen years and the average time to fully field the capability was an additional eight years. Over the years that it took to field these new systems, the AH-1 Cobra and the UH-1 "Huey" fleets remained a very relevant part of the Combined Arms Team. Then, as now, the demand for Army Aviation was insatiable. These aircraft were sustained and provided with key upgrades that enabled them to deliver capabilities that were still very significant in the AirLand battlefield paradigm of the close, deep, and rear area fights.

The concept of how we fight is now shifting to Multi-Domain Operations

(MDO) in order to address and defeat the threat's stand-off capabilities. The MDO framework overlays some very specific tasks (compete, penetrate, disintegrate, exploit, re-compete) that will continue to levy a high demand on Army Aviation. It is essential that the enduring platforms (AH-64, UH-60, CH-47), which will fly and fight with FVL and future ground forces, maintain interoperability with those systems via a targeted modernization plan.

As we refine the capabilities of the FVL systems and begin fielding them, we will continue to scrutinize the enduring fleet through the DOTMLPF-P (Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy) lens to determine what integrated materiel



Helicopters of the 3rd Combat Aviation Brigade, 3rd Infantry Division, stage on Chièvres Air Base, Belgium, Oct. 17, 2019 before deploying to more than 17 countries in support of Operation Atlantic Resolve.

and non-materiel elements we need to address in order to provide the desired warfighting effects to our aviation fleets.

This approach will help ensure we are able to execute our seven aviation core competencies and continue to support the ground commander and the Joint Force. The bottom line is that we will embrace the tenants of MDO and take advantage of the skills and judgment of our seasoned aviators and leaders to employ, fight and maintain the combined capabilities of all the aviation assets we have.

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.



Congratulations to PMA-202, NAVAIR, and PMA-299 on achieving Initial Operational Capability for the MH-60S Gunner Seat.

The new seat provides improved safety and endurance for our gunners. The enhanced ability to adjust height, weight and head rest position creates true custom seating ease. Using improved impact absorption technology provides maximum safety. Naval Air Warfare Center Aircraft Division AIRWorks office rapid prototyping enabled the production design in only six months following the completion of PT-2 testing.



Designed, Developed, & Managed by







Face-to-Face Leadership

By CSM Brian N. Hauke



he Army acknowledges three levels of leadership - Direct, Organizational, and Strategic. I'd like to discuss some thoughts specifically on the "direct" level of leadership and its importance to our branch.

U.S. Soldiers discuss pre-flight procedures before boarding a UH-60 Black Hawk helicopter from 3rd Combat Aviation Brigade, 3rd Infantry Division, at Chièvres Air Base, Belgium, Oct. 23. 2019.

Direct leadership is face-to-face or first-line leadership that generally occurs in organizations where subordinates see their leaders all the time such as teams, squads, sections, platoons, departments, companies, batteries, and troops (ADP 6-22, Army Leadership and the Profession, 2019).

Leadership of any kind, but especially within our branch requires direct leadership. Direct leadership requires constant communication! Communication generates a shared and situational understanding awareness. While this can be accomplished in many ways, the truest way is through face-to-face communication. Not via some other form of technology i.e. text message, email, voicemail, instant messaging. Obviously, in our world today there are so many ways to communicate, and as

such I believe this adds up to message overload for both the leader and the led. Please don't misunderstand my thoughts on this, technology has a place in today's world and our Army. These forms of communication can be essential and a phenomenal tool when leveraged, (dare I say) "correctly?" Specifically, the use of cell phones when it comes to text messaging. Nothing compares to actually looking a Soldier in the face and communicating with him or her. In fact, our doctrine even references face-to-face communication and states "any other means of communication present some risk for misunderstanding due to the lack of verbal and non-verbal cues." (ADP 6-22, para. 5-15)

When a leader is looking to inspire their Soldiers or simply move them to accomplish the mission, I think we all

agree the best way to achieve this is to look our Soldiers in the eye and tell them exactly what we expect of them.

Six good reasons for leaders to make the time to communicate face-to-face:

1. Demonstrate behavior - Being there in person tells your subordinates they are important, and the mission is important. This demonstrated behavior will increase the potential for shared understanding. While clearly a positive facet of face-to face communication, the most significant outcome from this is the trust that is built.

2. Interpret responses – When you are face-to-face, you can understand and respond to the Soldiers' reactions. For example, their facial expressions, body language and the tone of their voice. Leaders have the chance to show they care by asking probing questions and listening actively.

3. Builds trust – To be effective leaders, we must build trust, and it's just that simple. As I discussed previously, face-to-face interaction allows you to create shared understanding and situational awareness. The leader can explain it clearly and answer questions honestly. Leaders model behavior and Soldiers see how actions align with words, which enhances leaders' credibility and trust.

4. Build relationships – Interacting directly with other leaders including seniors, peers and subordinates expands your network and establishes shared experience that can increase future communication. It also helps create camaraderie that is the basis of cooperation and success across the organization.

5. Listen – Communication also flows from bottom to top. Meeting in person helps subordinates and peers feel valued and gives them a chance to contribute input to organizational strategies. It gives the leader a chance to confirm people's understanding of key issues, identify gaps and encourage ongoing feedback and engagement. Consider using interactive technology to gather "live" data.

6. Be the leader you want to be led by – Finally, the principal benefit of face-toface communication is demonstrating respect for our Soldiers and commitment to the accomplishment of the mission. It applies whether you're counseling or mentoring to increase their success or simply giving intent for a task. Face-to-face communication minimizes friction and improves overall organizational climate.

So, this is what I ask you, our Aviation leaders to do: Put your cell phones away (when appropriate) and communicate with your Soldiers faceto-face. That's right – look them in eyes. This sends a message even before you speak. Your tone, voice inflection, emotion, and your body language speak equally as much, if not more, than your verbal communication does. All of which gets lost over a text message.

Thanks again for all you do for our Branch, Army and Nation!

Above the Best!

CSM Hauke brian.n.hauke.mil@mail.mil

CSM Brian N. Hauke is the command sergeant major of the Aviation Branch and the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.

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 2018 National winners were featured in the April/ May AAAA Annual Summit issue.



SFC Bryant D. Macfarlane

Company D, 1st Battalion, 1st Aviation Regiment Combat Aviation Brigade, 1st Infantry Division Fort Riley, Kansas

Noncommissioned Officer of the Year Award, 2014 Sponsored by Lockheed Martin Corporation

SFC Bryant Macfarlane exemplifies the traits all noncommissioned officers Strive to achieve. While deployed in support of OPERATION ENDURING FREEDOM XII-XIII as detachment NCOIC, he meticulously oversaw the daily support operations of the Company D maintenance program team, of 138 Soldiers and NCOs, serving across five separate locations. He provided critical technical and logistical support to keep thirty-two AH-64D and sixteen OH-58D aircraft flying on time and on target. Critical in leading the redeployment of eighteen aircraft and his Soldiers, he seamlessly enabled the reestablishment of operations state-side while keeping the pace for mission reset.

SFC Macfarlane assumed the duties of acting first sergeant for four weeks; with his "Can-Do" attitude, company operations continued uninterrupted.

He cross-trained 15J and 15Y personnel into a cohesive and mutually supportive team capable of supporting the largest multi-functional aviation task force (MFATF) in Afghanistan across Regional Commands South, South-East, and West. He volunteered to be the forward area refueling point (FARP) NCOIC during battalion gunnery and played a significant role in its successful completion a full week early with no incidents or accidents.



Or Know an Army Aviation Soldier who is? Spread the Word!

You are eligible for a FREE 12 Month AAAA Membership. Contact: membership@quad-a.org



PEO Aviation – Building a Multi-Domain Operations Ready and Capable Force

By Mr. Patrick H. Mason



t is an absolute honor and privilege to serve as your Program Executive Officer for Army Aviation. Our sincere gratitude to MG Thomas and Tracy Todd for their tremendous leadership of the PEO over the last three years.

Through his 23 years of service with the PEO, leading at every level, MG Todd established an unparalleled standard of excellence and delivered asymmetric capabilities for our Soldiers. His strategic vision and expertise firmly set us on a path to design, develop, and deliver leap-ahead capabilities while also ensuring the continued readiness of our

enduring fleet. Our best wishes to the Todd's in their next assignment; it was an honor to serve with them.

As we focus on Large Scale Combat Operations and build a Multi-Domain Operations (MDO) ready and capable force, PEO Aviation remains oriented on applying an adaptive acquisition framework that delivers advanced caAviators from Joint Base Lewis-McChord, WA, conduct final pre-mission checks for a night air assault mission during operational tests of the UH-60V Black Hawk helicopter. The UH--60V updates the UH-60L analog architecture with a new digital, glass cockpit to replace the current analog dial instrumentation. The upgrades improve the enduring aviation fleet's interoperability and survivability on the Multi-Domain Battlefield.

pability at rapid speed. Key to achieving these goals is the ability to work seamlessly across the entire Army Modernization Enterprise and in alignment with our Aviation Branch Chief, the Future Vertical Lift Cross Functional Team (FVL CFT), Aviation and Missile Command, and Department of the Army Management Office–Aviation. Additionally, we must pursue creative ways to identify and accelerate the fielding of innovative technologies for our enduring systems and the future force, all in support of achieving an MDO capable force in 2028.

Industry Day

To that end, the PEO hosted our first "Design for Multi-Domain Operations (MDO) Suitability" industry day on 12 February. This event engaged both traditional and non-traditional vendors where we presented ongoing portfolio objectives and challenged industry to identify innovative aviation solutions for MDO. The broad topic areas included architecture, interoperability, survivability, suitability, and aircrew effectiveness. Our goal was to identify promising technologies that facilitate targeted modernization for the enduring fleet and potential integration into the FVL ecosystem. The event was executed in conjunction with the Aviation and Missile Technology Consortium with the ability to quickly receive white papers and initiate a transaction agreement. We plan to conduct similar events in the future as we continue collaboration on requirements, identification of affordable solutions, and accelerate capability to the field.

CABAIL

PEO Aviation has also created an environment on Redstone Arsenal where combat developers, users, government engineers, and industry teams can assess systems and technologies in an operationally representative environment. Known as the Combat Aviation Brigade (CAB) Architecture Integration Lab (CABAIL), this facility fuses live, virtual and constructive simulations allowing for rapid integration of potential product solutions. The teams can then evolve, develop, and evaluate capabilities and the potential operational impact in support of MDO. As CABAIL capabilities evolve, we will integrate modular open system architecture methodologies that will ensure the interoperability of the future and enduring fleets.

As you read the updates from six of our Project Managers, you will note how the PEO is operating across the span of time and geography. The PMs for Apache, Black Hawk, and Chinook provide insight into what they are doing to support you today and ensure our readiness tomorrow. Our Multi-National Aviation Special Project Manager highlights our continued role in building partner capacity across the globe in support of the National Defense Strategy. Our Future Vertical Lift Project Managers also cover how we are teamed with the FVL CFT and focused on delivering the future of Army Aviation. Finally, we introduce CW5 Travis Dixon, the first PEO Aviation Command Chief Warrant Officer. His article highlights the critical link he maintains between programs and those who fight and maintain our combat aviation platforms.

Again, it is a tremendous honor to serve as your PEO and work with incredible teammates in support of Soldiers. The PEO workforce, our greatest strength, is an exceptional group of professionals - mission focused, values based, and incredibly passionate about Army Aviation and our Soldiers. While many complex tasks lay ahead, I have no doubt the team will excel, overcome every challenge, and deliver for our Army.

Mr. Patrick H. Mason is the Program Executive Officer, Aviation located at Redstone Arsenal, AL.



For your complete Aviation Solutions Choose Columbia

- Aircraft, Engine, and Component MRO Services
- Comprehensive Supply Chain Management
- Professional Engineering Services
- Dependable Logistics Support
- Training Services

colheli.com 503.678.1222



Dedicated People, Inspired Solutions.

FAA Part 145 Repair Station • AS9100 Rev D, AS9110 Rev C and AR-95-20 certified • US Army Source Approved 714



Program Executive Office Aviation Update

By CW5 Travis Dixon



29.2019.

A CH-47F Chinook surrounded by a cloud of dust as Oregon Army National Guard pilots from the 1-168th General Support Aviation Battalion perform multiple dust landing certification flights at the National Training Center (NTC) in Fort Irwin, CA, May

rogram Executive Office Aviation's mission is to "Serve Soldiers and our nation by designing, developing, delivering, and supporting advanced Aviation capabilities for operational commanders and our allies."

In support of the mission, PEO Aviation is constantly growing and adapting to a changing environment. One recent change was the addition of a Command Chief Warrant Officer position to the PEO headquarters last year.

As the first PEO Aviation Command Chief Warrant Officer, I'm charged with providing advice and counsel to the Program Executive Officer, ten Project Management (PM) offices, and 22 functional division chiefs for the total life-cycle system management of over 100 Aviation programs. With more than 25 years of service as an aviator and maintainer, I am well positioned to give the PEO my best assessments and recommendations. My experience allows me to provide a unique "user's" perspective as we consistently strive to operationalize the PEO and prepare to support MultiDomain Operations (MDO). This is my first assignment to PEO AVN and Redstone Arsenal, AL. My family and I are honored to be a part of this great team and community.

I provide the PM's with warfighter input and insight when designing, developing and delivering the future capabilities. This input prior to Initial Operational Test & Evaluation (IOT&E) saves money, gets the new capability to the warfighter faster and with fewer recommended improvements. This position also gives combat aviation brigades (CABs) CCWOs, U.S. Forces Command, Combatant Commands (CCMDs), National Guard Bureau, Army Reserves, and other government agencies a point of contact and direct access to PEO AVN on operational concerns regarding Aviation capabilities, maintenance, sustainment, and fielding. Allowing the Warrant Officer Cohort direct access to PEO AVN provides the combatant commander with tailored support down to the lowest level. I hope to provide expertise brought from the operational force to support the CABs during fielding of new equipment and make sure they understand how PEO AVN supports the warfighter.

The PEO AVN CCWO allows for continuity of effort between Aviation and Missile Command (AMCOM), PMs and the CAB. Having a senior maintenance officer within the PEO structure that both AMCOM and the PMs can leverage to get support to the warfighter is of paramount importance. Most operational units don't understand where the lines of effort fall. Is a problem a sustainment issue which is a primary task of AMCOM or is it fielding and life cycle management issue which is a PEO AVN function? The ability to contact both AMCOM and the PM at the warrant officer level to get immediate support is what the new expeditionary force will require under MDO.

All PMs are keenly focused on the Army's guidance to prepare for MDO. Six of the PMs have articles in this edition.

¹ PM Apache is working on the AH-64E V6 and focusing on the three Rs: Relevant, Reach, and Resilient. PM Utility successfully completed UH60V IOT&E in September 2019 and the UH60V MEDEVAC design phase is underway. PM Cargo is progressing with the next generation of Chinook helicopters with the CH-47F Block II prototype test aircraft breaking ground for the first time on November 7, 2019. The Block II has an improved drivetrain, improved rotor system, and advanced Chinook rotor blade. PM Future long Range Assault Aircraft (FLRAA) is working on the Army's next generation of future vertical lift assault aircraft. The FLRAA Competitive Demonstration and Risk Reduction

(CD&RR) Down-Select is on track for the second quarter of fiscal year 2020. FLRAA will have increased speed, range, and survivability to overmatch enemy forces in contested and ever-changing environments. Designing, developing and delivering an affordable Future Attack Reconnaissance Aircraft (FARA) for the MDO capable force in 2028 to close the aerial reconnaissance and security gap on the battlefield falls on PM FARA and they are making good progress.

One of the unsung and little recognized PMs within the PEO is PM Multi-National Aviation Special Project Office (MASPO). MASPO is the DoD and Army focal point for international delivery and sustainment of non-standard rotor-craft to allied countries and the PM delivered more than 90 aircraft to our nation's international partners throughout 2019.

PEO Aviation recently held a ribbon cutting for the Combat Aviation Brigade Architecture and Integration Lab (CABAIL) facility. CABAIL will provide opportunities and an environment for industry to introduce mature products and technologies into the CAB architecture for testing and review. This facility will expedite getting usable capabilities to the Aviation Warfighter.

Some of the current projects I am actively participating in include Degraded Visual Environment, Active Noise Cancelling Intercom Communication Systems, Army-Airborne Command and Control System replacement for UH60M/V, as well as improved turbine engine program fit test on UH60M and AH64E aircraft.

I look forward to hearing from the end-users in the field. I am charged with supporting the Program Executive Officer and look forward to advocating for you. Contact me if you have an issue that you need assistance with resolving.

CW5 Travis Dixon, is the command chief warrant officer for the Program Executive Office Aviation at Redstone Arsenal, AL.





Managing the Transitions in Aviation Operations By COL Jason L. Miller

W e've all heard that there's no such thing as a "routine mission" in Army Aviation. Time and again, mishap investigations have proven this to be true.

The devil is often in the transitions before and after the primary mission. The paragraphs below detail the most common findings in recent Class A aviation mishap investigations.

Risk-Common Operating Picture (R-COP) - While mishap units might have an RCOP on file, investigations show they often failed to identify several key factors that increased mission risk. Missed factors include operational environment (dust/sand/terrain), fighter management and currency in night vision system training. Exclusion of these considerations means the mission briefing officer (MBO) and approval authority miss critical information in determining proper crew selection for mission success. Units should regularly scrub their R-COPs and make sure they cover all factors affecting unit operations, whether for training or in combat conditions.

Aircrew Training Program (ATP) - Investigations often find that the unit was inadequately managing its ATP. Left unchecked by leadership, "small" deviations from standard can quickly turn "normalized." Commanders and their standardization staff, including the aviation safety officer, must review their ATPs regularly and monitor the health of the program by conducting no-notice evaluations and commander fly-alongs, sitting in on MBO briefings, and taking a direct role in developing unit training to ensure it meets the standard.

MBO Training- It can be argued that MBO training is the final defense in mishap prevention, but investigations show deficiencies in some training programs. The mission brief is the last opportunity for a risk check prior to the



Twenty Army helicopters travel 200 miles to move soldiers and equipment for an exercise at Wheeler Army Airfield, Hawaii, Nov. 12, 2019.

crew's departure, and MBOs must know the right questions to ask and fully understand crew requirements for the specific mission at hand. Commanders at all levels have a stake in designing and validating their MBO training program and should conduct periodic reviews to ensure it remains on target.

Staff Planning - Investigations are revealing the absence of key staff officers (to include the safety officer) in mission planning and a lack of detail in the Deliberate Risk Assessment Worksheet. Ensuring the right emphasis is placed on the planning process allows units to war-game hazards and contingencies and implement controls before mission execution. Leaders must treat the DRAW and R-COP as living, evolving documents, not a paperwork drill, and ensure the correct experts are part of the planning process. Furthermore, through intent and mission command, subordinates must be empowered to make dynamic risk decisions when conditions, environment and missions change to ensure successful mission execution.

Crew Complacency - Complacency is a natural byproduct of all the above — standards deviations, inadequate planning and training, and insufficient risk management. Leaders and aviators alike should routinely self-check to ensure they aren't becoming complacent both in and out of the aircraft. Additionally, complacency can have a dramatic effect on one of the most important aspects of successful mission execution, and that is crew coordination. Everyone must understand the dangers of becoming too comfortable in such a risky profession.

Rehearsals - Just as on the ground side of operations, aviation mishap investigations are increasingly uncovering a lack of pre-mission rehearsals. Rehearsals give crews an opportunity to address hazards before, during and after the principal operation and help identify small glitches that could lead to a catastrophic event. Standardizing rehearsals prior to each flight gives commanders a prime opportunity to implement controls and drive risk down to acceptable levels. It will also train subordinates and build our professional bench on what "right" looks like.

As you can see, each failure within the system ultimately cascades to the mishap. Implementing controls, following SOPs, maintaining standards, conducting comprehensive training and planning appropriately with the correct personnel (i.e., standardization instructors and aviation safety officers) while standardizing premission rehearsals will go a long way toward safe mission accomplishment.

Readiness Through Safety!

COL Jason L. Miller is the deputy commander of the U.S. Army Combat Readiness Center at Fort Rucker, AL. For more than 40 years, the U.S. Army has trusted Robertson for helicopter fuel systems with uncompromising safety and reliability. Robertson continues its long standing support and history of Extending The Reach Of Freedom.

Visit us at AAAA Booth #642



INTERNAL AUXILIARY FUEL TANK SYSTEM **GUARDIAN® SINGLE IAFTS**



time



Average usable fuel 193 gals.



E SAVE LIVES

Engineering Survivable Fuel Systems For More Than 40 Years







Army Aviation Talent Management: Nowhere to Go For the Army Unmanned Aircraft

System Operator By CW2 Jonathan Olson

Winning matters, and people are my number one priority... We win through our people, and people will drive success in our readiness, modernization and reform priorities. We must take care of our people..."

> – General James McConville, 40th Army Chief of Staff

It's easy to see the evolution of military forces across the timeline of technological advancement. A conversation often sidelined by technology is the human element, the training, the chess match of keeping talent within an organization.

Army Aviation evolves organically by keeping and growing the full potential of its aviators, both manned and unmanned.. In 2018 the Minnesota Army National Guard (MNARNG) selected Benjamin Aleksander for Initial Entry Rotary Wing training. WO1 Aleksander was an experienced Unmanned Aircraft Systems Operator whose pathway to the MNARNG Aviation is unique highlighting a dilemma within the tactical unmanned aircraft system (TUAS) platoons. There is an absence of upward mobility for enlisted Soldiers and no internal mobility or the option to transition to Gray Eagle from Shadow.

Understand what the Army almost LOST in this one example: WO1 Aleksander's ambitions led him from the 1st Cavalry Division as an Unmanned Aircraft Standardization Operator to the Wisconsin Army National Guard (WI-ARNG) 32nd Infantry Brigade Combat Team (IBCT), TUAS Detachment.

His education at the University of North Dakota and Embry Riddle, made him a highly sought Aviation commod-



ewmembers in Wisconsin Army Nati refight operational checks during a

SGT Mills, SGT Soule and PFC Brandsoy, unmanned aircraft crewmembers in Wisconsin Army National Guard's 173rd Brigade Engineer Battalion conducting RQ-7B prefight operational checks during a training exercise in support of the 1-147th Aviation Regiment at Ft. McCoy, WI.

ity. WO1 Aleksander is an Adjunct Professor at the University of St. Thomas in St. Paul, MN and he also teaches FAA Ground School.

From 2011 to 2014 WO1 Aleksander was a textbook example of talent lost to the private sector. He left the service before re-enlisting with WIARNG. CW3 Lucas Gordon the TUAS operating facility commander, recognized skilled labor and set about re-acquiring the skill of an individual whose military skill sets were only benefiting the private sector, bringing him back to the WIANG.

Future talent management software using algorithms eventually may have identified his qualifications and characteristics then recruited him in accordance with Army strategy. However, advanced as the system may be, leaders will always augment technology and in this case the collective awareness of Army strategies resulted in a *total force benefit* through a single advantageous point of retention.

The Bigger Picture

How many highly skilled Soldiers are seeking opportunities outside Army Aviation, specifically TUAS platoons because Unmanned Aviation lacks upward, and internal mobility coupled with insufficient incentives that parallel the private sector incentives? The Unmanned Aircraft Operator is an excellent force pool to feed manned Aviation because of the skill sets an Unmanned Aircraft Operator has in common with manned Aviation. How do we create growth within our force structure so that we are not taking talent from one career field to feed another; losing our talent to lucrative private sector occupations?

Two recommendations; Implement a force structure that supports enlisted mobility to E8 within the BCT Brigade Aviation Element; implement upward mobility through a transition Aircraft Qualification Course (AQC) to Gray Eagle from Shadow.

CW2 Jonathan Olson is the Army National Guard Unmanned Aircraft Systems Operations and Training Officer in the Aviation and Safety Division, located in Arlington, VA.

SEE THE BATTLESPACE FROM A BETTER ANGLE. ALL OF THEM.

Whether you are a dismounted warfighter on the ground or a pilot supporting from the sky, Viasat's BATS-D AN/PRC-161 radio brings 360-degree situational awareness — even in highly contested environments.

BATS-D - the world's only handheld Link 16 radio.

Viasat:

Learn more at viasat.com/batsd-1



Certifying Our Leaders By CPT James C. King III

A ccording to the International Air Transportation Association, the Aviation marketplace is one of our nation's rapidly growing industries that, over the next 20 years, will see double the billion passengers currently flying annually.

According to the International Air Transportation Association, the Aviation marketplace is one of our nation's rapidly growing industries that, over the next 20 years, will see double the billion passengers currently flying annually. In order to match this growing number of passengers, Boeing has forecasted a demand for 39,000 more aircraft within the same time frame. To keep up with the demand for fully mission capable aircraft, Aviation enterprises rely on certified technicians to keep their aircraft, both rotary and fixed wing, operating at full capacity with complete assurance of safety. These technicians are the lifeblood of Aviation, trusted with countless lives as they inspect, troubleshoot, and maintain a wide variety of aircraft.

In the 128th Aviation Brigade, one individual has made it his mission to certify as many of the Soldiers in our growing Army to become Federal Aviation Administration (FAA) Airframe and Powerplant (A&P) certified technicians, Mr. Kevin Gasway (kevin.o.gasway.civ@mail.mil). As the Credentialing Manager for the 128th Aviation Brigade, Kevin developed and implemented a phenomenal program that assists noncommissioned officers (NCO) serving as instructors within the brigade, as well as those attending the Advanced Leaders Course (ALC) in attaining this highly sought after certification. Taking over the program in 2007, he has worked diligently to ensure newly arriving Soldiers have all the necessary tools and information to pursue their A&P certification while assigned or attached to the 128th Aviation Brigade. Additionally, Mr. Gasway offers and schedules study sessions for anyone interested in more personal assistance to prepare them for the necessary examinations.

The process for Army Aviation maintainers to obtain an A&P certification is not an easy one, and for good reason. A person who holds this certification is a FAA licensed Aircraft Mechanic and Service Technician and are trusted with the lives of all crewmembers and passengers flying on the aircraft they maintain. One reason why employers need A&P certified mechanics is because those without this certification must be constantly supervised by an A&P certified mechanic, thus requiring an employer to pay for two people to perform one task. Additionally, A&P mechanics can approve airworthiness unlike those not certified.

To obtain their certification, NCOs must first acquire their 8610-2 form (Airman Certificate and/or Rating Application)



NCOA Commandant, CSM Bradford Smith, presents the 500th graduate, SGT Kyle Thomas, his A&P Certificate of Eligibility.

from the nearest FAA Flight Standards District Office (FDSO). Fortunately for those assigned or attached to the 128th Aviation Brigade, this form is retrieved from Mr. Gasway himself, thus easing the burden of any travel. The NCO must then take a written test at an FAA authorized testing center. Again, Mr. Gasway has led from the front by administering this test within the brigade footprint. Lastly, an oral and practical examination must be taken with the closest FAA Designated Mechanic Examiner (DME), who is available within proximity to Joint Base Langley-Eustis. The limited travel and advantageous resources available by the 128th Aviation Brigade's A&P program have made it a huge success for all who strive to obtain their certification while stationed at or on Temporary Duty (TDY) to Joint Base Langley-Eustis. AAAA has a grant program to assist defraying expenses for the testing phase of candidates. Go to www.quad-a.org and select A&P License Soldier Support Grant under the Awards tab.

This success is measured by the sheer number of graduates from the program since 2007. To closeout 2019, the brigade had the honor of presenting its 500th graduate of the program, SGT Kyle A. Thomas (15T ALC Student), his certificate. To make the year an even better one, the brigade also presented the 150th graduate of 2019, SSG Michael J. Linhardt (15R Instructor), his certificate.

The FAA A&P certification is an extremely important step that our highly trained, disciplined, motivated, and professional Army Aviation maintainers take to securing their future as FAA licensed Aircraft Mechanics and Service Technicians. This career is part of the driving force of our nation's safe and efficient travel. The 128th Aviation Brigade and Mr. Gasway have made a significant impact on the Aviation industry where they will continue to certify our nation's leaders that help provide the most reliable and safest aircraft around the world.

CPT James C. King III is the commander of Company B, 1st Bn., 210th Avn. Regt., 128th Avn. Bde. located at Joint Base Langley-Eustis, VA.



The **MD** 530**F**°Cayuse Warrior

An evolution of the fabled OH-6 Cayuse light observation helicopter, and widely recognized for speed, safety, agility and the ability to operate with ease in confined spaces and at high altitudes, the **MD 530F Cayuse Warrior** is adaptable to support both training and combat missions.

Delivering increased operational capabilities, greater mission versatility, and superior performance in the execution of a broad range of mission profiles, the **MD 530F Cayuse Warrior** offers a safe and efficient crew environment as well as mission training skills that will positively transfer to all other platforms.



MD HELICOPTERS MADE IN AMERICA

A MDHELICOPTERS.COM

Гессом 🕨 Tech Talk

CH-47F Maintenance Steering Group 3 -The Right Maintenance at the Right Time By Mr. Wyndon Tysor

ake note, the CH-47F Fleet's Scheduled Maintenance Program (SMP) is being overhauled using the Air Transport Association's (ATA) Maintenance Steering Group - 3rd Task Force (MSG-3) analysis logic. The MSG-3 methodology is the worldwide gold standard for SMP development with both USAF and USN benefitting from its application to their platforms.

The MSG-3 philosophy has been in continuous use for decades and regularly revised. MSG-3 combines Reliability-Centered Maintenance (RCM) concepts with collaborative analysis methods producing a lean and effective SMP, while emphasizing waste reduction and avoiding "Recreational Maintenance." MSG-3 employs a "3-Legged Stool" approach for developing maintenance tasks. This approach brings together the manufacturer (Boeing), the operators (Cargo PM), and the Airworthiness Authority (U.S. Army Combat Capabilities Development Command Aviation & Missile Center Aviation Engineering Directorate (CCDC AvMC AED), to form the Maintenance Steering Committee (MSC). Since 2014, AED's Systems and Functional Engineering groups have worked with Boeing and Cargo PM to establish the MSG-3 Optimized Scheduled Maintenance Program (OSMP). The goal is to keep the CH-47F safely flying while drastically improving readiness and lowering operating costs. Units are currently being briefed and some aircraft have already been inducted into the program via AWR 202781.

Under MSG-3, every maintenance task and interval exist for a specific, value-added reason. More than 300 MSG-3 analyses were reviewed by AvMC AED and covered the aircraft's systems, powerplants, structures, and zones. MSG-3 begins with a thorough review of the aircraft design, and identification of logical zones. Next, Maintenance Significant items (MSIs) and Structurally Significant Items (SSIs) are identified and scrutinized within defined MSG-

3 logic. Working Groups evaluate each functional failure and its consequences to generate a Failure Effect Category (FEC). The analysis result and the aircraft's historical records in the Unit Level Logistics System-Aviation (ULLS-A) Database, are used to identify applicable and effective maintenance tasks. Target intervals are derived based upon statistical analyses which determines probability of component failure and probability of detection during the inspection. Robustly applied, the MSG-3 process identifies the scheduled maintenance tasks needed to ensure the aircraft design's inherent safety and reliability are realized. Once the baseline tasks and initial intervals are established, the tasks are then assembled into "optimized" packages for efficient execution. An OSMP is a living program and MSG-3/RCM processes require continuous refinement based upon field data and reliability analyses. The importance of accurate and complete field data cannot be overstated. An ÔSMP thus highlights the need for accurate maintenance records in Aircraft Notebook (ACN) to support future refinements to the OSMP.

One change that will become apparent is regarding corrosion inspections. Under the Legacy Maintenance System or Preventative Maintenance Services (PMS1, 2, 3 or 4) the CH-47 unit's inspection intervals were based upon environmental zones (mild/moderate/severe). In-Depth and Abbreviated inspections were categorized by these zones, each requiring different frequency of inspection. The MSG-3 OSMP employs a proactive "Find it, Fix It" approach to all



corrosion findings rather than deferring corrective action to the next due corrosion inspection. With MSG-3, every inspection is a corrosion inspection and the MSG-3 D1V 45/90/180 Day variable intervals are established to promote flexibility for he units who are ultimately responsible for their assets. Scheduled D1V intervals are based on unit and aircraft specific findings.

The final scheduled maintenance product consists of Daily, Hourly, and Calendar inspections. Currently the major Flight Hour intervals, outside of Special Inspections, include 40, 160, 320, 640 and 1920 Flight Hour Work Package inspections. The Calendar Intervals fall on 45, 90, 180, 360- and 720-day rotations. The Special Conditional or Event driven inspections are unchanged. The legacy Overhaul and Retirement intervals have been packaged into the MSG-3 Discard and Restoration tasks. All Work Packages are developed from the OSMP and will ultimately be integrated into the TM 1-1520-271-23&P.

The most important change that will occur is a cultural change. MSG-3 ushers in an industry-proven, methodical, process-oriented, and detail-driven maintenance approach. Our people will be the key to this program's success or failure. Buy-in at all levels will be crucial.

Mr. Wyndon Tysor is a systems engineer with the Combat Capabilities Development Command Aviation & Missile Center Aviation Engineering Directorate directly supporting the PM Cargo Fleet Management Office at Redstone Arsenal, AL.



DECISION SUPPORT For life Saving Missions

When you're called to action, your mission requires swift response. Even in the most obscure conditions, FLIR airborne solutions provide clear line-of-sight for mission success. Compact and lightweight, and AWR qualified, the FLIR Talon MMS has deployed more sensors to the US Army than any other supplier.

LEARN MORE AT FLIR.COM/SURVEILLANCE



Sexually Transmitted Infections

By MAJ (Dr.) Roger Williams & CPT (Dr.) Gurdeep Buttar

Q Doc, I go to my flight surgeon every few months to get checked for sexually transmitted infections. I have been treated three times in the last year for these infections and I was wondering how this could affect my flight status.

FS: From a military perspective, Sexually Transmitted Infections (STIs), have a significant impact on the medical readiness of individual service members and degrades force health protection. According to the Armed Forces Health Surveillance Branch, between 2010-2018, approximately 350,000 service members were diagnosed with an STI. The Army had the highest rates for chlamydia, gonorrhea, and genital herpes; the Navy had the highest rates of syphilis; and the Air Force had the highest rates of HPV. HIV rates have been relatively stable across the services from 2012-2017.

Military aviators are not spared from contracting these diseases and these infections are potentially dangerous in the flight environment. Many of these infections can look like more benign conditions, especially early on in their course. However, if not treated appropriately these conditions can distract a pilot and place crewmates' lives in jeopardy. For example, syphilis' signs and symptoms can be as seemingly nonthreatening as a rash, low grade fever, sore throat, headache, and fatigue, but become as serious as causing liver, joint, kidney, eye, and neurological issues if left untreated.

Local Risk

The communities we live in have risks associated with the way we work and play. The Army Public Health Center (PHC) evaluates the Army as a whole and each individual post to identify the risks within our community. The PHC's Health of the Force (HOF) Report found that the rates of STIs are higher than in our civilian counterparts. Soldiers who have access to medical care and prevention, usually in the form of condoms and other barrier methods, should have lower rates. Furthermore, Soldiers should be pro-actively protecting their health; especially against diseases that currently have no cure like genital warts, herpes, and HIV. The report can be found at: https://phc.amedd. army.mil/Periodical%20Library/2018He althoftheForceReport.pdf

Counseling

Patients with newly diagnosed STIs should be referred to the Community Health Clinic. The clinic staff will get a detailed sexual history to allow all exposed partners to be informed of possible infection and treatment options. The goal is not to embarrass or judge anyone but to ensure that the cycle of infection is broken and to stop the spread of disease. The Community Health Nurse may also allow Soldiers to notify partners personally. Online apps like *https:// dontspreadit.com* allow for anonymous notification to partner's cell phones.

Diagnosis and Treatment

Your doctor will usually collect urine or blood samples to verify that an STI is present. Treating the potential infection prior to the lab being completed is common. Soldiers are then directed to practice safe sex with a barrier method for at least a week after both partners are treated. Soldiers may also be informed that they should be vaccinated against the virus that causes genital warts.

Regardless of STI type, if you are on flight status, be prepared to be grounded while actively seeking treatment to monitor for side effects. In some instances, you may be required to obtain a waiver from your flight surgeon in order to maintain your status following your grounding period. Serious infections like HIV may result in the inability to perform duties or deploy. Also, repeated failure to prevent STIs may also be a reason for termination of flight status as this could indicate habitual poor decision-making processes that are not compatible with safety of flight.

Final Recommendation

The good news: STIs are preventable! Soldiers who present for recurrent or frequent STI testing should be counseled that unprotected sex is to be avoided. Many STIs are not treatable with immunizations or medications and can result in permanent infections. Women may have no symptoms of STIs and pass infections to partners unknowingly. STIs in women may also result in difficulty becoming pregnant in the future. These issues can take an emotional toll on both the Soldier and their partners. Soldiers should be evaluated for the need for immunizations against STIs. Genital warts, cervical cancer, and early PAP smear changes can be prevented with these immunizations. Protect yourself and educate your partner on the effects of STIs.

Fly safe!

Docs Williams & Buttar

Question for the Flight Surgeon?

If you have a question you would like addressed, email it to *AskFS@quad-a. org*; we'll 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

MAJ Roger Williams M.D. and CPT Gurdeep Buttar M.D. are flight surgeons at the U.S. Army School of Aviation Medicine, Fort Rucker, AL.



www.PhantomLights.com

Special Focus > Rotary Wing Project Manager Update

AH-64E – Supporting the Army's Vision

By COL Talmadge Sheppard

he Army's guidance to prepare for Multi-Domain Operations (MDO) is singularly driving how the Apache Project Office designs, develops, and delivers the world's most lethal attack helicopter. MDO outlines how the Army will simultaneously operate in all domains: land, air, sea, cyber, and space. Because future Army operations will be conducted with Allied and Joint Forces, the Army's modernization strategy focuses on success in MDO and Army Aviation is integral to that success. Presently, the Apache Project Office is looking into how the AH-64E Apache fights in MDO as part of the enduring force and how the aircraft will contribute to the success of future battlefield commanders.

Our strategy in the Project Office is to ensure the Apache Attack Helicopter meets the needs of the Army in MDO and focusing on the three Rs: Relevant, Reach, and Resilient.

Relevant

The AH-64E is a modernized version of the legacy AH-64D Longbow Attack Helicopter and it will remain the Army's attack helicopter well through the year 2050. In order to remain relevant, the Army has upgraded the AH-64E with three major software capability increments since development began in 2006.

The AH-64E Version 6 (V6) is the latest modernization upgrade to the aircraft and includes multiple sensor

systems to increase target acquisition performance, additional weapons and software to increase lethality, and software enhancements to increase crew situational awareness and reduce crew workload.

The AH-64E V6 was thoroughly tested by the Army Test and Evaluation Command in the Army's largest test event in 2019. The Follow-on Operational Test and Evaluation was very successful and found that the AH-64E V6 aircraft improved operational effectiveness and suitability, is more survivable, and had no cyber vulnerabilities.

During this test event, members of 1-227th Attack Reconnaissance Battalion, Fort Hood, Texas, conducted 32 missions, flew 269 hours, and conducted



An AH-64E Version 6 aircraft fires the Joint Air to Ground Missile (JAGM) during the AH-64E Follow-On Test and Evaluation event. The JAGM provides commanders with greater standoff and lethality on today's battlefields.

live fire missions to evaluate the AH-64E V6 aircraft operations over water and land. The test was executed at three distinct locations to cover a variety of battlefield conditions: Eglin Air Force Base, Florida; Fort Hood, Texas; and Redstone Arsenal, Alabama.

Some key findings from the test event are – the AH-64E V6 aircraft is more lethal than previous versions of the Apache, with the integration of the Hellfire Missile Romeo variant and the Joint Air to Ground Missile along with software enhancements to improve weapons effects for all existing weapon systems. The aircraft also provides the crews with greater situational awareness. Link 16 military tactical data link provides aircrews with greater fidelity of engagement target and wingman locations, coordination of fires between flight members, and interoperability in a Joint environment. With all these improvements, the AH-64E V6 decreased the workload of the aircrews during the conduct of their missions.

The color daytime imagery on the Modernized Day Sensor Assembly is one of the game changers for the aircrews. The ability to distinguish targets in full color greatly improves the situational awareness and effectiveness of the crews conducting their missions.

AH-64E V6 remains relevant in the capability to conduct attack helicopter missions, with the addition of System Level Embedded Diagnostics, unit commanders and maintenance teams receive real time notification of aircraft maintenance status and are able to prepare for aircraft that have maintenance requirements before the aircraft returns to the assembly area. This greatly reduces maintenance evaluation, troubleshooting, and overall aircraft down-time for commanders.

Reach

MDO will change the tactics that Aviation units use to conduct operations in the future. Departing from relative sanctuary, flying further (range), going longer (endurance), seeing the battlefield, maneuvering in battle positions, engaging targets at longer distances, and returning safely is how Apache will dominate on the Multi-Domain battlefield against near peer threats. The AH-64E V6 aircraft provides the majority of these enhancements needed on the MDO battlefield. Current plans to install Army Aviation's newest aircraft engine, the Improved Turbine Engine, on the Apache will be the next piece to ensure the AH-64E Extended Reach airframe meets all the requirements for success in MDO.

Resilient

The definition of resilience is pretty simple – the power or ability to return to the original form or position after being bent, compressed, or stretched. For our workforce in the Apache Project Office, we must remain resilient to ensure the AH-64E continues to be the world's premier attack helicopter.

We will continue our efforts to make the Apache easier to maintain, redundant, and more reliable so soldiers can sustain and maintain the aircraft in any environment.

We strive to make the aircraft affordable and a worthy expense of taxpayer dollars. The AH-64E program utilizes a large amount of parts from the previous AH-64D airframe which reduces production costs. We will remain resilient by constantly examining current and future initiatives to improve reliability and reduce soldier workload at the best expense available.

Our resilience is also demonstrated through initiatives such as the home station training provided by our New Equipment Training (NET) Team. In 2019, the NET Team trained the



Members of 1-227th Attack Reconnaissance Battalion, Fort Hood, Texas with members of the Apache Project Office, TRADOC Capability Manager Attack/Reconnaissance, Army Test Command and other participants at Eglin Air Force Base for the AH-64E Version 6 Follow On Test and Evaluation. The AH-64E Version 6 test was the Army's largest Operational Test event in 2019.



Soldiers from 1-3rd Attack Reconnaissance Battalion conduct maintenance on an AH-64 in Germany. The AH-64E Version 6 aircraft has improved maintenance diagnostics. The System Level Embedded Diagnostics (SLED) alerts unit commanders and maintenance teams with real time information of aircraft maintenance status which will expedite trouble-shooting and repairs.

1000th AH-64E aviator. This team trains individuals at home station, which reduces the time away from home that our maintainers and pilots would otherwise spend at schoolhouse training

centers. The team is also assisting units with pilot progressions, training instructor pilots, and maintenance test pilots. This team bends and stretches to meet the requirements of Apache units and is always able to return to normal form. Not only has the demand increased for the Apache in the U.S. Army, our allies are also modernizing their attack helicopter fleets with the AH-64E. Our International Apache Office works diligently in managing 16 Foreign Military Sales nations utilizing the Apache today and in the future.

This is an exciting time for the Apache Attack Helicopter community. We will be fielding the first Army AH-64E V6 aircraft in September 2020 and bringing numerous capabilities to your formations. The Project Office will continue to ensure the Apache remains Relevant, has the Reach needed to conduct attack operations, and will stay Resilient in our efforts to support Soldiers.

Attack!



COL Tal Sheppard is the project manager for the Apache Project Office, Program Executive Office for Aviation, Redstone Arsenal, AL.



'Transitioning to Dominate in Multi-Domain Operations"

2020×SUMM

ARMY AVIATION MISSION SOLUTIONS SUMMIT

Army Aviation Hall of Fame







LTC Ace Alan Cozzalio

CW5 Douglas M. Englen SGM Gregory M. Chambers

Hall of Fame Induction Banquet



Soldier Appreciation Dinner Concert



AAAA National Awards



Scholarship & Museum Luncheon



Spouse Activities & Tours





Exhibit Hall

Experience The ONLY Annual Gathering of the Entire Army Aviation Community!

Register Today! quad-a.org/20SUMMIT 🚯 🗊 🗘 💿 😏 #20SUMMIT

Special Focus >

Rotary Wing Project Manager Update

Mission Accomplished, More to Achieve By COL AI M. Niles Jr.



n January 2020, Team Chinook will successfully pass another milestone: the U.S. Army will take delivery of its last Remanufactured CH-47F Block I Chinook helicopter. This is a culminating event of what is considered one of the Army's most successful acquisition programs. The CH-47F traces its origins to the 1997 Improved Cargo Helicopter program, a service-life extension program for the CH-47D. The program achieved its First Unit Equipped (FUE) in July 2007 with fielding to the 7th Battalion, 159th Combat Aviation Brigade, 101st Airborne Division at Ft. Campbell, KY. Over the last 12 years, this program delivered and fielded all its 460 aircraft, on time, to all Chinook units in the Active Army, Army Reserve, and Army National Guard. During these production and fielding efforts, the aircraft also received multiple significant retrofit enhancements.

The Chinook continues to bring unique and reliable capabilities to bear since its first flight on September 21st, 1961. The CH-47 received numerous upgrades, progressing from the original CH-47A through C and D models to the current CH-47F in use by Army conventional forces. Other Chinook variations include gunship models and the MH-47 family of special operations aircraft.

In the current variant, the CH-47F, the implementation of the Common

Avionics Architecture System (CAAS) and the Digital Advanced Flight Controls System (DAFCS) enhanced safety and situational awareness. The change to new monolithic machined airframes, permanently installed rotor and drivetrain vibration monitoring systems, and improved approaches to preventing corrosion reduced maintenance demands and extended airframe life-spans. Mission flexibility and cargo management improved by the Cargo On and Off Loading System and the addition of the latest defensive systems continues to improve aircraft survivability.

Through continuous combat deployments that began almost immediately after FUE and countless responses to natural disasters, ranging from floods to hurricanes and forest fires, the CH-47F maintains its long-standing reputation as the Army Aviation workhorse. The aircraft's unique capabilities are indispensable in the mountains of Afghanistan. Its power and stability enabled the rapid reconstruction of electrical power distribution infrastructure in Puerto Rico after Hurricane Maria. No other platform can safely deliver comparable payload in such extreme environmental conditions.

The aircraft's reputation as the workhorse is a testament to the hard-working, persistent, and resilient people of the Chinook family. None of it would happen without the support of the Pentagon, Army Acquisition Corps, and



Congress who perceived the need and provided funding and strategic guidance. There are hundreds of people completing aircraft design and manufacturing efforts at the Boeing facility at Ridley Park, Pennsylvania. Additionally, there are thousands of people working in the supply base across the nation and in several foreign countries to design, develop and deliver the sub-systems and components necessary to build and maintain the aircraft. Their work culminates with the untold numbers of people training, operating, maintaining, and riding in the CH-47F along with the vast amounts of cargo and equipment moved around the world every day.

Each of these people have their own unique story and many of them, a lengthy and notable connection with the Chinook. One example is Mr. Dick O'Connell, who joined the Chinook



family as a CH-47A pilot in Vietnam. O'Connell recently retired from a position in the Training and Doctrine Command's Capabilities Manager's office where he provided input and guidance for the definition of user requirements. Whether these team members are recent additions to the Chinook family, or they have participated from the inception; whether the component or system they produce is large or small, each is critical to the success of the platform.

As the Chinook family anticipates the milestone delivery of the last CH-47F Block I, it is also looking to the future. The Block I Product Office continues to provide heavy lift capability to our international partners through the delivery of Chinook aircraft, the training systems, and simulator devices to support aircrews and individual country requirements for unique modifications to the CH-47F.

Another historic step in Army Aviation occurred on November 7, 2019, when the first fully configured CH-47F Block II prototype test aircraft broke ground and completed an experimental test flight at the Boeing Test Flight Facility in Mesa, Arizona. This event was the first time that a complete Block II aircraft flew with the improved drivetrain, improved rotor system, and advanced chinook rotor blade. The November 7th flight is a testament to the incredible CH-47F Block II Product Office dedicated to providing the Army critical heavy lift capability.

A combined test team made up of U.S. Army and Boeing personnel is currently testing three Block II prototype Engineering and Manufacturing Development aircraft. The CTT is ushering the aircraft through months of rigorous ground testing and over 300 hours of experimental flight testing in advance of a limited user test in early 2021.

One thing is clear: despite a changing Army and evolving battlefields over the past 59 years, the Chinook continues to stand the test of time. As the U.S. Army prepares itself to dominate in the Multi-Domain Operations fight, the Chinook will continue to play a critical and unique role in the fight. The Chinook family is leaning forward to ensure the aircraft will remain relevant in the future fight through improved reach and payload, improvements in interoperability and cybersecurity, and agile deployment of new capabilities through the employment of the Modular Open Systems Approach (MOSA).

COL Al M. Niles, Jr. is the project manager, Cargo Helicopter, Program Executive Office Aviation at Redstone Arsenal, AL. Special Focus > Rotary Wing Project Manager Update



The Multi-National Aviation Special Project Office – Providing Affordable Non-Standard Aircraft, Building Global Relationships, and Enabling Multi-Domain Operations By COL John Vannoy, Dr. Wayne Hudry, and Mr. Andy Greer

he Multi-National Aviation Special Project Office (MASPO) is the Department of Defense (DoD) and Army juggernaut for international delivery and sustainment of non-standard rotorcraft. To this end, MASPO delivered over 90 aircraft to our nation's international partners throughout 2019. MASPO's global contributions have been recognized by the prestigious selection as the Army's Project Management Office of the Year.

The MASPO mission is to develop, deliver, and support non-standard rotary wing aircraft for the DoD, allied countries, or as directed by the Office of the Secretary of Defense. MASPO traces its origins back to 2010 when the Undersecretary of Defense (Acquisition, Technology, and Logistics) issued an Acquisition Decision Memorandum (ADM) stating: ... an institutional framework and resources for Mi-17 helicopters and any other non-standard rotary wing aircraft should be consolidated for the DoD under a single Service-level Project Management Office. To that end, I designate the Department of the Army as the lead Service for the DoD in

performing Mi-17, and potentially other non-standard rotary wing aircraft, procurement and support activities. In addition, the Army shall establish a PMO that will be responsible for executing all procurement, sustainment, and technical support to meet requirements for aircraft and crews in support of DoD and partner nations, to include: Iraq, Afghanistan, Pakistan, and others as directed by the Under Secretary of defense for Policy.

Since that time, MASPO continues to steadily widen its aperture from a solely Mi-17 warfighting focus to the management of 16 different types of aircraft represented in 27 countries around the globe. MASPO continues to support the war in Afghanistan as a core effort, but is now executing the full breadth of the USD (ATL) ADM by contributing to Multi-Domain Operations (MDO) through the delivery of rotary wing capabilities that nest within Combatant Command (CCMD) campaign plans, satisfy CCMD priorities, and support allies. MASPO endeavors to provide value to the Department of Defense and U.S. Army through three critical activiAbove photo: OH-58D Kiowa Warrior during ship unloading at the Greek port of Volos. MASPO, working with the Security Assistance Management Division, coordinated and oversaw the delivery.

ties: Enabling global competition in a unique Rotary Wing niche, Creating affordable rotary wing options, and Building relationships with our allies.

Supporting MDO Competition

MASPO's role in MDO competition is illustrated by LTG Eric Wesley (Deputy Commanding General, Futures and Concepts Center, United States Army Futures Command) comments in the August 11, 2019 Army Times: "You want to create porcupines against your adversaries. Empowering an ally creates another porcupine."

International partnerships serve the United States greatly in this capacity. Any "porcupine," roadblock, or complex dilemma we create for our adversaries to solve gives us the opportunity to seize the initiative, ensure dominance, and be successful. MASPO directly supports strategic competition by building relationships with the many allies that have CCMD endorsed rotary wing requirements, yet cannot afford the superlative UH-60, AH-64, CH-47, and Future Vertical Lift platforms due to economic realities. The second and third order effects of these relationships have operational and strategic impacts in their regions and for MDO. The building and supporting of sufficiently armed and trained allies serve as a deterrent to conflict.

Fulfilling the Mission

During the past 12 months, MASPO diligently fulfilled this mission by fielding 98 aircraft, over 170 supporting mission equipment systems, and enabling over \$231 million in supplies, logistics, and sustainment support. Some of our recent key activities include fielding aircraft and training in Uganda and Kenya, prolonging the life of the OH-58D Kiowa Warrior by fielding 72 aircraft to Croatia and Greece, fielding and sustaining aircraft in Afghanistan, and deploying technical and sustainment personnel to Tunisia. Furthermore, MASPO is preparing to conduct sustainment operations for UH-60A "Afghan Hawk" and CH-47 aircraft in Afghanistan.

Furthermore, in the past 12 months MASPO delivered twenty new MD-530 aircraft and six Mi-17 overhauled/heavy repaired aircraft to the Afghanistan Air Force (AAF) and Afghanistan Special Mission Wing (SMW) providing a much needed, positive impact on fleet density and mission capability. In addition, the team accomplished ten 500-Hour service life extensions for the AAF Mi-17 fleet. These extensions maintain Mi-17 combat power and provide needed aviation assets to Operation Resolute Support.

In December 2019, MASPO delivered six MD 530F Cayuse Warrior Aircraft to the Kenya Defence Forces (KDF). Additionally, MASPO provided and deployed Contractor Field Support Representatives (CFSR) to work with both the Kenyan Air Force and the Uganda Peoples Defense Air Forces. The CFSR experts provide support and mentorship as well as repair of Kenyan and Ugandan Huey II helicopters. The MD 530F and Huey II aircraft provide a significant Close Air Support capability increase for the KDF in support of their ongoing operations against Al-Shabaab and the Islamic State in Somalia.

In June 2019, MASPO orchestrated the delivery of 70 Bell OH-58D Kiowa Warriors to the Greek Hellenic Army. This delivery occurred just 16 months from the signing of the Letter of Offer and Acceptance. The aircraft are helping to fulfill Greece's end state of establishing two aviation brigades.

Members from the MASPO and Security Assistance Management Division supported the delivery of two OH-58D aircraft to Croatia in September 2019, bringing the total number of aircraft delivered to Croatia to 18 aircraft. This final delivery concluded the divestiture of the US Army's OH-58D program. In total, 112 OH-58D aircraft were fielded to partner nations through the Excess Defense Article process.

Aviation Systems Upgrades, Modifications, and Updates

MASPO provided aviation upgrades including Aviation Survivability Equipment installation on SMW Mi-17-V5 in Afghanistan. MASPO's 23 aircraft installations of the AAR-60 system enable SMW aircraft to operate in a hostile environment with the capability of being able to detect Surface-to Air Missiles, Man Portable Air Defense Systems, as well as small arms fire. This system enhances the reach and protection of aircraft on the battlefield.

Through MASPO's initiative, Afghanistan's SMW PC-12 fixed wing aircraft received Forward Looking Infrared Radar and Global Positioning System Software upgrades in Kabul, Mazari-Sharif, and Kandahar. The software enabled accurate geographical pointing and location targeting for Intelligence, Surveillance & Reconnaissance platforms. MASPO was responsible for the installation of Armor Ballistic Protection Systems (BPS) in combat fighting aircraft, which provide ballistic protection against small arms fire. The BPS provides protection of the aircraft system and passengers. This modification is a modular system and can be customized to fit any type aircraft. The modularity also allows for rapid repair with less downtime.

Currently, MASPO is actively conducting market research regarding how the mission equipment and weapons suites of aircraft within the portfolio can be evolved to meet emerging allied demands. The intent is to identify possible ITAR releasable mission packages that could be made available to our allies. Important to this initiative are industry developments that may be offered in aircraft and equipment that can be readily qualified as airworthy. MA-SPO's interest areas will be released via



MASPO provided Contractor Field Support Representatives to support the Huey II airframe in Uganda.



The MD 530 Cayuse Warrior Aircraft has become the Attack / Reconnaissance platform of choice for the Afghan Air Force.



MASPO and the Croatian Air Force personnel unload an OH-58D Kiowa Warrior.

FEDBIZ (SAMS.gov).

The Multi-National Aviation Special Project Office serves as a world-wide ambassador for the United States by developing, delivering, and supporting non-standard rotary wing aircraft. Whether through the sale of non-program of record aircraft, excess defense articles, militarized versions of commercial aircraft, or the sustainment of such assets, MASPO provides cost effective and affordable aviation capabilities meeting CCMD priorities and building international partnerships in the process. Throughout these strategic interactions, MASPO contributes to the defense of the United States, our allies, and promotes U.S. military and industrial interests worldwide.

COL John Vannoy is the project manager, Dr. Wayne Hudry the deputy project manager, and Andy Greer an operations officer within the Multi-National Aviation Special Project Office. They are all assigned to Program Executive Office, Aviation at Redstone Arsenal, AL.

Special Focus > Rotary Wing Project Manager Update

Utility Helicopter Program Office Update

By COL Calvin Lane



he Utility Helicopters Project Office (UHPO) continues to make great strides at providing the U.S. Army and our strategic stakeholders with the world's best utility helicopters. We manage the Black Hawk, Lakota and Medical Evacuation (MEDEVAC) fleets and design, develop, deliver and support associated products and services. Our focus is providing our user community with world class Aviation capability while reducing pilot and maintainer workload.

I am honored to return to Program Executive Office Aviation as the UHPO Project Manager. I have served multiple tours in PEO Aviation in various positions. As the PM, I intend to keep moving the UHPO programs forward as we determine what new capabilities our systems require to be successful on the Multi-Domain Battlefield and how our enduring fleet will complement the Future Vertical Lift (FVL) platforms. Our enduring systems will be operational for decades even as the FVL aircraft come on line and they will need significant upgrades to remain relevant in Multi-Domain Operations (MDO).

¹This article covers three of the UHPO lines of effort. Because the

largest segment of our utility helicopter fleet is found in Army National Guard (ARNG) units, the ARNG comprises a significant portion of the UHPO mission. This includes the MEDEVAC fleet which remains on the front lines supporting our troops. We continue to modernize and upgrade Medevac Mission Equipment Packages (MEPs) so when the call comes, they will be ready, capable and survivable. The UHPO is preparing the enduring utility helicopter fleet for MDO. The UH-60V program has recently completed Initial Operational Test and Evaluation (IOT&E) and will help bridge the gap until FVL platforms are operating.

ARNG Aviation continues to deploy worldwide as part of our enduring force. They participate in combat operations and have a homeland security mission while serving as first responders in the event of disasters. This unique set of missions presents our acquisition community with challenging issues which are intensified as the Army moves to MDO. MDO requirements mean that PEO Aviation and the UHPO needs to design, develop and deliver new technology and capabilities for our enduring helicopter fleets and meet the requirements of our ARNG *Two UH-60V helicopters arrive at Joint Base Lewis McCord for testing.*

Warfighters at a price our Nation can afford. ARNG Aviation represents the largest segment of our utility helicopter fleet, especially our medical evacuation aircraft. The majority of ARNG Aviation MEDEVAC assets are currently analog based UH-60A/L helicopters and incompatible with MDO operational concepts. The UHPO is developing new technology that will upgrade these aircraft with digital capabilities to meet MDO requirements with the UH-60V MEDEVAC and UH-60V.

UH-60V MEDEVAC

The UH-60V MEDEVAC design phase is underway. The Critical Design Review is expected to occur in 1QFY2021 and flight testing in 1QFY22. The MEDEVAC MEP is to be integrated on the UH-60V production line at Corpus Christi Army Depot and will take advantage of UH-60V production processes that will have already occurred on the aircraft production line (i.e., depopulation of the aircraft, integration of electrical harnesses, etc.) This facilitates improving
efficiencies in the production hours required for installation. This critical technology is anticipated to deliver to the field in late FY23.

The Army Aviation fleet currently consists of more than 200 MEDEVAC variations of the UH-60L. As the UH-60L is recapitalized into UH-60V, 200 of the UH-60Vs have been designated for conversion into the MEDEVAC variant with approximately 65 percent of the MEDEVAC aircraft assigned to the Army National Guard. The UH-60V MEDEVAC Integration program will integrate the MEDEVAC Mission Equipment Package (MEP) into the UH-60V airframe. MEDEVAC MEP integration consists of the MEDEVAC Mission Sensor (MMS), external rescue hoist, patient handling system (PHS), and the Black Hawk Advanced MEDEVAC (BAM) window.

MEDEVAC Mission Sensor

The current UH-60L MMS is a federated integration design, meaning that it is a stand-alone system that is added to the aircraft, but doesn't utilize any aircraft data or systems in order to provide the sensor capability. The UH-60V MEDEVAC will feature a fully integrated MMS. It is re-utilized from the UH-60L MEDEVAC aircraft and integrated onto the nose of the UH-60V, utilizing an HH-60M MEDEVAC "Duck Bill" style mount. The nose mount design facilitates snow kit installation providing increased all-weather capabilities. The UH-60V MMS design integrates the video display directly into the cockpit Multi-Function Displays, removing the requirement for the UH-60L MMS monitors that were mounted to the side of the instrument panel. The MMS integration includes pilot control of the sensor via the cockpit Multi-Function Control Unit (MFCU), eliminating the MMS control unit, saving space in the cockpit, reducing pilot workload, and increasing optimal human factors use-ability of the MMS. The MMS collects aircraft GPS position data and computes it to provide the Geo-Locate capability. Pilots will have the capability to click on an image on the MMS video screen and immediately receive the GPS coordinates of that image. Geo-Point capability will also be available to the pilot. The pilot will click a point on the tactical map or a point on the MMS video image and lock the MMS to that point. The MMS remains pointed and locked on that location no matter the location or attitude of the aircraft enhancing the crews' ability to locate and identify patients on the ground.

Unlike the UH-60L, the UH-60V uses the same rescue hoist externally mounted above the cabin door as the HH-60M. The UH-60L uses an External Stores Support System (ESSS) hard point mounted hoist that conflicts with the installation of Crashworthy External Fuel System (CEFS). Being able to use the CEFS extends the range or loiter time of the UH-60V MEDEVAC providing commanders with more MEDEVAC capabilities.

IMMSS

The UH-60V MEDEVAC will use the same Interim MEDEVAC Mission Support System (IMMSS) currently installed in the UH-60A/L MEDEVAC. The IMMSS consists of four stationary litter stations and four ambulatory patient seats. The ambulatory seats are stowed behind the litter pans when deployed. It has a four-litter patient or four ambulatory patient capability without rear troop seats installed. With the rear troop seats installed, it can transport up to eight ambulatory patients. IMMSS is located in the front of the cabin and is attached to the floor, overhead, and bulkhead on each side of the cabin with room for medical providers to work on patients from the center of the cabin. An Intercommunications System (ICS) relocation kit and BAM window are fielded with each IMMSS. The crew chief and the medic are relocated to the rear of the cabin. The BAM window and the relocated ICS allow non-rated crewmembers to clear the aircraft from the relocated seat positions. The IMMSS includes two integrated power converters supporting two outlets per litter station. The outlets provide electrical power to required medical equipment. There are also four oxygen bottle mounts to accommodate carryon oxygen for four patients. There are about 275 IMMSS currently fielded.

In January 2019, the UH-60V Product Office kicked off their Low Rate Initial Production (LRIP) phase with its first aircraft induction at CCAD. This upgrades UH-60L aircraft with a fully digital cockpit which increases aircrew situational awareness, enhances navigation, and improves safety. The digital cockpit configuration also prepares the helicopter for MDO with an open system architecture – digital glass cockpit. Eight aircraft have been inducted at CCAD with two more slated for induction by the end of January 2020. The first LRIP aircraft will be completed by 31 May 2020.

In September 2019, the UH-60V Product Office successfully completed their IOT&E. Three UH-60V prototype aircraft completed over 312 flight



UH-60V Nose Mount and MMS Integration

hours supporting deployment, new equipment training, collective training, and record test flights during the event. Completion of this phase drives the program towards meeting the criteria necessary to enter full rate production of UH-60V aircraft.

To recognize the achievements of the UH-60V Product Office, the Army Aviation Association of America presented the office with the Robert M. Leich Award, in April 2019. The UH-60V modular open-system architecture (MOSA) and Future Airborne Capability Environment (FACE) alignment allow for cost efficiency, rapid future modernization, and increased interoperability that will benefit Army Aviation well beyond the UH-60V platform.

COL Calvin Lane is the Project Manager, Utility Helicopter, Program Executive Office, Aviation at Redstone Arsenal, AL.

Special Focus > Rotary Wing Project Manager Update



Focused on the Finish

By COL Gregory S. Fortier





moment borne from a unique opportunity for active duty soldiers to run the Honolulu Marathon for the affordable price of two dollars.

Those same lieutenants (now colonels), have been asked to run a much more important race - Design, Develop and Deliver an affordable Future Attack Reconnaissance Aircraft (FARA) for the Multi-Domain Operations (MDO) Capable Force in 2028 to close the aerial reconnaissance and security gap on the battlefield. From that mission statement, our primary implied task is to provide next generation airground integration capability to America's most prized weapon system - the Soldier. Army Aviation exists to support the Soldier - that is our "why." Although I agree with the popular communication theory presented by author Simon Sinek that "the most successful teams transmit in "why-how-what" order; this piece presents its ideas in reverse while assuming an intrinsic understanding of "why" across every level within the formation. Delivering the fully qualified FARA weapons system in 2028 requires an expert understanding of "what" PEO Aviation does and enterprise agreement of "how" we must run this eight year marathon.

What You Can Expect From PM FARA

Since the enactment of the Goldwater-Nichols Reorganization Act, PEO Aviation has worked tirelessly to generate affordable, producible, reliable and survivable capabilities that our Soldiers require and deserve. Army Aviation can expect the FARA Project team to work horizontally and vertically to create an integrated solution. While risk is sometimes viewed as threatening, mitigating and managing residual risk is an Army Acquisition fundamental for timely and suitable capability development - the first time. Make no mistake about it, the need to meet the requirements of an MDOcapable force by 2028 requires a realtime risk reduction dialogue between industry and the government - at every stage. We are fortunate to learn from a competitive prototyping effort but must not lose sight of the enormous task of finishing the hardest 10km to full weapons system qualification. We are even more fortunate that the Joint Multi-Role program has laid foundational understanding for the "first twenty miles of the race." I am humbled to be able to participate in the process thus far.

Fundamentals of How

1. Engage continually in honest and open dialogue. Undoubtedly, the single biggest benefit from the establishment of the Cross Functional Teams is the access to senior leaders and the speed with which industry responded. We must understand that communication and problem solving are directly proportional as government and industry run this race together. The more frequent and candid the communication, the easier the inevitable challenges are solved.

2. Be clear with our challenges and be real with our technology readiness assessments. While communication is critical to succeeding in any endeavor, delivering a fully qualified FARA in 2028 begins and ends with realistic technology readiness assessments. I assure you that my project office will work tirelessly to present technological options to decision makers that have a realistic chance of buying them on FARA Block I. We will not delay development waiting for a premier solution that is incongruent with the MDO-capable timeline of 2028.

3. Back up all claims with actionable and irrefutable data. Over the past 10 years, I have learned that full qualification of an ACAT-I weapons system is often an emotional endeavor. In this business, excessive emotion enables poor performance. If we first derive our claims with accurate and quality data, then discussions become foundational, positions are convincing,

and approvals are more easily obtained. 4. Suppress the noise and employ proven fundamentals. Pushing programs across the finish line is far from easy. There are a myriad of tasks to complete, each with attendant knowledge required and decisions along the way. It is incredibly easy to fall into the trap of focusing on individual tasks and losing sight of the goal which is to deliver a capable weapon system to the warfighter. Saying "no" to distractions is fundamental. 5. Embrace competition. Competition is the single biggest way to ensure affordability and encourage fastest delivery of the most innovative capabilities. The

Crossing The Finish Line

When the situation was manageable it was neglected, and now that it is thoroughly out of hand, we apply too late the remedies which then might have effected a cure. – Winston Churchill

highest performing programs vie inter-

nally and externally at every echelon.

I can assure that you as I climbed Diamond Head at Mile 24 of that race, I had no additional remedy to ease the pain or enhance my performance. I failed to understand that the first 20 miles was only half the race and was unprepared for the immense demands of the hardest half (the final 10km). All three components of Simon Sinek's theory are important, but we have already internalized that our "why" is to support the Soldier. For this race, we must trust PEO Aviation's "what" while collectively embracing, employing and refining the fundamentals of "how." Let us never mistake activity with achievement. Achievement for the FARA Program of Record is a qualified weapons system in 2028.

Great moments are always borne from great opportunity and Army Aviation has a generational chance. The Commander's Intent is clear: "WINNING MATTERS." The FARA Project Management Office is not here to try hard. We exist to deliver.

COL Gregory S. Fortier is the Project Manager, Future Attack Reconnaissance Aircraft, Program Executive Office Aviation at Redstone Arsenal, AL.



Special Focus > Rotary Wing Project Manager Update



Delivering the Next Generation Tactical Assault Aircraft

By COL David C. Phillips

Why FLRAA?

One of the Army's greatest strengths is the capability to project combat power across a battlespace and deliver lethal effects at a time and place where the enemy least expects. However, our Nation's adversaries have modernized their capabilities to chip away at the Army's overmatch and hope to deny our forces access to key terrain or objectives in the next conflict.

Army Aviation's vision for multidomain operations (MDO) necessitates next generation vertical lift capabilities that can deter, fight, and win as part of the joint force, in increasingly dangerous and complex environments. The Future Long-Range Assault Aircraft (FLRAA) will provide the next generation tactical assault and MEDEVAC capability to our Soldiers and enable the Army to retain its ability to project combat power.

FLRAA will increase speed, range, and survivability to overmatch enemy forces in contested and ever-changing environments. The Army's Combat Aviation Brigades will field this capability in 2030.

Innovative Approaches

In July 2019, PEO Aviation established the Future Long-Range Assault Aircraft project management (PM) office, building from the existing PM Future Vertical Lift (FVL) Team. With the Army's decision to accelerate FLRAA, the PEO and PM worked together with the FVL Cross Functional Team, to build a strategy that would reduce risk and successfully cross the proverbial acquisition valley of death – transitioning technology demonstrated in science & technology efforts to the program of record.

This strategy builds on the Joint Multi-Role Technical Demonstration (JMR-TD) efforts, ongoing since 2013, and the Army's analysis of alternatives completed in July. To maintain momentum with industry and continue to identify innovative designs and technology solutions for FLRAA, the PM first coordinated with the Combat Capabilities Development Command's Aviation



U.S. Army Soldiers from 1-17th Infantry Battalion, 2nd Stryker Brigade, 2nd Infantry Division, deploy a smoke signal to mark a desired recovery location during the training exercise Bayonet Focus 19-02 at Yakima Training Center, WA, May 6, 2019.

Development Directorate (ADD) to award additional tasks on the four existing ADD JMR-TD Technology Investment Agreements. Then, with a draft requirements document delivered by the FVL CFT and Requirements Development Directorate for Aviation Platforms, the PM held an industry day to initiate a Competitive Demonstration and Risk Reduction (CD&RR) effort.

Working with Army Contracting Command-Redstone (ACC-RSA), the PM solicited for this CD&RR effort via the Aviation and Missile Technology Consortium (AMTC) Other Transaction Authority (OTA). CD&RR phase one will deliver an initial conceptual design to include all requirements decompositions, requirements feasibility, trade studies, and substantiating technical documentation to support the design. Planned phase one awards are on track for second quarter FY20. These efforts will inform the final Army requirements, and the program of record (scheduled to begin in FY22).

PM FLRAA is exploring multiple options to initiate the program of record with a hybrid acquisition approach. These options include the opportunity to employ new authorities granted by Congress along with a tailored DODI 5000.02 acquisition strategy to deliver a first unit equipped by 2030.

MOSA

PM FLRAA intends to use a Modular Open Systems Approach (MOSA) for the Mission Systems Architecture (MSA). MOSA will support faster fielding of threat-based capability, flexibility, adaptability, capability growth, and technology obsolescence management through incremental design blocks and cycles. Operationalizing this effort, PM FLRAA and ADD established the FVL Architecture Collaboration Working Group. This group is a technical collaboration-working group (with participation from industry and academia) that will establish and maintain a common architecture requirements framework for FLRAA and Future Attack Reconnaissance Aircraft (FARA) system development and acquisition efforts throughout their life cycles. PM FLRAA also awarded a MOSA risk reduction effort with a university affiliated research center that will inform the MOSA requirements through the Architecture Collaboration Working Group.

If defined properly, the standards and interfaces will enable future delivery of capability – and do it more efficiently. Not only must FLRAA systems be compatible with the FVL family of systems, but they must also be forward and backwards compatible with the Multi-Domain Operations capable Combat Aviation Brigade.

Affordability

Life cycle affordability is critical to fielding a next generation long-range assault capability. Long-term readiness, sustainability, and affordability are foundational pillars to the FLRAA program. By addressing sustainability and maintainability early in the program, experienced product support managers and logisticians are providing critical inputs to system design, acquisition approach and discussions with industry.

Stakeholders and Army senior leaders continue to identify FLRAA affordability as a significant risk. To achieve affordable system operational effectiveness, the FLRAA design must have an optimal balance between technical performance, ownership cost, schedule, and process efficiency (including reliability, availability, and maintainability). The FLRAA team is closely reviewing multiple strategies to achieve these goals including cost reduction opportunities, competition across the life cycle, use of a digital thread, stochastic sustainment modeling and artificial intelligence strategies. Additionally, FLRAA has implemented a comprehensive intellectual property and data management strategy developed as part of an Army pilot program that seeks to instill greater planning and discipline throughout the life cycle.

FLRAA Is A Team Sport

Designing, developing, and delivering this capability for the Army is a once-in-a-generation opportunity, but the Army cannot achieve success on its own. Industry partners, with advanced manufacturing technologies, innovative approaches to collaboration, and adaptable business and intellectual property strategies are critical to FLRAA's success. Already, PM FLRAA has a robust dialogue and data interchange with industry, and we look forward to ultimately delivering a world-class tactical assault aircraft to our Soldiers in 2030.

FLRAA will fly further and faster, conducting air assaults with maneuver forces to objectives across the battlespace. Teaming with the FVL family of systems, and integrated into the Combat Aviation Brigade, FLRAA will provide a critical capability for MDO, ensuring that our warfighters and the Army continue to dominate on the battlefield.

For those of us in PM FLRAA, it is an honor to serve as members of an elite team of Army professionals in PEO Aviation, delivering on our commitments to the Soldier and our nation.

COL David C. Phillips is the project manager for the Future Long-Range Assault Aircraft, Program Executive Office, Aviation at Redstone Arsenal, AL.

Special Focus > TRADOC Capability Managers Update



The Enduring Fleet in Multi-Domain Operations

By COL Michael Demirjian, MAJ Steve Cusack, and MAJ Justin Goldman



s Army Aviation continues to pursue Future Vertical Lift (FVL) and the associated ecosystem to meet requirements for Multi-Domain Operations (MDO) and Large Scale Combat Operations (LSCO), there remains a requirement for our enduring fleet to be MDO ready and capable. As 2028 approaches and our proximate and pacing threat capabilities converge it will be the enduring fleet that is leading the way for Army Aviation. With targeted modernization efforts on the AH-64, UH-60, CH-47, Gray Eagle (Extended Range), along with other upgrades to the enduring fleet, Army Aviation is moving forward to becoming MDO capable and ready as necessary to win large scale combat operations (LSCO). Ongoing modernization efforts ensure enhanced system capability, compatibility with other supporting programs, and focuses on Army Aviation MDO priorities of increased reach, protection, lethality and sustainment.

Propulsion

Key to extending reach and sustainment is the Improved Turbine Engine (T901) for the AH-64 and UH-60, an upgrade which incorporates substantial increase in shaft horsepower, along with gained efficiencies in fuel efficiency, sustainability and improved redundancy. Performance growth to meet projected power requirements during challenging flight operations while in the most demanding environments (high/hot/ hover) is made available with the T901. Additionally, the T901 sets conditions for additional enhancements in the drive and propulsion subsystems to increase maximum range and station time. The engine possesses enhanced digital control, removes "hard-line" cabling, reduces weight and increases dynamic redundancy in the event of combat damage or degraded system operations. The design of the engine is to ensure our maintainers can continue to conduct repair on the fast paced MDO battlefield.

Sensors

Advancements in sensor technology are driving towards "technology overmatch" in the enduring fleet. As sensor technology matures, government and industry efforts remain nested in forefront advancements of targeting and pilotage developments advantageous to MDO; each of which provides significant gains in mission effectiveness. Within AH-64 targeting and pilotage realms, crews can expect higher-fidelity imaging options which filter and fuse radar, infrared, and optical sources to maximize tactical stand-off and navigable inter-visibility. These capstone capabilities provide unprecedented maneuver space, reaction time, and risk-appropriate attack solutions for ground commanders.

The Modernized Radar Frequency Interferometer (MRFI) is one of the most significant mission equipment advancements pursuant to MDO modernization efforts for AH-64Es. MRFI is a key component of the AH-64E Version 6's mission equipment suite and is a critical capability for attack aviation success within MDO. MRFI incorporates technology which significantly improves threat radar detection, supports autonomous and cooperative/teamed targeting, and incorporates networking supportive to the Joint Force level Common Operating Picture (COP). The ability to share this information with the joint force through Link16 will enable operations at all levels.

The Gray Eagle Extended Range (GE-ER) provides commanders with an aircraft that significantly increases range and endurance. As a result, the GE-ER has internal and external payload capacities capable of supporting emerging sensors and munitions specifically being developed to address MDO requirements. GE-ER capitalizes on its range and endurance to provide a forward deterrence through flexible, responsive reconnaissance and attack with lethal and non-lethal effects. Along with the efforts by the ISR Task Force, the GE-ER will integrate its capabilities as part of the strategic operating picture as we penetrate and dis-integrate enemy threat systems.

Weapons and Munitions

The Joint Air-to-Ground Missile (JAGM) provides a dynamic replacement capability to the already combat-proven Hellfire family of missiles for both the AH-64E and Gray Eagle. JAGM uses a dual-mode seeker assembly (Radar Frequency and Semi-Active Laser) and the warhead contains many discrete weaponeering options which guarantee the highest probability of kill. The aircraft's software incorporates a robust Pilot-to Vehicle Interface, which enables efficient weaponeering by the crew to optimize munitions effects against a diverse family of targets. This coupled with efforts by the FVL-CFT and industry to develop a long range precision munition will significantly increase the protection of our aircrews and increase their lethality on the MDO battlefield.

The capstone Fire and Forget technology within JAGM is a highly-advanced "blended seeker" combination of Radar Frequency and Semi-Active Laser. This mode is termed RF-SAL, providing an equitable balance of target discrimination and increased platform survivability beyond Hellfire. The RF-SAL mode uses a Fire Control Radar to deliver targeting and guidance information to the missile; however, the missile will also accept targeting and guidance information via laser designator input. The SAL attribute operates in parallel during employment and affords the crew an 'audible' when they desire to maximize opportunities for selective target discrimination while minimizing laser designation exposure. The end state mitigates tactical risk to the crew and maximizes the probability of hit/kill during higher-intensity engagements.

Battlefield Teaming

Manned-Unmanned Teaming continues standoff and synergy of ground and air battlefield assets. Link16 operations and One-System-Remote-Video-Terminal (OSRVT) connectivity improves the crews' ability to identify friendly forces from threat targets to help reduce fratricide. Additionally, increased network capability allows teaming that enables air and ground assets to increase battlefield awareness, visually confirm targets, and reduce collateral damage and fratricide risk.

Cockpit Enhancements

The UH-60V program modernizes a portion of the aging UH-60L fleet and brings it out of the age of analog into the digital opening a host of opportunities for future growth. Not only does it add 10 years of life to the airframe with a complete L-L recapitalization, it also sets conditions for modular open system architecture (MOSA) with government owned technical data packages to enable rapid upgrades. The digital cockpit increases situational awareness by the crew and enables mission planning and



JAGM on launcher

capability for MDO.

Federated Area Navigation System (FANS) fielded to units deploying to the European theater is an interim solution as the PM and industry develop a path forward to integrating a permanent RNAV solution into the UH-60M cockpit. This integrated system will increase the all-weather capability of the UH-60M, especially in an environment more reliant on space based navigation rather than land based.

The CH-47 Common Aviation Architecture System (CAAS) continues to evolve capitalizing on the MOSA concept to provide crews with increased capability in the aircraft and enable rapid upgrades. The upcoming upgrade to CAAS 9.5 addresses interoperability, Assured Positioning Navigation and Timing (A-PNT), Cyber security improvements, and supervised autonomy. It contains updates necessary to utilize the Modernized Crypto Key structure that is necessary to support the Joint Force in the MDO fight. A-PNT is realized using the M code of the new EAGLE EGI providing robust protection to operate in a GPS denied environment. The Cyber Security improvements provide cyber hardening aimed at increased security and protection against near peer capabilities. Finally, CAAS 9.5 provides supervised autonomy increasing capability in situations like degraded visual environment (DVE) landings and reduces crew workload in high demanding situations.

Summary

Army Aviation remains agile and adaptive to conduct LSCO within a complex battlespace against current and emerging threats in all environments. The enduring fleet will continue its important role as we prepare for a capable MDO force in 2028. Through post deployment collection visits and discussions with the users we will continue to develop the requirements and see adaptable solutions for an MDO ready force.

COL Michael Demirjian is the director TCM R/A and TCM Lift; MAJ Steve Cusack is the XO TCM R/A; and MAJ Justin Goldman is the XO TCM Lift; all are stationed at Ft. Rucker, AL.



Special Focus > Futures Command



Army Aviation's Near-Term Solution to a Long-Range Precision Munition Problem

By CW5 Steven Dermer

The Gap

In 2017, two separate combat aviation brigades (CAB) supporting two distinct Combatant Commands located on either side of the globe came to the same conclusion; the current Army Aviation munition payloads for conventional forces were insufficient to provide standoff and range against peer/near-peer adversaries in an Integrated Air Defense System (IADS) environment. The conclusion was a result of operational mission planning, warfighter exercises, and tabletop exercises conducted by the 10th and 2nd CABs which were then assigned to United States European Command (EUCOM) and the United States Indo-Pacific Command (PACOM) respectively.

The necessity to out-range enemy pacing threats is validated in the Army Aviation Weapons, Sub-Systems, and Munitions-Initial Capabilities Document, and Army Aviation Munition Strategy. Long Range Precision Munition (LRPM) is a long-term requirement of the Future Attack Reconnaissance Aircraft (FARA) Ecosystem in support of Large-Scale Combat Operations within the Multi-Domain Operation (MDO) operational concept. The enduring FARA Ecosystem, equipped with LRPM among other payloads, will not begin fielding until 2028. EUCOM and PACOM, via validated operational needs

statement (ONS), identified the need to provide an interim capability sooner.

The Discussion

In 2018, the Future Vertical Lift Cross Functional Team (FVL CFT) initiated research of LRPM initiatives to inform the #1 Army Aviation Modernization priority: FARA. This research naturally included investigation of the ONS and analysis of the Spike Non-Line of Sight (NLOS) missile system as an interim LRPM capability. Spike is an NLOS off-the-shelf solution equipped with a dual seeker (electrooptical/infrared (EO/IR)) missile. The NLOS capability is accomplished via a unique data link, providing communication between the aircraft and the missile. Spike is offered in three variants: high explosive anti-tank, penetration blast fragmentation, and fragmentation. The missile's advertised probability of hit is 95% and the unclassified maximum effective range is 32km.

The Analysis

Spike NLOS analysis included Foreign Competitive Testing (FCT) and the FVL CFT led live-fire demonstrations in Israel and the United States. The July 2019 Israeli live-fire event included participation by Army warfighters from: 82nd and 25th CABs, the Directorate SSG Nathan Rew, assigned to the 101st Combat Aviation Brigade, places a cover on the Captive Flight Training Missile during the SPIKE NLOS experimentation, Yuma Proving Ground, Arizona, in August of 2019

of Evaluation and Standardization and FVL CFT.

In preparation for the live-fire missile engagements, the team of warfighters received three days of academic, simulation, and flight training by the Spike original equipment manufacturer. With relative ease, the warfighters successfully prosecuted four targets in MDO relevant scenarios. In addition to being executed on an extremely accelerated schedule, the event was unprecedented in that it marked the first time U.S. military aviators flew or fired ordnance from an Israeli AH-64Di Apache helicopter. This remarkable event would not have been possible without assistance from the United States Embassy in Jerusalem, Embassy of Israel to the United States, Aviation Development Directorate-Eustis (ADD-E), the Army Test and Evaluation Command, Aviation Engineering Directorate (AED), and Department of the Army G-3/5/7.

The Israel live-fire event was crucial to informing LRPM capabilities, but further assessment would be necessary. While the FVL CFT team was gathering valuable information about the Spike missile system in Israel, the FVL CFT and ADD-E simultaneously prepared for an experimentation at Yuma Proving Ground (YPG), Arizona. The event was conducted utilizing Spike NLOS federated onto a U.S. AH-64E.

The Assessment

By August 2019, the FVL CFT and ADD-E, with warfighter support from the 101st, 82nd, and 25th CABs, and USAACE, executed the LRPM experimentation at YPG. The ADD-E U.S. AH-64E equipped with Spike NLOS served as a surrogate for FARA and LRPM. Careful and detailed mission planning was conducted to inform the live-fire event, ensuring MDO relevant scenarios were executed. The YPG event further informed the FARA Ecosystem Kill-Chain and battle damage assessment (BDA) capability through employment of an Air Launched Tube Integrated Unmanned System (ALTIUS) which served as the surrogate for Air Launched Effects (ALE).

This YPG assessment consisted of MDO relevant shots, executed by an ADD-E aircrew.

Engagements

Engagement #1-"Engineering shot" or "*safety shot*."

Engagement #2–Low-level ALE onstation provided simulated coordinates, observation, and BDA to the shooter. The shot was taken at a range of 28km, from the masked and maneuvering AH-64E. The missile flew up and over 1,600' of terrain, with the co-pilot gunner (CPG) making minimal inputs until the missile precisely impacted the SA-15 target.

Engagement #3 and #4 Proved To Be Significant

Engagement #3 – During tactical maneuver, the missile was fired, flying over 1200' of complex terrain prosecuting a *"reverse-slope"* positioned SA-15 target at a range of 24km with precision, with on-station ALE providing observation and BDA.

Engagement #4 –The missile was fired from the maneuvering AH-64E, climbing over 1,500' of terrain to an SA-22 target located in a simulated urban complex at a range of 32km, with on-station ALE providing observation and BDA. With the missile in-flight, the CPG was able to steer the seeker, observe the previously engaged SA-15 target (engagement #3), and report the BDA while the missile body continued to the original target. Locked on the SA-22 target, the missile knowingly lost-link before target impact due to employment of MDO relevant engagement scenarios. Importantly, the missile impacted the target due to the CPG's prior inputs and missiles algorithm accuracies.

Engagement #5 – Under the hours of darkness, the engagement was initiated using the manual mode (LOS to the target) to a 17km moving target. During the engagement sequence, a LOS break-lock occurred near missile time of impact. The CPG quickly reacquired the target, with successful prosecution. This may not have been achievable with a laser guided munition due to the required terminal laser on time.

The Outcome

The surrogate FARA Ecosystem experiments provided immense value to informing enduring requirements. The FARA Ecosystem will support the Joint Maneuver Force via the 2028 FARA Ecosystem mission - comprised of FARA, ALE, LRPM, Unmanned Aircraft Systems (UAS), and other airborne agents. FARA with its speed and combat radius will have the ability to fight from relative sanctuary to extended distances beyond the Forward Line of Own Troops without a ground support necessity. Couple these attributes with a n LRPM, the Joint Air Ground Munition, ALE, and UAS and you have the lethal combat multiplier required to support the ground maneuver force, while remaining survivable on the future battlefield - CRITICAL to the 2028 MDO Penetration and Disintegration Force.

The demonstrations had the added benefit of informing a requirement for an interim LRPM capability in response to the EUCOM and PACOM ONS, due in large part to the success of the Spike live-fire events resulting in nine of nine targets hit. The Army initiated the Army Requirements Oversight Council (AROC) approval process to field an interim LRPM solution with Spike NLOS. The AROC occurred in November 2019 providing unanimous concurrence for a Directed Requirement to field and federate the system to three Army Aviation Units, yet to be announced.

"Forge the Future!"

CW5 Steven Dermer is the Lethality Technical Advisor for the Future Vertical Lift Cross-Functional Team at Redstone Arsenal, AL.

WARRIORS TO THE WORKFORCE

Transitioning from

military to civilian life?

Resume reviewers on site

to advise job seekers!

REGISTER TODAY!

warriorstotheworkforcebna.net

Hiring Event

Booth #3211

NASHV



From the Field >



Adapting Training for Large-Scale Combat

By CW4 Milton Mercado and CW3 Christopher Munz

In the final choice, a Soldier's pack is not as heavy as a prisoner's chains. - General Dwight D. Eisenhower

"Best day ever!" is a phrase not usually associated with Army training, but when it comes to Survival, Evasion, Resistance, and Escape (SERE) training, Soldiers from the National Guard's New York-based 3rd Battalion (Assault Helicopter),142nd Aviation Regiment (AHB) feel differently. Over 150 Soldiers from across the 42nd Combat Aviation Brigade (CAB) participated in Personnel Recovery lanes during their recent annual training at Ft. Indiantown Gap, PA.

In each lane Soldiers had to negotiate an isolating incident and use common Soldier skills to successfully complete the lane. The training began with an isolated downed aircrew scenario brief, the responding convoy reacting to simulated engagements initiating the event and becoming isolated themselves. Soldiers had to use actions on contact drills, use camouflage, map reading and navigation skills, correct radio communication procedures, establish a hide site, and correct link up procedures on the lane in order to earn a well-deserved helicopter ride back to a "safe" area. Adding to the realism, all Soldiers were tested by the Opposing Forces (OPFOR), 90-degree heat, oppressive humidity, steep terrain, and dense vegetation of the Pennsylvania training site.

A key portion of the training included support from the Joint Personnel Recovery Agency (JPRA) in Ft. Rucker, AL, and Ft. Hood, TX. Soldiers on the lane were required to contact the JPRA via Combat Survivor Evader Locators (CSEL) for isolation guidance and coordination. CW4 Milton Mercado, the training events planner and OIC, coordinated with Mr. Richard Brand, Above: A UH-60 Black Hawk lands to exfiltrate Soldiers conducting PR training, Ft. Drum, NY, 26 July 2019.

CSEL FSR Support Lead and his team, facilitating correct programming of the CSELs and over the horizon (OTH) communications with the JPRA via Satellite (SATCOM). Milt stated "This coordination and synchronization is absolutely necessary when training with CSELs and getting Soldiers to train as they fight. Our Soldiers receive their SERE 100.2 training and are then required to apply that training in



CW5 Victor Figliuolo observes and controls personnel recovery lane, Ft. Drum, NY, 26 July 2019

a practical field environment. CW4 Mercado's cadre of warrant officers, to include all the CAB's CW5s, were instrumental in the success of the lane. Not only did they provide subject matter expertise for the training, but they walked each lane and were out in the field daily setting the example for the Brigade's junior Soldiers."

When isolated from their unit, Soldiers of every Military Occupational Specialty (MOS), not just aircrews, must have the skills to evade and survive until they can affect recovery by friendly forces. Battalion commander, LTC Jason Lefton stated, "PR Training, which spans across the spectrum of military occupational specialties, levels the playing field and promotes a sense of team across the battalion. Putting captains and privates together, sharing the same challenges, gives leaders context, emphasizes and recognizes creativity at every level, and demonstrates officer's commitment to training."

The unit's commanders understand prepared Soldiers cannot be created once they are isolated from their unit; therefore, they routinely conduct tough, realistic training tailored to each Soldiers Military Occupational Specialty (MOS). Not every Soldier



Soldiers participate in personnel recovery training lane, Ft. Drum, NY, 26 July 2019.

likes sweating all day, evading through brush so thick they can't see more than five feet in front of them, and climbing tough hills under duress but the reward of a UH-60 ride makes the hard day worthwhile. AARs are continuous and conducted throughout the PR lane. SPC Hurd stated "This was the Best Day Ever!" when asked about his PR Training during one of many AARs.

As Army Aviation pivots toward the potential of Large-Scale Combat Operations (LSCO) with a near peer threat it becomes more probable that an isolating incident will occur. The Soldier of 3-142nd AHB now have a solid foundation of the skills and confidence to work in small teams to overcome an isolating incident, avoid capture and return to the fight.

CW4 Milton Mercardo and CW3 Christopher Munz are the Aviation Mission Survivability Officers (AMSO) assigned to 3-142d AHB, Ronkonkoma, NY.



From the Field >

Time to Change the Army Aviation Commissioned and Warrant Officer Promotions Paradigm By Mr. George Johnson

Editor's Note: The opinions of the author are his own and do not necessarily reflect current Department of the Army policy.

he timeline to gain an Aviation branch officer, whether warrant or commissioned, is not excessive but it is not quick. Delays due to medical issues (i.e., illness or injury), family emergency, or academic problems can further exacerbate this elongated timeline. None of these are unheard of nor uncommon. When weather is added into the equation, it becomes easy to see why there are so few junior officers in aviation organizations outside of Fort Rucker. Junior officer time is a prime developmental phase that many Aviation branch officers miss out on due to the time required for graduation. Aviation Officers need to be on a level field for development alongside their Maneuver branches counterparts, and therefore should not be moving through the promotion cycle until after completion of training and continuance to a utilization assignment.

The US Army's training center for aviation is stationed at Fort Rucker, Alabama, a mere 90 miles north of the Florida Gulf Coast. The selections to attend are rigorous, time consuming, and notoriously difficult to attain; all by design. The selection design philosophy is an extension of the procedures that were developed in the pre-, peri-, and post-World War II military eras. The initial obstacles to entrance are the GT Score of 110 or more/selection of Aviation as a basic branch upon commissioning, scoring a 40 or more on the Selection Instrument for Flight Training (SIFT), passing a Class 1A Flying Duty Medical Examination (FDME) commonly known as a flight physical, and for Warrant Officer applicants a Department of the Army Selection Board.¹ These are in addition to the moral or medical waivers if required, letters of recommendation, etc. Only after making it through this gauntlet will a Soldier be allowed to attend Initial Entry Rotary Wing (IERW) training.

Once a Soldier is appointed a Warrant Officer One (WO1) or commissioned a Second Lieutenant (2LT) their "clock" for promotion begins. To pause, rewind, or adjust the clock is cumbersome to the point that bringing up the possibility is usually met with disdain or outright hatred. Consider the training pipeline to produce an Army aviator, using the 2LT from an ROTC program as a benchmark. Using FY2020 and FY2021 likely commissioning dates and class schedules via the Army Training Requirements and Resources System (ATRRS) a timeline can be established for the "perfect" throughput.²

Assuming an 8 May 2020 graduation/commissioning date from a university ROTC program, the sequence would flow into Aviation Basic Officer Leader Course (BOLC) phase 1, Survival, Evasion, Resistance and Escape (SERE) level C, Initial Entry Rotary Wing (IERW) course, advanced aircraft track (UH-60M in this scenario), and ending with AV BOLC phase 2. Only after this does a new Aviation branch officer get pinned their silver wings of an Aviator. Figure 1 provides a course beginning/end date listing: however, the major concern is growth as a leader that is stunted when less time is spent leading. There is a spectrum of leaders' capabilities across the Army, therefore no single example should be considered. Anecdotes are useful in this situation since there is no true metric to judge leadership ability. The author has had assignments in infantry, medical, and aviation organizations and the perception is stark in differences. A 1LT in an infantry battalion is perceived to be more operationally knowledgeable than an equivalently ranked 1LT in an aviation battalion, as the former has likely been in his unit for over a year shooting, moving, and communicating. The latter has been in readiness level (RL) progression for up to six months at his/her first unit before being operationally qualified.³

The new 2LT would remain that rank all through training, gaining active time in service similar to how prior enlisted personnel who attain a commission earn pay as a 2LT with 3 years of service. He/she would not, however, be placed into a year group cohort un-

AV BOLC Ph1	22 May 2020 start
	3 July 2020 end
SERE-C	4 July 2020 start
	25 July 2020 end
IERW	3 August 2020 start
	15 January 2021 end
UH-60M Track	1 February 2021 start
	24 May 2021 end
AV BOLC Ph2	24 May 2021 start
	11 June 2021 end

Figure 1. IERW Timeline

As shown, the absolute minimum time for a student to be at Ft. Rucker for flight school is over 13 months. An Infantry branch newly commissioned 2LT, assuming not previously attended courses, requires approximately half the time of an Aviation branch officer. So, on perfect timelines, an Infantry 2LT will get approximately one year of troop time prior to promotion, compared to his/her Aviation counterpart who would receive less than six months. til after completion of training. Initial dissent to this plan will likely hinge on tracking of individual persons in the training pipeline and the creation of new systems to manage them. On the Aviation branch side this can be assuaged by using the orders issuing date on the award of Army Aviator Badge. This is a memorandum that all aviators receive and would provide a start date for promotion timelines. This process would incentivize earlier completion of training and assignment to operational

This is important for many reasons;

units by ensuring an earlier sequence number on promotion selections than personnel who finish later.

The Army prides itself on making and improving leaders, and under many circumstances, it succeeds. The bedrock of leadership is learning the basics as a junior officer and recognizing bad decisions early at the lowest possible level, then developing personalized techniques to prevent those mistakes from happening again under your control. While the solution to maintaining junior leader development phase will take time to correct, it can be a system used in all Army branches. Imagine the development a newly minted officer would receive by not having to worry about how promotions, professional military education, and job "box checking" must line up in less than four years currently in practice across the formations.

Army Aviation branch officers need to be maintained at the lowest rank possible throughout their initial training, allowing the junior officer development in deployable formations necessary to mold future senior leaders. Allow them to commission, acquire additional time for pay, and yet remain in the 2LT or WO1 ranks until attaining an aeronautical rating or elimination from schooling. Procedures would be relatively transparent to the incoming officers, if made aware of the policy in advance of selection, little negative feedback should ensue, and commanders in the field would have a greater period to cultivate officers into the leaders soldiers deserve.

Notes

 "Warrant Officer Prerequisites and Duty Description 153A - Rotary Wing Aviator," U.S. Army Recruiting Command Official Website, accessed July 12, 2019, https://recruiting.army.mil/ISO/AWOR/153A/.
"Search the ATRRS Course Catalog," Army Training Requirements and Resources System website, accessed July 15, 2019, https://www. attrs.army.mil/atrscc/search.aspx.
Department of the Army. TC 3-04.11, Commander's Aviation Training and Standardization Program (Washington, D.C.: Army Publishing Directorate, U.S. Army, September 2018), 8-6.

Mr. George M. Johnson has 18 years of Army Commissioned Officer service, 3 years as a ground Medical Service Corps Officer (70B), 11 years as a Medical Service Corps Aviator (67J–Army MEDEVAC), and 4 years as an Army Aviation Officer (15B) with diverse domestic and international experience.

News Spotlight >

Tennessee Valley Chapter Climb for the Soldier

.....

By CW4 Steven L. Sanders, U.S. Army Retired, Chapter VP Awards



O n August 19, 2019, a team of five Army Aviation Association of America (AAAA) members embarked on a challenging climbing expedition in the heart of Glacier National Park, Montana. The Team, "Rock Steady," set their sights on reaching the summit of Piegan Mountain while raising money to support Combat Veterans, or as LTG Neil Thurgood called it: "Climb for the Soldier."

QuantiTech's Janice Sanders coordinated corporate sponsorship for this year's climb and was instrumental to the team's success with facilitating donations. CW4 (Ret.) Steven Sanders Sr., TN Valley Chapter VP Awards, and his son, Steven Sanders Jr., with approximately 40 years of combined experience between them led the climb, and lent their expertise to fellow AAAA members, LTG Neil Thurgood, LTC (Ret.) Cliff Calhoun and COL (Ret.) Steve Mathias.

The route covered almost 14 miles of challenging terrain with an elevation gain of approximately 4,500 feet to a summit altitude above 9,000 feet. The climb was made one day after departing from Huntsville, AL (elevation 680 feet) so there was no time for acclimation, but the team did have supplemental oxygen to help with the altitude change. There was breathtaking scenery in exchange for the challenges of scrambling over difficult terrain, traversing large scree fields and glacier snow, and risking the possibility of encountering a very large bear.

The Rock Steady Team raised \$4,005 thanks to those who contributed to the cause, every penny of which was donated to the Combat Veterans Motorcycle Association (CVMA) by the Tennessee Valley Chapter. Travel costs and climbing expenses were self-funded by the team.

Above photo: The Rock Steady Team (I to r): LTC (Ret.) Cliff Calhoun, COL (Ret.) Stephen Mathias, CW4 (Ret.) Steven Sanders, Sr., LTG Neil Thurgood, and Steven Sanders, Jr.

Lower left photo: View of Mt. Siyeh from the summit of Piegan Mountain, Glacier National Park, MT. Lower right photo: On the climb to the summit of Piegan Mountain.

•

Historical Perspective >

Reprinted from the February 1959 Issue of ARMY AVIATION Magazine

■ Back in 1910 when a jet pilot was part of the kitchen stove and flight of any kind was still almost exclusively for the birds, the British Army put its riflemen and cannoneers on maneuvers with an aerial flivver called, more accurately than poetically, the "Boxkite," and with it wrote the rudiments of the modern-day facility as a troop and freight transport, in search and rescue operations, as an ambulance and in paratrooping and supply dropping duties.

The 192 is big, tough and fast. Powered by two Napier Gazelle "free turbine" engines, each of 1650 horsepower, it has an all-up weight of



military formula in which the flying machine is both weapon and tool for the man who fights his war on the ground.

The fact that the concept of integral aviation's value to infantry and artillery missions was tried and proved at a time when the popular idea of the ultimate weapon was, not the Hydrogen Bomb, but the machine gun, is part of the proud tradition passed on by the makers of the "Boxkite," the Bristol Acroplane Company, to the great-great grandchild of the 1910 biplane—the Bristol 192 Tandem-rotor, twinturbine military helicopter.

Designed for Ground Warfare

Field testing of the 192, now well along at United Kingdom facilities of the pioneer British aviation firm, has proved that the designers, who tackled their drawing boards with the aim of creating an aircraft for the man who fights his war on the ground, have indeed come up with a "field soldier's flying machine."

One of the cardinal virtues of the 192 is its versatility. In the field it can star with equal

BY H.C.M. Watkinson Bristol Aeroplane Co. (U.S.A.), Inc.

18,000 pounds and a maximum speed of 120 knots. As a weight lifter, the 192 is also a star performer. Its 24-foot cabin can hold 6,000 pounds; bulky, odd-shaped loads that can't be accommodated by the roomy doors, are slung under the belly on a rig that takes a suspended load of 5250 pounds or can be used for towing.

Has Single Engine Capability

Another outstanding feature of the 192 is that even with this full load, should one engine be knocked out in combat, the aircraft can *still* maintain cruising flight on the remaining power plant.

On a long range troop carrying mission of 250 nautical miles, the 192 can carry 18 fully equipped soldiers plus its crew of two. For shorter hops as many as 25 troops can be accommodated. For quick off-loading of infantrymen in hovering flight, the 192 has a scrambling net than can be attached to the lower sill of the door on the forward starboard side of the fuselage.

As a flying ambulance, the 192 is designed to carry 12 stretcher cases arranged in tiers of three along each side of the cabin. In addition, there are places for two "sitting" wounded. Medical supplies, outlets for electric blankets and blood transfusion equipment are also





provided. Over difficult terrain where landing is impossible, stretchers can be winched up to the fuselage while the aircraft is hovering.

In its role as a flying mule, the 192 can carry a maximum distributed load of three tons. The floor of the 192 is level throughout and is equipped with lashing down points. A 600pound capacity winch takes on cargo when the helicopter is in hovering flight.

Litter Configuration

On search and rescue missions, the aircraft has a radius of action of 140 nautical miles and can accommodate 10 rescued cases—in addition to the normal two-man crew and fuel



Reporting "extremely good control and stability in the areas tested," Peter Girard, Ryan Aeronautical Company chief engineering test pilot, completed the first conventional flight testing of the Ryan Vertiplane. Utilizing the deflected slipstream to accomplish vertical take-off and landing, the Lycoming turbine-powered test vehicle has made more than half a dozen conventional flights at altitudes up to 5,500 feet at Moffett Field, California.

Page 56

supplies that allow for a hover period of 20 minutes.

With 12 fully equipped paratroops on board the 192 has a radius of action of 115 nautical miles. For ferrying, *extra* tanks are installed in the fuselage to increase the still air range to about 620 nautical miles.

The 192 is fully equipped for day and night instrument flying and provision has also been made for an automatic pilot and dual controls. Single engine safety is ensured by a *synchronizing* shaft which interconnects the two engines, keeps the rotors in proper phase relationship, and permits both rotors to be driven by one engine in case of emergency, Rotor gear boxes are installed at a seven degree angle, enabling th 192 to take off and fly in a level altitude.

Climatically Equipped

For operation in gusty wind conditions, each rotor hub is fitted with centrifugally-operated droop stops, the anti-coning stops for start-up and run-down in high winds, and a hydraulically operated rotor brake is capable of stopping the rotors from 100 rpm in 16 seconds. For cold weather operations, the windscreen has thermal anti-icing. Crew stations are heated and the rotor blades are fitted with electrically operated de-icing equipment.

The Type 192, together with the Type 171 Sycamore helicopter, are being built at Bristol's Weston Division, where all the Company's heicopter activities are now concentrated.

The U.S. Air Force placed a \$2,044,345 order in January with the Vertol Aircraft Corporation for six Vertol 44A helicopters, spare parts, ground support equipment, and handbooks. The Vertol 44 is an improved, commercially certificated version of the H-21 helicopter.

ARMY AVIATION

NETWORK | RECOGNITION | VOICE | SUPPORT

AAAA Chapter Affairs By LTC (Ret.) Jan Drabczuk

I greatly appreciate the support from LTC (Ret.) George Benter, Rio Grande Chapter President, for authoring and sharing this information for our membership.

The Rio Grande Chapter El Paso and West Texas Support

The Rio Grande Chapter includes active duty Soldiers from the 1st Armored Division Combat Aviation Brigade and the 204th Military Intelligence Battalion, retired Aviation Soldiers, local civilians and other Aviation branch Soldiers working within the local area.



The Chapter provides great support to its membership to include AAAA scholarships, reduced cost for younger Soldiers and their families to attend organizational events and provides recognition Awards for Aviation Soldiers, Aviation support personnel and spouses.

Chapter Leadership

In January of 2016 the AAAA Rio Grande Chapter changed its leadership make up when the 1st Armored Division CAB Commander identified a lack of continuity that inhibited the best possible care of members and families in the region. Local retired officers were elected and filled several key Chapter leadership positions to provide more stability. The newly elected Chapter President was COL (Ret.) Benny Steagall, LTC (Ret.) George Benter and CW5 (Ret.) Todd Evans were elected as the Senior VP and VP of Membership, respectively. The remaining chapter positions are filled with active duty Officers and NCOs. In January 2018, CSM William Haddon was elected as the Chapter President, CW4 Micah Amman as the VP of Membership, and numerous other changes occurred due to PCS and other factors.

Chapter officers changed last year with the deployment of the CAB to Afghanistan. The newly elected team headed by the new chapter president, LTC (Ret.) Benter kept the chapter alive during the deployment which just ended in November. The team also included CW4 Micah Amman^{*} as SVP/ VP of Membership, SFC Edwin Marquez as Treasurer/Secretary with 1LT Stephanie Eldridge^{*} as alternate, SGM Timothy Ros as VP Scholarships, MSG Scott Newhart as VP Activities and Programs, and CSM William Haddon' and 1SG David Vowell' as Public Affairs. SGM Timothy Ros and MSG Scott Newhart vacated their positions as they departed from the United States Army Sergeants Major Academy in the late summer, while the asterisked individuals served forward deployed.

Chapter Activities

To increase its outreach, the Rio Grande Chapter executed a "Battle Rhythm" of chapter events, specifically semiannual golf tournaments in the spring and fall seasons that averaged 144 golfers and 20 support personnel. Membership participation in quarterly meetings increased as CAB leadership voiced support and participated in hosted events and meetings. Multiple formals within the brigade as well as 204th MI's event recognized AAAA and presented individual awards to deserving Soldiers. During the CAB's deployment window, January - March 2019, the Chapter conducted membership drives recruiting over 150 new members with the 12-month free memberships.

The Chapter desires to add marksmanship team competitions and other volunteer activities and still has an appetite to lean forward and provide community outreach this coming year. Unfortunately, but understandably, the 1st Armored Division's battle rhythm and the CAB's deployments to Liberia in 2016, Puerto Rico and Houston in 2017, predeployment CTC rotations in 2017 and 2018 and most recently to Afghanistan in January – November 2019 prevented the amount of participation that would be required to facilitate many great events. Despite the high operational tempo, the Chapter did support "Homes for Heroes" in February 2017 and several members volunteered individually at other events while representing the Chapter. Upon return from deployment in November 2019, the CAB held recognition ceremonies and have several planned for 2020.

Summary

The 1AD CAB, Iron Eagles, whose motto is "Lethal, Agile, Ready Now!" and the 204th MI Bn. leadership past and present have been stellar in their support of the Rio Grande Chapter. Their conduct on and off duty embodies the traits of an engaged ambassador. It is impressive to see the ranks of our senior leaders serve selflessly in positions of significant responsibility, especially in combat. The leaders within our Aviation community have recognized 64 Soldiers, spouses, and retirees with Bronze, Silver, Knight OSMs and Lady of Loreto inductions. The Rio Grande Chapter is proud to serve and represent the 1AD CAB, the 204th MI Bn., and all Aviation Soldiers, past and present within the local community. The Chapter welcomes all current and new members that are stationed in the Ft. Bliss area. For more Rio Grande Chapter information contact George Benter at gwbenteriv@gmail.com.

Feel free to contact me if you need help for your chapter. I look forward to working with you and supporting AAAA.

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



AAAA Chapter News

Rio Grande Chapter Christmas Party



The chapter sponsored a Christmas party for the 2nd Battalion, 501st Aviation Regiment (General Support Aviation) on Dec. 13, 2019 at Fort Bliss, Texas. It was a unit event focused on families with approximately 525 in attendance. There was a recruiting booth and a surprise induction of Chapter President, **LTC (Ret.) George Benter** (center) into the Silver Honorable Order of St. Michael by battalion commander, LTC Christopher Chung (left) and battalion command sergeant major, CSM William Haddon (right).

Tennessee Valley Chapter Annual Space Challenge



The Tennessee Valley Chapter proudly sponsors three Aviation Challenge scholarships each year. Hosted by the U.S. Space and Rocket Center in Huntsville, AL, attendees enjoy a multitude of activities during the weeklong event. The Challenge is broken down into 3 groups; Mach I, Mach II and Mach III programs are based on age and increase in the intensity of activities. One scholarship is awarded for each group. To learn more about Space Camp-Aviation Challenge visit the website at https://www. spacecamp.com/aviation. Submission for this year's Aviation Challenge Scholarship opened Feb. 12 and will close Mar. 18, 2020. Applicants must be the child or grandchild of members of the TN Valley Chapter.

The 2019 awardees and their families are:



MACH I Winner - Jonathan Harlan



 $\mathsf{MACH}\ \mathsf{II}\ \mathsf{Winner}-\mathbf{David}\ \mathbf{Crabtree}$



MACH III Winner - Ty Stanley

Summit App







With the app, you can:

- · Search for Exhibitors
- $\cdot\,$ Review the Agenda
- \cdot View the Floor Plan
- · Create a Daily Schedule
- · Receive Event Alerts

iPhone/iPad App iTunes App Store

> Android App Google Play





Order of St. Michael and Our Lady of Loreto Inductees

Tennessee Valley Chapter



COL William D. "Billy" Jackson (right) looks on as his wife, **Rebecca Jackson**, is inducted into the Honorable Order of Our Lady of Loreto by Tennessee Valley Chapter President, Gary Nenninger, and MG Thomas Todd, former Program Executive Officer Aviation, on January 17, 2019 at Redstone Arsenal, AL. Jackson was inducted into the Silver Honorable Order of St. Michael just prior for his significant and long-lasting contributions to Army Aviation throughout his career and culminating with his accomplishments as the Army Project Manager for Utility Helicopters.



Mr. Wayne Ferguson (center), deputy commander of the Aviation Flight Test Directorate of the Redstone Test Center, Redstone Arsenal, Alabama, was inducted into the Silver Honorable Order of St. Michael by chapter president, Gary Nenninger and LTC Joe Minor, AFTD commander, on Dec. 19, 2019 at Redstone Arsenal. Ferguson was recognized for his 28 years of service to the Army Aviation community in a wide range of technical and leadership positions.





Washington Potomac Chapter



COL (Ret.) Leslie R. Gilbert is inducted into the Gold Honorable Order of St. Michael by AAAA National President MG (Ret.) Jeff Schloesser (center right) during the chapter Weapons Systems Aviation Monthly Luncheon at The Portofino Restaurant in Arlington, VA, Jan. 21, 2020. Chapter President MG (Ret.) Rudy Ostovich (left) and National Executive Board member COL (Ret.) Curt Herrick (right) assist. The 92-year old Gilbert, drafted in WWII, was recognized for his numerous significant contributions over a lifetime of service to the Army Aviation community and the AAAA to include as the Army project officer for the XH-40 Huey, OH-6 LOH, and AH-64A Apache. After retirement, this Cub Club pilot "Original" led the industry role on the Apache government-industry team into 1991.

AAAA Chapter News continued Connecticut Chapter



On Jan 30th, AAAA CT Chapter board members Tom Nicolett (left) and Dom Fernandes (right) visited AAAA Headquarters and presented a check for \$38,000.00 to Sue Stokes, AAAA Scholarships coordinator. The donation was made possible from funds raised from an annual golf tournament supported by Sikorsky suppliers. Missing from the photo is Sikorsky employee and AAAA member Eric Kraemer who organizes and runs the charity golf tournament annually. \$20,000 will be donated to the AAAA CT Chapter scholarship account, and \$18,000 will be donated to the AAAA Igor Sikorsky memorial scholarship account.



Please contribute to the AAAASFI through the Combined Federal Campaign (CFC) program.

The AAAA Scholarship Foundation, Inc. provides a variety of annual scholarships to hundreds of students seeking higher education: Soldiers, NCOs, warrant and commissioned officers and to their family members. Your tax-deductible donation helps make a difference to those looking to further their educational opportunities.

Contribute to #10516. See your unit CFC representative for details on participating in the CFC Program.



The AAAA Scholarship Foundation, Inc. 593 Main Street, Monroe, CT 06468-2806 Email: aaa@quad-a.org (203) 268-2450

VIETNAM/KOREAN VETERAN & FAMILY APPRECIATION RECEPTION

Friday, April 24, 2020 - 5:30 - 6:30 PM



If you are a Vietnam or Korean War veteran, you and your family are invited to a special reception in your honor with AAAA National President, MG (Ret.) Jeff Schloesser, and other members of the National Executive Group just before the dinner/concert on the final day of the Summit.



April 22-24 | Nashville, TN | quad-a.org/20Summit

NETWORK | RECOGNITION | VOICE | SUPPORT

AAAA Membership Update By CW4 Becki Chambers This month, SGT Ashley Sanchez has written the Membership Corner. Let me just add, we are so very close to reaching our 20K by 20Summit goal. Keep up the good work! See you at Summit! – Becki.

The Membership Corner

D uring my time at Fort Belvoir I have had the privilege of getting to know SGT Wong Dang. Wong arrived at the company as an SPC in the middle of 2018 and has been a great addition to the team.



SGT Wong Dang, wife Brittany, and daughter, Aria.

He has ambition, drive and most of all a passion for Army Aviation. He has expressed his gratitude thru his dedication and performance.

SGT Wong Dang grew up in Laredo, Texas and always wanted to serve his country. He felt Army Aviation was his go-to, and the community associated with it was a major factor when it came to opportunities for his family. He joined in 2013 out of Texas as a UH60 mechanic with his first duty station close to home at Fort Hood. He served with Charlie Company 227 Medevac General Aviation Support Battalion, as a crew chief for 5 years. While assigned with Charlie Company, he was forward deployed to Germany in 2016. SGT Dang is currently attached to the VIP Company in The Army Aviation Brigade at Fort Belvoir, VA. He is tasked with missions supporting the key senior leaders in the Military District of Washington. Wong mentions that CW3 Tom Reynolds is a key factor in his Aviation career path, so much in fact, that Wong is now the Flight Instructor for his company at Fort Belvoir. SGT Dang looks forward to becoming the 12th Aviation Battalion

Standardization Instructor for all crew chiefs assigned to the battalion.

Wong and his wife Brittany grew up together in Laredo and have been married for 4 years. Together they have a beautiful 3-year-old baby girl, Aria. Brittany is currently pursuing a degree in nursing and hopes to use an AAAA scholarship to assist in her achieving this goal. While he was in Germany, the Aviation community supported his family in more ways than he could ever ask for. Through the Washington Potomac Chapter, Wong and his family had the opportunity to visit the Washington Nationals during their Championship season last summer. This Chapter has many volunteer opportunities, for members and their spouses, which keeps them involved with the Aviation community. During the summer Wong put together a gold team within his company to partake in the Chapter golf tournament on Fort Belvoir

Wong joined AAAA after attending a meeting about the 2019 Summit where Soldiers spoke about their experiences in Nashville. He realized that the organization had much to offer and was really moved by the Support, and Voice that AAAA has to offer, as it is 2 of the 4 key pillars. Last October he had the opportunity to volunteer at the AAAA membership booth at the Association of the United States Army (AUSA) convention in DC. While at the booth he engaged young Soldiers and informed them about AAAA. He was successful in recruiting new members that will help us reach our goal of 20K by 20Summit. Sitting with the AAAA media coordinator, he saw that AAAA is the Voice for their members through all platforms, to now include social media. He looks forward to attending the 2020 Summit with a few peers and continue to seek support from the Aviation community.

SGT Ashley Sanchez is an AAAA National Executive Board member-at-large.

CW4 Becki Chambers AAAA Vice President for Membership



2LT Nena Riccoboni



New AAAA Life Members

Cedar Rapids Chapter CAPT Michael Guttau **Central Florida Chapter** Timothy L. Childrey Jack H. Dibrell/Alamo Chapter CW5 John Hickman **Jimmy Doolittle Chapter** CW3 Lee Beahm **Lonestar Chapter** COL Tim Kopra **Tennessee Valley Chapter** Jack Bailey Thunderbird Chapter CPT Gary Winsett Wright Brothers Chapter CW2 Charles Canfield, Jr. Ret. LTC Scott Humphrys Ronald P. Marshall

New AAAA Members Air Assault Chapter

1SG Sean M. Connelly Fort Campbell Historical Foundation, Inc. 1SG Luther York **Arizona Chapter** Kenneth Baba Phillip Meyer CDT Liam Stills Edgar Vazguez **Aviation Center Chapter** 2LT Austin Adams W01 Gabrielle Bernal **2LT Samuel Boyles** 1LT William Bradley WO1 Jarrod Bravd W01 Brandon Brooks W01 Stephen Bulls WO1 Jeffrey Carden 2LT Ryan Chisum 2LT Hailey Conger 2LT Paden Conway 1LT Bryant Cunningham 1LT Brian Downey 2LT Benjamin Duhaime WO1 Cedric Ebrottie WO1 John Fitzmaurice W01 Michael Haines W01 David Hammrich **2LT Tipper Higgins 2LT Trevor Jones** WO1 Tyler Justet W01 William Koch CW2 James Kunkle W01 Joshua Link **2LT Patrick Mars** W01 Erick Martinez **2LT Genevieve McCormick** 2LT Jordan Meskill **1LT Timothy Myers** W01 Ruvim Obolonchik W01 Samuel Oder 1LT Haley Okamusa WO1 Billy Palanalelo W01 Jonathan Parham 2LT Gunner Patterson **2LT Nicole Polhamus** 2LT Megan Pontius CW2 Erik Prins

W01 Scott Sherman W01 Tyler Smitten W01 Nicholas Stehmeier WO1 Elliot Stevenson WO1 Matthew Stone WO1 Christopher Turner WO1 Kurt Udseth WO1 Layne Ulm WO1 Marisa Vazquez WO1 William Virrill **2LT Bogue Waller** 2LT Andrew Young **Battle Born Chapter** PVT Jose Angel Cruz **Big Sky Chapter** SGT Samantha Ingraham Black Knights Chapter CDT Tyler Leary CDT Dion Perinon CDT Brandon Vega Cedar Rapids Chapter Ken Peterman **Central Florida Chapter** PV2 Gavin Jasin Lind **Colonial Virginia Chapter** WO1 Chase A. Shedor **Connecticut Chapter** CDT Paul Corapi CDT Kyle Summa **Desert Oasis Chapter** CW3 Jamie Bryan Šeymore **Gold Standard Chapter** SSG Brandon W. Blassingame SGT William R. Stepp **Great Lakes Chapter** CDT Adam Kopp CDT Matthew Robinson **Greater Atlanta Chapter CDT John Erskine** CW2 Chris Reeder **Griffin Chapter** CPT Jonathan G. Blake **Grizzly Chapter** PFC Timothy D. Dawson CPT Dana D. Durham SGT Michael A. Loft **Idaho Snake River Chapter** SFC James G. Miller SGT Brad B. Stock **Iron Mike Chapter** CDT Samuel Gordner SGT Michiel D. Randles Jimmy Doolittle Chapter CDT Poole Jakob CDT Brent Towery **Keystone Chapter** CDT Brigit Duffy Lindbergh Chapter PV2 Gavin Allen Roche-Voss PV2 Jackson Ray Walker **Lonestar Chapter** LtCol Marvin Fuller MacArthur Chapter CDT Russel Kraus Stephen Marini Mid-Atlantic Chapter Jeremiah McNamara MAJ Alex Morse Morning Calm Chapter SFC Jaydon Joel Alvarado CPT Matthew Gallup CW3 Harry "Buddy" Haskins CPT Nickolas Lupó David Michael Rierson

1LT James Rood Mount Rainier Chapter SPC Paul K. Benedict SSG Michael K. Bergin SGT Christina M. Blomberg 1LT Austin M. Bogard WO1 Alexander K. Branan SPC Lucas Bulajewski SGT Sherman L. Burkhead SSG Rory C. Cavanaugh CW4 Paul Connors PFC Bryan Alexander Emtman SPC Michael M. Gormley **CDT** Taylor Krug SGT Billy Lor SPC Harvey T. Schinkal Narragansett Bay Chapter CDT Jacob Lopardo North Country Chapter 1SG anthony Agney CPT Charles A. Batchelor III SGT Jemuel Bowen CSM Walter Brown SPC Christian Card SGT Andrew L.Fernandez Sr. PFC John Gavin Fisher SFC Nicholas A. Gardner 1LT Larry Keith Glover III PFC James Charles Halsell SSG Edward Steven Heckman SPC Nathan Benjamin Koch CPT Andrew M. Miguelon SPC Bryant Patris PFC Jeremy S. Pomberg SPC Heather Pryor SPC Jorge E. Rios Cedillo MAJ Matthew Stockton **CPT Nicholas Thurston** SGT Edwin Yamil Velez Castillo CPT James Webb North Star Chapter SPC Tiandray N. Simon North Texas Chapter PVT Luis F. Cortes SPC Keega Lund Northern Lights Chapter W01 Justin Spillers Pikes Peak Chapter PFC Seth Carl Gordon CDT Brandon Tyson Ragin' Cajun Chapter SFC Jacob M. Knapp SGT Robert L. Ray SSG Brad D. Robert Savannah Chapter CPT Omar Alens CPT Desmond L. Clay 2LT Madison Yuki Daugherty CW2 James Kelley Joseph Mark Natter 1SG Jason Reichart Sheldon Smith **1LT Jeffrey Telford** CW3 Jeffery S. Wallace Southern California Chapter CDT AnnaMaria Dear CDT Delaney Marbach Tarheel Chapter CDT Austin Morock SPC Nolan E. Watkins **Tennessee Valley Chapter** Carol Joiner Kenneth Long CW4 Ken Spier, RET

Thunderbird Chapter CW4 Robert Allen Steele Utah Chapter Carrigan Young Washington-Potomac Chapter CDT Victor Kao **CDT Corrie Michell** CDT Joseph Tussing Ms. Sydney Tutein CDT Braden Welsh Winged Warriors Chapter 1LT Ian M. Gidcomb CW2 Lloyd S. Mills SGT Julie C. Sargent Wright Brothers Chapter Mac Canali Karl Listl **Zia Chapter** LTC Linda Horan DuMoulin **No Chapter Affiliation** PFC Jace C. Ailor CW4 Jason Aldins CDT Shea Allen Sharon Azbell PVT Desmond Keion Black SPC Ryker L. Brekke CPT Chaney Brooks PV2 Payton Ivery Byrd A1C Anthony E. Canlas SPC Peter G. Ciuca-Duffy SPC Jake Alexander Clor CW4 Thomas Dansbury PFC Jacob Joseph Delbene Cayla Diehm James Duke SPC Patrick I. Dyer CW2 Brad Harry Erlenbach CDT John Gray CDT Grayson Hill James Hutson SPC Jaycob Patrick Larson CDT Paul Manfredini SPC Victor W. McCollum SPC Thomas E. McIntosh WO1 Eric E. Oliver

CDT Nicholas Perovich CDT Aidan Reardon Alex Risen PV2 Raymond Tyler Robinson CPT Timothy Romack CDT Tim Schmitt PFC Ryan Steven Scoville CDT Abigail Smith 2LT Maria Ugstad PFC Robert E. Wood WO1 Nick Xidis

Lost Members

Help AAAA locate a lost member from this list and receive a FREE one month extension to your membershin! PFC Anthony Aleman CPT Robert S. Boham Harold V. Bowie Jr. LTC Jeffery D. Brown MAJ James E. Bruckart SPC Brett Christopher Butler E. W. Cavanaugh LTC Richard G. Cercone, Jr. LTC Tzu-Shan Chang COL James A. Coar, Ret. SPC Derrell L. Coats MAJ Harry L. Connors Jr. Ret. Bruno Cussigh SGT Travis Bonham Darnell CW3 Matthew John Decker 2LT Arthur W. Galloway Michael F. Glass MAJ Gregory W. Glover LTC William T. Goforth Mary H. Gorman COL Gerhard Granz, Ret. Trevor Harker COL Jose L. Hinojosa, Ret. SFC Carroll Elmo Hinson V Barb Hively COL Eldon H. Ideus, Ret. CW4 Delbert Jackson, Ret. MAJ Gregory R. Jenkins MAJ David A. Jobe LTC Peter D. Kowal Beth N. Kramer CW3 Vladimir Kultschizky CW3 Timothy J. Larz MSG David W. Little, Ret.



NEW for AAAA Members! Over thousands of Travel and Entertainment Discounts!



Simply Sign In To www.quad-a.org

Click "My Discounts" – **Start** Shopping & Saving!



AAAA Family Forum By Judy Konitzer

Make 2020 Your Year For Employment Opportunities! By Judy Konitzer

/ hen I first started writing this column in 2006, I contacted Military One Source (MOS), a newly acquired DoD sponsored program, to see if it really offered what it promised. I was impressed when I talked at length to a live agent at 11 o'clock at night, and subsequently felt it worthwhile to publish their call line and website.

Years later, on New Year's Eve morning, I called the Help Line 1-800-342-9647 and still found no busy signal, prompts, or long waits, and had a discussion with a very informative and friendly agent. I was interested in how easy or difficult it would be for a military spouse to get information employment opportunities, about marketing, educational opportunities, mentoring, and their other available resources. It is unfortunate if new military spouses are not aware of programs such as these, or if seasoned spouses are "burned out" by missing opportunities to further their careers or garner employment. It is a given that frequent moves are challenging for spousal careers especially those requiring licenses and opportunities for pursuing degrees or technical paths, but at least it is improving. Among a multitude of other information available on Military One Source portals at www.militaryonesource.mil,



Recruiting Assistants

Help us get the word out about 2020 Census jobs. Call on local organizations to request assistance in providing information about jobs to the people they serve. Answer questions from the public about jobs, qualifications, and how to apply. Conduct formal and informal presentations about 2020 Census jobs.

For more information visit: 2020census.gov/jobs 1-855-JOB-2020 (1-855-562-2020) Federal Relay Service: (800) 877-8339 TTY / ASCII

www.gsa.gov/fedrelay The Federal Relay Service provides telecommunications services to allow individuals who are deaf, hard of hearing, and/or have speech disabilities to conduct official business with and within the federal government. The U.S. Census Bureau is an Equal Opportunity Employer Census

Form D-443 September 2018



the following avenues are just a few which could prove helpful.

MY SECO is a program where spouses can use tools and assessments to explore their interests, skills, passions, and personality types to determine their best fit for education and career choices and start to build a portable and meaningful career path.

Military Spouse Employment Partnership connects you to openings at companies you might like who are committed to hiring military spouses. MSEP Job Search to access employment opportunities.

My Career Advancement Account **Scholarship** where eligible spouses, of E-1 thru E-5, W1- W2, and 01-02 Active Duty, National Guard and Reserve Soldiers on Title 10 military orders, who have successfully completed high school and are pursuing licenses, certificates, certification, or associate degrees necessary to gain employment in high demand, high growth portable career fields and occupations can apply for tuition assistance.

Besides contacting MOS for employment opportunities you could also consider the following:

Recruiting 2020 Census Workers -Hundreds of thousands of temporary workers will be needed to conduct the 2020 census this year, and Census NETWORK | RECOGNITION | VOICE | SUPPORT



Bureau officials believe that veterans and military spouses could be the perfect candidates for those jobs. Positions include census takers, recruiting assistants, office staff and supervisory staff. To be eligible applicants must be at least 18 years of age, have a valid Social Security number, be a U.S. citizen, have a valid email address, complete an application, and answer assessment questions. Salaries will vary (all above minimum wage) depending upon the job and the location. To apply, visit *https://2020census.gov/jobs* or call 1-855-JOB-2020

Hiring our Heroes National Fellowship Program - Military spouses have an opportunity to gain experience with employers thru a national fellowship program. Hiring Our Heroes as part of the U.S. Chamber of Commerce Foundation has collaborated with Lockheed Martin to introduce a Military Spouse Fellowship Program into Dallas/Fort Worth, Washington, D.C., Orlando and Tampa, Florida, San Diego, and Honolulu over the next two years, with it already being established in Maryland, Northern Virginia, San Antonio, and Colorado Springs, Colorado.

Eric Eversole, president of Hiring Our Heroes and vice president of the U.S. Chamber of Commerce said "this initiative will put spouses back to work, eliminate gaps in resumes, and allow employers to see firsthand how a military spouse can impact change within a company."

Scholarships for the program from Lockheed Martin will place 100 military spouses with host companies for a six-week fellowship. Spouses will be matched with companies based on their skills and preferences. With this initiative military spouses will be able to connect to local employers and build their networks while they receive job experience and enhance their professional development.

Interested applicants as well as potential employers can apply for these spots at www.hiringourheroes. org/fellowships/spousefellows. The next application deadline is March 13, 2020.

Judy Konitzer is the family forum editor for ARMY AVIATION; questions and suggestions can be directed to her at judy@ quad-a.org.





SPOUSE PROGRAMS & ACTIVITIES



The Evolution of Rosie the Riveter (Spotlighting Army Spouses)



Multiple Deployments Presented by Tim Hoyt, Ph.D. – Chief, Psychological Health Promotion Branch Psychological Health Center of Excellence



Marathon Village & Greenbrier Distillery



Culinary Experience with the Chef's of Gaylord Opryland



Strategies for Living with Gaylord Opryland Garden Tour





Yoga

Water Aerobics

REGISTER TODAY! April 22-24, 2020 Gaylord Opryland Hotel & Convention Center, Nashville, TN quad-a.org/20SUMMIT NETWORK | RECOGNITION | VOICE | SUPPORT





OUR DONORS MAKE SMILES HAPPEN AND DREAMS COME TRUE



Thanks to our Donors, the AAAA Scholarship Foundation awarded over a half million dollars in scholarships to 304 deserving applicants in 2019.

Now that's something to smile about!

The 2020 program is now open. Deadline for applications is May 1. Learn more at www.quad-a.org/scholarship



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, Inc. from January 2019 through January 2020. 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. Every penny donated to the Scholarship Foundation goes directly towards scholarships as a result of the Army Aviation Association of America subsidizing all administrative costs (minus investment brokerage fees).

114th Aviation Company Association AAAA- 2019 Summit Speaker Donation Sidney W Achee AAAA Air Assault Chapter Airbus Group, Inc Airbus Helicopters, Inc. Khalifa Almeghairi AAAA Aloha Chapter N. L. Amato American Airlines Ameripack Amy Anderson MG (Ret.) Andy & Artie Andreson Laura Arena AAAA Arizona Chapter Mike & Daphnie Arthur AAAA Aviation Center Chapter Army Aviation Center Federal Credit Union Army Aviation Publications. Inc. Army Otter Caribou Association AAAA Badger Chapter **BAE System Charles David Bayless** Jeff Becker Becker's Air Powered Sweeping, Inc. Rell BG Harry H. Bendorf Victoria Bendure Jason Benedict David Blackburn Sofia Bledsoe Boeing John S. & Linda S. Bolton Booz Allen Hamilton Mimi F. Boulden Bradley S Boyer & Alexandria H Boyer Terry Branham Billy & Glenna Brashear Michele Lynn Brashear Jacob Adam Brewster Dan Brown Pamet W. Brown Ingrid K Bruce Cynthia S. Campbell Canebrake Club, LLC Kellv F Carberry AAAA Colonial Virginia Chapter **Concept Components** AAAA Connecticut Chapter AAAA Corpus Christie Chapter **Reves** Cortes AAAA Cowboy Chapter Davis Aircraft Products Co., Inc.

AAAA Delaware Chapter Donaldson Aerospace & Defense Dustoff Association Jon C Eidem James Emerson Donald Fetzer, Van Note-Harvey Associates AAAA Flint Hills Chapter Jeffrey & Vanessa Fowler Judy French Brian Garv Leslie H Gilbert AAAA Gold Standard Chapter Jen Gordon Thomas O. Graft D.R. Haag & D.E. Haag James Hamill Constance Hansen Debra Harlow-Aldecoa Thomas M. Harrison Bobby Hart BG (Ret.) James M. & Joyce L. Hesson John Hickman William Hipple Larry D. & Julianne S. Holcomb Raquel E. & Terry R. Horner AAAA Idaho Snake River Chapter Ironmountain Solutions, Inc AAAA Jack H. Dibrell Alamo Chapter JACS Aircraft Certification Specialist Jack A. James Judith H. Janowiak Arlo Janssen Chervl Jensen William S. & Sara S. Johnson Johnson & Johnson K-Con, Inc. Charleen Kennedy Diane M. Kennedy AAAA Keystone Chapter Sharon Kleiber CW3 Nick Koeppen Walter J. Kohls T Konitzer. TJK Konsulting Inc. Carl Kreisel James Krueger Scott Kubica Ronald V. & Carol J. Kurowsky Jessica Bailey Lallier John D. & Kathleen B. LaMotta Edward Lewis Landry & Kimberly A Jamison Joe Lawver Alyssa Lemanski

AAAA Lindbergh Chapter Lockheed Martin The Luminescence Foundation, Inc. **Timothy Lunger** Robert H (Chip) and Angela Lunn AAAA Luther Jones Speakers Jodi Lynch AAAA MacArthur Chapter Daniel T Madish & Elisabeth Madish John Maez Jolanda Masters Paul McCarthy Lewis McConnell Thomas F. McNamara Jerry P. Mellick AAAA Mid-Atlantic Chapter Emily M Miller Raymond Milora AAAA Minuteman Chapter AAAA Mount Rainier Chapter S D Mundt & B J Mundt Donald Munsch, Munsch & Co. Aeromechanics Bonnie & Gary Nenninger Gary N. & Christine A. Nesta William Newby AAAA North Star Chapter AAAA North Texas Chapter AAAA Northern Lights Chapter Northrop Grumman LTC (Ret.) Jerry O. & Vivian A. Obert Rudolph & Pamela N. Ostovich III The OV-1 Mohawk Association Patriot Taxiway Industries. Inc Lawrence P. Peduzzi, Peduzzi Associates LTD Alvssa Perrv AAAA Phantom Corps Chapter Phantom Products Inc. LTG (Ret.) William & Marilyn Phillips William Phillips Piasecki Foundation Karissa Poe Potomac Knight Chapter, 114th Aviation Project Manager Apache QuantiTech. Inc. Marlene Raczkowski Ellen Luz Ramil & Manuel B Ramil Marc Rassler Christie Reyenga Marilyn Rickmeyer Terry & Bonnie Reininger Roberson Giving Fund Keith Roberson

Robertson Fuel Systems James E. Rogers & Reba A. Rogers Safran El. & Def., Avionics USA Safran Helicopter Engines Safran USA Virginia Malinda & Edward Schmidt Edwin W. Schmierer III **Robert Seigle** Nancy Shaffer Shashy Family Charitable Fund John Sheard Matthew J. Sheedv Kenneth Shields Sikorsky Aircraft Corporation EJ. Sinclair & Susan Sinclair Joy Skantz AAAA Southern California Chapter Evelvn A. Soucek Trust Steven M Soucek & Chandra L Soucek CPT (Ret.) Barry Speare Laura Steele David John Stock II & Jennifer Lynn Stock Strata-G Solutions, Inc. System Studies & Simulation, Inc. Masaki Sudo Roy Sullivan Tactical & Survival Specialties, Inc. AAAA Tarheel Chapter Team Apache Tee It Up for the Troops, Inc. AAAA Tennessee Valley Chapter AAAA Thunder Mountain Chapter AAAA Thunderbird Chapter Tier 4 LLC COL (RET) Harry Townsend & Diana L Townsend John Vannov Vantage West Credit Union Gail Vergez Vertex Aerospace Veteran Guardian Vietnam Helicopter Pilots Association Vietnam Veterans of the 227th Assault Helicopter Battalion AAAA Voodoo Chapter AAAA Washington Potomac Chapter Timothy Wooldridge Wreaths Across America Sponsors Charles E. Wright & Jessica L. Wright AAAA Wright Bros. Chapter Michelle Yarborough Michael Younce YPO Fairchester Gold

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

AAAA **Awards**



Order of St. Michael Inductees Gold

COL (R) Leslie H. Gilbert MG Thomas H. Todd Silver MG Patrick D. Sargent COL John C. Hopkins **Bronze** SSG Jorge Aguilar CW4 Zachary B. Barnes CW3 Cody M. Benzvidez MAJ Anthony A. Booher 1SG Kevin M. Bowlen CW4 Brandon T. Briggs LTC (R) Daniel S. Brown CPT Brian K. Burgi CPT Armando Castellano MSG Brian D. Chrisman MAJ Nicholaus J. Cortez MAJ Louis M. Fabrizi CW4 Darwin L. Finch CW5 Kenneth R. Gatewood CW4 Kipp C. Goding SFC John W. Gooderham 1SG Michael F. Gorham CW5 Jack Hvde MSG Richard A. Jarrett CW5 Chuck C. Juul David R. McPhearson MAJ Christopher E. Klich CW4 Brian L. Koharski 1SG Matthew P. Langseth COL Brad P. Luebbert CPT Daniel L. Mackey Robert W. McGrew MAJ Noah L. McQueen CW5 (R) Todd F. Moorehead CW5 Glenn A. Moya CW4 Richard J. Nasby MAJ Joseph M. Natter LTC Robert G. Nopp 1SG Mario A. Orta 1SG Christopher S. Ramirez 1SG Jason D. Reichart SFC Juan A. Salazar CPT Samuel J. Scallon CW5 Paul F. Sherry CW4 John D. Silva MAJ Steven Skiles **1SG Marcus Slade** CW5 Dennis E. Smith COL (R) Michael A. Smith MSG Mark Smith CW4 Richard W. Swan

CW3 Raul Torres CW4 Michael J. Turner MAJ Carlos A. Vincens LTC Matthew S. Wolfe MSG Douglas W. Wonacott LTC Timothy M. Zerbe

Honorable Knight Inductees



CSM Charles A. Booth John Barclay Davis CPT Michael B. Dell Brett Dixon Connie M. Goodwin Dr. Thomas H. Harding CW3 Jarod R. Kedrick Ken Larsen CW4 Darby D. Ledbetter Jeff Saunders LTC DJ Walker

Our Lady of Loreto Inductees



Christine Chernecke Michele L. Deon Cindy Despres Beatriz Hardy Laura A. Kephart Sarah Luebbert Melissa M. McQueen Ann S. Natter Janet M. Sheckles Yolanda Smith Melanie Wilson

In Memoriam

LTC Bak Y. Chin (Retired)





AAAA Functional Awards Suspense: July 1 AMSO Award ASE Award Avionics Award Donald F. Luce Depot Maintenance Artisan Award

Suspense: August 1

 Logistics Unit of the Year Award
Materiel Readiness Award for a Contribution by a Small Business or Organization
Materiel Readiness Award for a Contribution by an Individual Member of Industry
Materiel Readiness Award for a Contribution by a Major Contractor
Materiel Readiness Award for a Contribution by an Industry Team, Group, or Special Unit
UAS Soldier of the Year
UAS Unit of the Year
Fixed Wing Unit of the Year

Suspense: September 1

Air/Sea Rescue
ATC Facility of the Year
ATC Unit of the Year
ATC Controller of the Year
ATC Manager of the Year
DUSTOFF Medic of the Year
Medicine Award
Trainer of the Year

AAAA Hall of Fame Inductions Suspense: June 1

Send in Your Nominations Today!

Nomination forms for all of the AAAA Awards are available on our website:

quad-a.org.

Any questions? Call 203 268-2450.

NETWORK | RECOGNITION | VOICE | SUPPORT



FALLEN HEROES

AAAA is saddened to announce the recent loss of the following Aviation Soldier.

OCONUS

The Department of Defense announced the death a Soldier who was supporting Operation Octave Shield, the mission focused on targeting militant groups in Somalia.



SPC Mayfield

SPC Henry Jarrett "Mitch" Mayfield Jr., 23, from Hazel Crest, IL, was killed Jan. 5, 2020, during a mortar and small arms fire attack on Manda Bay Airfield, Kenya approximately 150 miles south of the Kenya-Somalia border.

He was an Air Traffic Services Mechanic assigned to 1st Battalion, 58th Aviation Regiment, 164th Theater Airfield Operations Group, at Fort Rucker, Alabama.

The incident is presently under investigation.

May he rest in peace.

(Information from Defense Department news releases and other media sources.)

UNITED STATES ARMY AVIATION MUSEUM FORT RUCKER, ALABAMA



AMAZING EXHIBITS, AWESOME GIFT SHOP, FREE ADMISSION & PARKING OPEN M-F 9-4, Sat 9-3 Independence, Memorial and Veterans Day Check us out online at www.armyaviationmuseum.org



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

FY21 Budget Request

This month, unlike so many throughout the year, we are happy to deliver an article that is not anchored to Congressional inaction, Continuing Resolution, or that awful word Sequestration! The FY20 defense budget was codified at the end of December thus providing everyone in the defense political ecosystem a brief breather to bring in the New Year. That said, while most Americans welcomed 2020 with champagne, those in the political ecosystem, including our general officers, senior executive service, administration officials, congressional staff/ lawmakers, and industry executives were already busy thinking about how to craft and execute their political strategies for the FY21 budget. Each stakeholder within the political ecosystem must diligently strategize how to influence and set in motion the conditions that will foster success for their individual enterprise. In February, the DoD/White House will send the FY21 Budget Request to Capitol Hill and Congress will start the process by which they make their cuts and additions so let's talk about what is at stake for all the stakeholders.

Army Aviation Iron Triangle

The best way to illustrate the various stakeholders within our Army Aviation Enterprise is by considering it a 3-sided iron triangle. Any industry whose success or failure is dependent upon taxpayer funding is an iron triangle. The triangle, what some may consider a self-licking ice cream cone, passes taxpayer funding to Congress to appropriate to a government agency, the DoD in our example. The DoD then pushes that money to for-profit industry with the expectation that in return they receive weapon systems (goods) and/or services. Industry then takes that money and provides the goods and services to the DoD, but out of their profits, they funnel money back to Congressional decision makers in the form of political contributions. The iron triangle is bi-directional on all three sides which is why it's important to never burn a bridge. Funding is not the only factor in an iron



triangle. Influence is another commodity that cannot be underestimated. One day a decision maker could be serving in the Pentagon in uniform, the next day as a civilian Congressional staffer and then the next day as a for-profit industry executive. Never burn a bridge when working within an iron triangle because you never know where someone is going to land year to year, administration to administration!

Army Aviation's Strategy for FY21 Budget Cycle

In short, Army Aviation has a formal "official" strategy that is laid out annually and articulated in the President's defense budget request. Of course we want as much O&M funding for flying hours and sustainment, procurement funding to buy new aircraft and mission systems, and RDTE funding to develop next generation technology, but when it comes to BG McCurry, MG Todd, and BG Rugen advocating on Capitol Hill for our interests, they are doing so in strict adherence to the President's budget request that is developed through the DoD's annual budget planning process. Unofficially, all areas of the DoD advocate for more funding for their interests, but formal communication with Congress follows the President's budget request.

Congress's Strategy for the FY21 Budget Cycle

Congressional strategy is driven by the parochial and non-parochial interests that influence what lawmakers believe the DoD should look like and how much money should be appropriated for defense. Parochial interests are injected into the budget process by individual Members of Congress who are influenced by forprofit lobbyists, trade organizations, and the issues that affect the districts they represent. Non-parochial interests are similarly influenced but are (ideally) shaped in a non-partisan manner by the four defense committees. Essentially, the nonparochial interests are led from a party perspective and driven by the party that has control over the House and Senate.

Private Industry Strategy for the FY21 Budget Cycle

Industry drives their strategy simply by what will benefit their corporate shareholders. Industry (and trade organizations) deploy platoons of lobbyists to engage individual Member offices and the four defense committees. They donate to individual campaign funds and political action committees, they use the press to get their messages out and at the same time, they engage DoD to ensure there is support from the unofficial DoD advocacy positions to encourage Congress to make beneficial changes to the budget request.

What to look for in February....

So, how does this all play out? When the President's budget request moves to Congress in February, all stakeholders within the Army Aviation Iron Triangle will put their strategies into action. An 8-month chess game will commence with the award being the taxpayer dollars that float through the Triangle! Ideally, the strategies for all Army Aviation Enterprise stakeholders align, but that's nearly impossible due to the various agendas and the determination of industry players to grab the biggest piece of the pie. Next month we'll talk about what is in the President's budget request for Army Aviation and provide some context on the strategies employed within the process and how they will play out as Congress begins to make their adjustments to the request.



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.

Swift Engineering Selected by Sikorsky for FARA Airframe





Swift Engineering announced on Dec. 23, 2019 it has Swift Engineering Inc. been selected to be

the key partner for

the airframe design and build of the Sikorsky Future Attack Reconnaissance Aircraft (FARA) competitive prototype. "We are proud to highlight Swift Engineering as one of our flagship, non-traditional defense contractors, providing design and construction of the fuselage for the FARA CP," said Tim Malia, Sikorsky's Future Attack Reconnaissance Aircraft Director. Swift Engineering will support the design and development of the airframe structure from its design studio and manufacturing facility in San Clemente, CA.

GA-ASI Begins MDO Demonstrations Using Gray Eagle ER



General Atomics Aeronautical Systems, Inc. announced on Jan. 21, 2020 completion of the first in a series of internally-funded Multi-Domain Operations (MDO) demonstrations on Nov. 19, 2019 using a company-owned Gray Eagle Extended Range (GE-ER) Unmanned Aircraft System (UAS). The flight series will continue in 2020 and show that a GE-ER equipped with long-range sensors and Air Launched Effects (ALE) is able to Detect, Identify, Locate and Report (DILR) targetable data to support Long Range Precision Fires (LRPF) systems. GE-ER is a long-range variant of the U.S. Army's MQ-1C Gray Eagle UAS that provides the U.S. Army with increased endurance, more payload capacity to support future mission tasking, and improvements in system reliability and maintainability.

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

AgustaWestland Philadelphia Corp., Philadelphia, PA, was awarded a \$38,432,233 firm-fixed-price Foreign Military Sales (Israel) contract for seven new AW119Kx aircraft, pilot and maintainer training, initial spares package, tools and ground support equipment, engine spares and the development of training aid devices; work will be performed in Philadelphia, with an estimated completion date of Sept. 30, 2020.

DynCorp International LLC, Fort Worth,

TX, was awarded two contract modifications: a \$26,829,891 modification to contract W58RGZ-19-C-0025 for aviation maintenance services; work will be performed in Fort Campbell, KY; Fort Bragg, NC; Honduras; Germany; Afghanistan; Irag; and Kuwait with an estimated completion date of Nov. 30. 2020: and a \$30.179.883 modification to contract W58RGZ-16-C-0016 for maintenance support services for the government of Saudi Arabia's Royal Saudi Land Forces Aviation Command Aviation Program: work will be performed in Saudi Arabia with an estimated completion date of Jan. 31, 2021.

Leidos Inc., Reston, VA, was awarded a \$72,575,612 firm-fixed-price contract for services in support of the existing Night Eagle System; work will be performed in Reston, with an estimated completion date of April 25, 2022.

Lockheed Martin Corp., Orlando, FL, was awarded a \$9,829,327 modification to contract W31P4Q-19-C-0071 for engineering services in support of the Hellfire Missile and Joint Air-to-Ground Missile; work will be performed in Orlando, with an estimated completion date of Jan. 15, 2021.

The Boeing Co., Mesa, AZ, was awarded a \$54,446,000 modification to contract W58RGZ-16-C-0023 for retrofit kits and software development for the Apache attack helicopter; work will be performed in Mesa, with an estimated completion date of Nov. 30, 2021.



AAAAindustry@quad-a.org

Advertisers Index

NETWORK | RECOGNITION | VOICE | SUPPORT

People On The Move

Aviation General Officer Promotions/ Assignments



MG Thomas H. Todd III relinquished responsibility for the Program Executive Office Aviation to Mr. Patrick Mason during a Jan. 14, 2020 ceremony at Redstone Arsenal. AL and was inducted into the Gold Honorable Order of St. Michael by AAAA National Senior Vice President, MG (Ret.) Tim Crosby, himself a former PEO Aviation. Additionally, Tracy Todd was inducted into the Honorable Order of Our Lady of Loreto for her dedicated support of Army Aviation Soldiers and Families over the course of her husband's career. Todd's next assignment is deputy commander, Combined Security Transition Command, Afghanistan, United States Forces-Afghanistan, Operation Freedom's Sentinel.

Changes of Command/Responsibility 35th CAB Welcomes Durr



CSM Paul Durr (right) is charged with responsibility as command senior enlisted leader of the 35th Combat Aviation Brigade (MOARNG) by commander, COL Christopher Moenster, during a change of responsibility ceremony Jan. 12, 2020 at the Sedalia, MO CAB headquarters. Outgoing CSM Javier Acosta (left) officially transferred his responsibilities during the ceremony. Durr recently served as the battalion CSM for the 935th ASB and Acosta now serves as the command senior enlisted leader for the Missouri ARNG. Both deployed with Task Force Trailblazer, 35th CAB in 2018-19 in support of Operations Inherent Resolve and Spartan Shield.

Awards

Robertson Receives Lifetime Aviation Entrepreneur Award



Dr. S. Harry Robertson (left), founder of Robertson Fuel Systems, A HEICO Company, was recognized for his entrepreneurial accomplishments with the Ken Ricci Lifetime Aviation Entrepreneur Award on January 16, 2020 at the 17th Annual Living Legends of Aviation Awards, hosted by John Travolta in Beverly Hills, CA. Mr. Ken Ricci personally presented the award. MG (Ret.) Carl H. McNair, Jr. nominated Robertson for induction into the Living Legends of Aviation, honoring Robertson's invention of "Robbie Tanks" which have saved thousands of lives.

UPCOMING EVENTS

MARCH 2020

5-7 31st Annual International Women in Aviation Conference, Lake Buena Vista, FL

APRIL 2020

22-24 AAAA Army Aviation Mission Solutions Summit, Nashville, TN NETWORK | RECOGNITION | VOICE | SUPPORT

People On The Move

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.



HOTOS ILS ARMY PHOTO FORT RUCKER P

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

45 Officers December 19, 2019

Commissioned Officers 1LT Riggins, Alec J. -DG 1LT Conine, Mason W. -HG 2LT Kilpatrick, Liam J. -HG 1LT Purvis, Thomas H. -HG 1LT Ramsdell, Joshua N. -HG 1LT Ambrose, Paul C. + 2LT Books, William E. 1LT Doyle, Curran J. 1LT Duke, Haley E. 1LT Gidcomb, Ian M. 2LT Hammond, Patrick R. + 1LT Hoffman, Gavin C. 1LT Hyde, Colby M. 2LT Hyde, Tyler R. 2LT Illari, Brienno A. 1LT Kiesewetter, Kylor T. 1LT Lackey, Kyle J. 1LT Lipp, Jedidiah T. 1LT Mcginnis, Mark J. 1LT Rau, Kenneth J. 2LT Sampson, Kyle D.

44 Officers January 16, 2020 Commissioned Officers

1LT Ward, Brendan S. -DG 1LT Chew, Travis T. -HG 2LT Montgomery, Austin D. * -HG 1LT Mosser, Corbin D. -HG 1LT Brouwer, Stephanie A. 2LT Cali, Corbin 1LT Centrackio, Joseph A. 1LT Cobb, Hayley L. 1LT Hanebut, Blake D. 2LT Kaufmann, Michael J. 1LT Kiernan, William A. 1LT Liebl, Maxwell A. 2LT Milhem, Hashem 2LT Pollard, Calvin K. 1LT Robison, Galen R. CPT Skikakhwa, Talal 2LT Shinn, Michael C. 2LT Stark, Cameron P. 1LT Subosheva, Nicole 1LT Welton, Spencer L. 1LT Young, Benjamin T. *Warrant Officers* WO1 Chapman, Keith T. -DG WO1 Alop, Sam A. -HG WO1 Packard, Dillon J. -HG WO1 Remsburg, Jeffrey H. -HG

WO1 Warmington, Cacey R. -HG WO1 Ballard, Donald T.

December

1LT Voecks, Daniel M. * 2LT Wood, Andrew C. ' 1LT Yelenosky, Mitchell J., Jr. Warrant Officers WO1 Risden, Christopher B. -DG WO1 Dalglish, Trevor W. -HG WO1 Freiler, Lauren A. -HG WO1 Kilson, William E. -HG

WO1 Anthony, Matthew D. * W01 Buckles, Daniel M. W01 Castillo, Steven E. WO1 Collins, Christopher M. WO1 Cooprider, Ashton L. 3 W01 Courey, Victor A. W01 Fritch, Steven A. WO1 Gardner, Shaun R.

WO1 Ghabour, Marwan S. WO1 Gruessing, Garrett H. W01 Hazard, Jeremy P. W01 Herman, Shane M. WO1 Mclaurin, Edward I. WO1 Saldana, Rolando J. WO1 Sharp, James T. W01 Smith, Britton L.



- WO1 Chamberlin, Oceana R. W01 Cotten, Luke D. WO1 Denson, Thomas M. *
- WO1 Diaz, David
- WO1 Haenel, Colin P.
- WO1 Hernandez, Charles D.
- WO1 Jenney, Benjamin M.
- WO1 Lozano, Michael P.
- W01 Montgomery, Benjamin R.
- WO1 Morton, Chad A.
- W01 O'Meara, Aaron K.
- WO1 Rios, Bryan
- WO1 Shepard, William A.
- W01 Smith, Karson B.

- WO1 Spaulding, Kamron D.
- W01 Torres, Andrew S. W01 Tran, Phi K.
- DG: Distinguished Graduate
- HG: Honor Graduate
- = AAAA Member
- + = Life Member



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 042-19*

PVT Luis Cortes * - DG PVT Justin Clement PVT Richard Carranza PV2 Luis Coronasfc PV2 Daniel Crawford PFC Kyler Daniels PFC Duy Dinh PVT Brock Doom PFC Connor Dubose Class 043-19 SPC Victor McCollum * - DG **PVT Jeremy Dutton** PFC Norman Escoto PV2 EDGar Espinosa PVT Taylor Hosea PV2 Seth Jones **PVT Mitchell Losey** PVT Austin McKinnev PVT Kyle McLure PVT Manuel Ramirez PV2 Matthew Tune PVT Junior Wong Class 044-19 PV2 Raymond Robinson * - DG PVT Jung An PV2 Gerry Dilworth Jr PV2 Andsel Estiler PV2 Jonathan Geyer PV2 Charles Lehew PFC William Montenegroc PFC Erge Tarila PV2 David Todd Jr Class 045-19 PV2 Jackson Walker * - DG PVT Dan Ksor **PVT** Aaron Lines PVT Austin Morlan PVT Nicholas Passeggio PV2 Mariun Robinsonfriend PV2 Sarah Rosborough PV2 Dale Sargeant PV2 Christopher Smith PVT Trenton Tarr PV2 Haila Taylor PV2 Kaemyn Thrasher Class 046-19 PV2 Pavton Bvrd * - DG PVT Dakota Agnew **PVT James Barlow** PV2 Bennett Blaylock **PVT Brian Box** PVT Moses Delgado PVT Jaden Gartamaker PVT Josiah Hare PV2 Caleb Harfield **PVT Jake Hollier**

PV2 Alessandro Iusco PVT Yuri Jacob

CH-47 Medium Helicopter Repairer (15U) *Class 036-19*

SPC Jake Alexander Clor * - DG PV2 Connor Thor Christianson PV2 Dyllon Michael Couey PV2 Jonathan James Cowl PV2 David Thomas Fitzgerald PV2 Austin Graham Gunther PFC Jacob Tyler Hanson PV2 Nicholas Daniel Hanson PFC Kody Alexander Hawley PV2 Joshua Adam Hustead Class 202-19 PV2 Trenton James Magee PV2 Colton Taylor McIntyre PV2 Cassidy Murphy PV2 Davin Kory Redwine SPC Jacob Cordell Reynolds PFC Tobias Jacob Robertson PV2 Nicholas Ranier Robinson PV2 Dominik Salamon PV2 Trysten Lakin Williams Class 037-19 PFC Seth Carl Gordon * - DG PV2 Colby Michael Anderson SPC Eli Hunter Bricker PV2 Mehedul Hasan Khan SPC Denmark James McKenzie PV2 Jonathan Lee Oberdiear PV2 Daniel Alexis Penadozavala PV2 William Edward Peppers II PV2 Elijah Isaiah Sanchez PV2 Joseph Emmanuel Santillan PV2 Jaycob Anthony Tarin-Madrid PV2 Logan Alexander Westerlund Class 038-19 PFC Jacob Joseph Delbene * - DG PFC Cade Spencer Benjamin PV2 Andre Elliot Bouchard PV2 Kristopher Riley Britton PV2 Alex Larry Diaz SPC Emilie Ann Geno PV2 Kodie Scott Gibbins PV2 Jacob Gregory Hill SPC Karen Moree Odom PV2 Toney Reyes-Peres **UH-60 Helicopter Repairer (15T)** Class 085-19 PFC Robert Ethan Wood * - DG PV2 Christopher Nash Asplin SPC Curtis Alan Brantley PV2 Bryant Bullard PV2 Rose Ichijo Carino PFC Merritt Arthur Cheney PFC Elijah James Flemming PV2 Kameron Mitchell Gentry PFC Matthew George Hill PV2 Memphis Raines Owens SPC Derek James Ryan PV1 Kristen Lynn Shattuck Class 086-19 SPC Thorne Edward McIntosh - DG PV2 Orlando Hernandez PV2 Samuel Lee Hilborn PFCJoshua Mirabal PV2 Christopher Robert Ohmacht

MSG Wissem Ouelhazi PV2 Kyle James Quinn PV2 Gage Alexander Real PFC Nasser Peter Vincent Rivera PV2 Benjamin John Sheppard SPC Daniel Ezewuiel Torres Class 087-19 PFC Rvan Steven Scoville * - DG PFC Christopher Gerald Beekman PV2 Bailey Summer Cagle PV2 Alex James Carter SGT Lino Jesus Fernandez PV2 Alexander Cain C. Garrido PV2 William Antonio Hermans Jr PV2 Jeffrey James Lawless PV2 Melina Dee Oliver PV2 John Samuel Robbins PV2 Nolan Ray Sell PV2 Anthony Edward Wenrich *Class 088-19* PV2 Gavin Jasin Lind * - DG PV2 Brandon John Boyer PFC Theodore Joseph Burrall Jr PV2 Joseph Neal Lavoie SGT Michael Anthony Moralez PV2 Landon Lee Nutt PV2 Matthew Dylan Patterson PV2 Benjamin Scott Smith Class 089-19 A1C Anthony Canlas * - DG A1C Abel Enrique Cruz A1C Collin Joseph Cunningham AMN Ceasar Damas AMN Nicholas Matthew Kain A1C Nathan Alex Knight A1C Ace Nesbitt A1C Mark Richter A1C Richard Stout AMN Noah Zurosky Class 090-19 PV2 Gavin Allen Roche-Voss * - DG PV2 Pierce Dakota Beaugez PV2 Blake Paul Dinh PV2 Bryan Horta SPC Michael Brandon Obrien IV PFC Kyle Logan Turkington PFC Frank Garrett Valant PV2 Michael Alexander Vaughn PV2 Caleb Michael Williams Class 091-19 CPL Cliffton Scott Atchison PFC Colton Lee Beaver PV2 Jason Mackenzie Bracewell SPC Chris Edward Brite **PFCNathaniel Cole Embers** PV2 Nicole Elizabeth George PV1 Sarah Elizabeth Hamler PV2 Troy Alan Jones PV2 Collin Payne Kelley PV1 Nicholas Bryne Lansford SPC Megan Lisanne Olsin PV2 Sarah Elaine Shepard *Class 092-19* PV2 Jacob Alexis PV2 Christian Alexander Bennett SPC Robert Ryan Boyle PFC Parith Imocha SPC Jorge Lee Jasperse PFC Trey Tristen Lesley PV2 Nathaniel Christian Long

PV2 Cyrus Grant Olivares

PV2 Bailey Aaron Matiz PV2 David William Nelson PV2 Drew Alan Wrocklage

Aircraft Powerplant Repairer (15B)

Class 015-19 SPC Tiandray N. Simon * - DG PV2 Payton Tanner Campbell SGT Jennifer Diane Chilton PVT Jonathan Michael Derosia PVT Mawulorm Kofi Duho PVT Liam Carl Hatz **PVT Courtnell Harland** PVT Tommy Don Locke III PVT Rushon Ryan Martin PVT Scott Louis Paille PV2 Hunter Christopher Pierce PV2 Robert Thomas Quiroz PVT Eduardo Vallejo Santos PVT Brandon Caleb Simms PVT William Austin Suhrie **PVT Jeanpierre Tavares** Class 506-19 PFCMichael Anthony Colthirst SSG Aaron Michael Cunningham PFC Nickols Alan Fouts PV2 David Emerson Hosea PFC Orlando Rafa Nievesgonzalez

Aircraft Powertrain Repairer (15D) *Class 010-19*

SPC Peter G. Ciuca-Duffy * - DG PVT Henry Gregory Alcaraz III PVT Colby James Bradley PFC Elijas Antonio Daza SPC Garry Lee East II PV2 Milton Buddy Hope PVT Mario Steven Iriarte PVT Zachary Allen Mullins PV2 John Carl Ruggiero PV2 Jacob Cameron Steely PV2 Jamie Eric Walker

Aircraft Pneudraulics Repairer (15H)

Class 015-19 PFC Bryan A. Emtman * - DG SPC Ton Ton Aquino PVT Hunter Sean Canis PFC Conner Michael Carpenter PFC Owen Channing Eldridge PFC Elijah Gordon Essen PV2 Dasan Lane Lundy PV2 Nhut Kim Ly PV2 Christian Peter Malleris PFC Londell Lorrenzo Streete

Aircraft Structural Repairer (15G) *Class 012-19*

PVT Desmond Keion Black * - DG PV2 Shane Michael Dix PVT Dylan Roy Hoover PV2 Saaha Gabriel Hurt PVT Joshua Terry Jones PV2 Cash Douglas Key PVT Brendan Michaelgarne Machac PV2 Casadi Noelle Morgan PVT Jonathan Ray Ortiz



People On The Move

PV2 Lochlyn Stephenlee Putnam PVT Cade Logan Vanwart PFC Sergai Vlasenko PV2 Bryson Roy Wheeler PVT Brenden Glenn Wood

Avionic Repairer (15N) Class 019-19

PVT Jose Angel Cruz * - DG PV2 Vicente Colon PVT Oscar Alberto Duran PVT Hunter Ryan Fields PV2 Cynthia Gonzales PVT Brandon Michael Hadlock PVT Brittany Sinurayjazi Leslie Class 020-19 PV2 Carlos Gabriel Acevedomorales PFC Emmanuel Acevedo Acevedo PV2 lankalev Avila Pena PV2 Darnell Asquith George PV2 Joshua Christopher Jenkins SGT Jackson Thomas McNulty

- PV2 Jahleel Michael Punter

Aviation Operations Specialist (15P)

Class 19-044 PV2 Nicholas Barbour **PV2 Marco Flores** PV2 Ilah Foster PV2 James Gregory PV2 Marc Gutierrez **PVT Jacob Hall** PVT Tyshawn Jenkins PVT Mckenzie Kapphahn PV2 Jasmin Maya PV2 Haywood Mayse PVT Keaghen Miglorini PV2 Jonte Shavers **PV2** Georgia Teems

AH-64D Armament/Electrical/ **Avionics Systems Repairer (15Y)** Class 019-19

PVT Dencil Alvarez SPC Dzifa Anyeteianum PV2 Riley Baxter PVT Dean Briggs PVT Nicholas Brock PV2 Mitchell Cochran **PVT Sean Davis** PV2 James Dickerson PVT Jeralyn Johnson PFC David Kirkwood PVT Jerrad Plocha SPC Cody Williams *Class 020-19* SPC Patrick Dyer * - DG PFC Carlos Evans **PVT Jason Gonzales** PVT William Hoffpauir PV2 Sheldon Laney PVT Shawn Myers PFC Isaac Powell SPC Charles Quaas **PVT** Pablo Rodriguez PVT Kyle Stuever PVT Silas Webb Class 504-19 SPC Nolan Watkins * - DG **PVT Ryan Deoliveira**

PVT Benjamin Elkhardt PVT Giovanni Iniquez SPC Hermenigil Lopez PFC Trey Summerlin PFC Andrew Valencia Jr PFC Colton Warner PVT Zachary Wear PVT Christian Wilkins PVT Jordan Williams

- DG: Distinguished Graduate
- HG: Honor Graduate
- = AAAA Member
- + = Life Member

UNMANNED AIRCRAFT SYSTEMS (UAS) GRADUATIONS

WARRANT OFFICER

AAAA congratulates the following Army graduates of the Tactical Unmanned Aircraft Systems Operations Warrant Officer Technician Course, MOS 150U, at Fort Huachuca, AZ.

Tactical Unmanned Aircraft Systems Operations Warrant Officer Technician Course 7 Graduates, 26 Nov 2019

W01 Benjamin J. Leonard - DHG W01 Cody L. Stewart - HG W01 Corey G. Dodds W01 Ted A. Freeman WO1 Wayne G. Gonzales W01 David F. Keasler WO1 George Valdez

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 9 Graduates, 22 Nov 2019

PVT Zackery S. Drumheller - HG SGT Roberto A. Galindo SPC Daniel P. Deluca PV2 Zane R. Miller PFC Daniel E. Montero PV2 Troy J. Rojas PVT Brandon N. Boyster PVT Robert E. Wineland PVT Johana E. Zambrano 19 Graduates, 11 Dec 2019 PFC Miguel Robles - HG PFC Pramote Siri PFC Eduardo M. Dominguez PFC Austin A. Gomon PFC Charles Henderson PFC Do W. Kwak PFC Lucas R. Seibert PV2 Cory B. Avila PV2 Caleb E. Cantu PV2 Nathan A. Kanipe PV2 Timothy Morris PV2 Clifford O. Ogola

PV2 Edwin J. Ortiz PV2 Sean P. Pagon PVT James B. Butler PVT Deen M. Overturf PVT Gerardo Palomares PVT Daniel D. Stanton PVT Devon L. Thompson

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

- 38 Graduates, 16 Dec 2019 PFC Jocelyn M. Ott DHG SGT Brock C. Post - HG SGT Kevin M. De Leon SGT Matthew D. Najera SGT Brandt M. Skillman SPC Michael A. Hartman SPC Timothy S. Hufnell SPC Andrew J. Monroe SPC Daniel M. Morris SPC Nehemiah V. Rucker SPC Alex M. Delgadillo SPC Forrest A. Hammond SPC Bryan A. Laboymolero SPC Joshua J. Lara
- SPC Carlos J. Wilwayco SPC Brandon M. Englert SPC Markel D. Hoffler PFC Jarvis B. Danielly PFC Piero Dito PFC Tony P. Vongsavath PV2 Tiana M. Blanchard PV2 Chad W. Collins PV2 Howard D. Dalev PV2 Michael A. Elias PV2 Kakha Kakhetelidze PV2 Marek M. Landeros PV2 Carlos I. Lopez PV2 Ruben C. Miller PV2 Joshua J. Roman PV2 Nevan C. Segraves PV2 Tucker W. Smith PV2 Kendall T. Teitsma PV2 Jamel M. Wade PV2 James S. Wilson PV2 Andrew H. Wolf PVT Payton A. Drake PVT Dahlten L. Hallsen

-DHG = Distinguished Honor Graduate -HG = Honor Graduate = AAAA Member + = Life Member

- ATTENTION -

ALL KOREAN WAR & VIETNAM WAR VETERANS



SPECIAL AAAA MEMBERSHIP RATES!



Membership Rates Start at \$15! Contact: membership@quad-a.org for details. quad-a.org



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 February 28, 1995

Briefings

2nd Armored Division, Fort Hood, Texas, has been chosen by the Army as its Experimental Force (EXFOR) for Force XXI operations. The EXFOR will be a force to conduct experiments in digitization; and therefore, gain insights and experience for new designs and equipment and, fresh

operational and doctrinal concepts for Force XXI. EXFOR's experimental component is as a digitized brigade-sized task force, AKA, Task Force XXI. Too, "slice" units from division formations will provide combat support and combat service support in such forms as intelligence, artillery, aviation, air defense, engineer, maintenance, medical and logistics support to the task force during combat operations. Task Force XXI is the prelude to a full-sized divisional experiment.



Distinguished Graduates

Graduates from the Army's Initial Entry Rotary Wing Course 94-10, pose with BG Ted F. Malloy, III, Chief of Staff, Tennessee Air National Guard. Left to right are

pictured WO1 Jeff Starrit; WO1 Martin Fish; BG Mallory and WO1 Jim Stidfole, II. WO1s Starrit and Stidfole received a set of sterling silver basic aviator wings for excellence during their flight training from AAAA.

CareerTrack

Active AAAA members may have a 30-word classified employment ad published in two consecutive issues of Army Aviation free of charge. If you would like to take advantage of the AAAA CareerTrack employ-



ment referral service, but are not a member of AAAA the solution is simple. Request an AAAA membership application with your CareerTrack application. For further information, contact: AAAA, 49 Richmondville Avenue, Westport, Ct. 06880. Telephone: 203-226-8184; FAX: 203-222-9863.



full-sized mock up can be towed down runways and taxiways, simulating landings and takeoffs, since the module can be raised and lowered, preparing pilots and co-pilots to deal with sun glare, airport lights and other circumstances affecting takeoffs and landings.



50 Years Ago February 28, 1970

Training Module

A portable flight deck of Lockheed's new L-1011 Tri-Star jetliner provides pilots with a chance to check the visibility and instrument lighting in the flight station of the new aircraft before

it flies later this year. This



Space Visitor

Field Director of the NASA Space Task Group, Colonel Frank Borman, spent ten days in Vietnam during the Christmas holiday. Here he is shown with personnel from the

 22^{nd} Aviation Bn. (Cbt) and, the 195^{th} , 11^{th} and 273^{rd} Aviation Companies of the 1^{st} Aviation Brigade.

New Order

January 30: The U.S. Army placed an order for another 170 AH-1G Huey helicopter gunships from Textron's Bell Helicopter Company. This brings to a grand total of 1,000 of the heavily-armed, high-speed helicopters purchased by the Army from Bell since 1966. Some 800 of the gunships have been delivered. Deliveries for the order in question will commence

July 1971 and, conclude August 1972. The AH-1G can carry a ton of mixed armament fired from a chin turret and wing stores; and, can dive at speeds upwards of 219 mph.





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 2021 induction is June 1, 2020

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

Army Aviation Hall of Fame

Lieutenant General August M. Cianciolo

Army Aviation Hall of Fame 2013 Induction – Ft. Worth, TX



TG August M. "Gus" Cianciolo, a Master Army Aviator, helped shape Army Aviation through dedicated application of visionary leadership and management skills over a 34-year career.

His distinguished career includes two tours in Vietnam where he commanded B Battery, 2nd of the 20th Aerial Rocket Artillery (ARA) and served as the battalion S-3. During each tour his superior leadership led to his unit receiving special recognition for valorous performance. His individual bravery was also recognized with a Bronze Star for valor.

Other distinguished service included program management of two Army acquisition programs – the Standoff Target Acquisition System and the Multiple Launch Rocket System. As the Army Staff Director of Weapons Systems, he was responsible for oversight of the development, funding, fielding and sustainment of all Army Aviation programs to include the Black Hawk, Apache, Chinook and Kiowa Warrior. Serving as the commanding general of the Army Missile Command and Redstone Arsenal he led the development, production and fielding of the HELLFIRE missile on attack and armed reconnaissance helicopters. Culminating his career as the Military Deputy to the Army Acquisition Executive and Director of the Army Acquisition Corps he provided management oversight of all Army acquisition programs.

His ability to work effectively with senior leaders and subordinates ensured that there was "one voice" advocating for Army Aviation. His sustained outstanding leadership established a bedrock foundation for the Army's highly capable combat aviation systems of today and tomorrow.

Technology that lets pilots focus on the fight.



Securing vertical lift superiority in the multidomain battlespace will require even greater mission capabilities than are available today. Featuring flexible and intelligent systems, the agile, lethal and survivable RAIDER X[™] provides both pilots and warfighters on the ground the reach, protection, and lethality required in the most demanding and contested environments. Learn more at lockheedmartin.com/raiderx

Lockheed Martin. Your Mission is Ours.®



© 2020 Lockheed Martin Corporation