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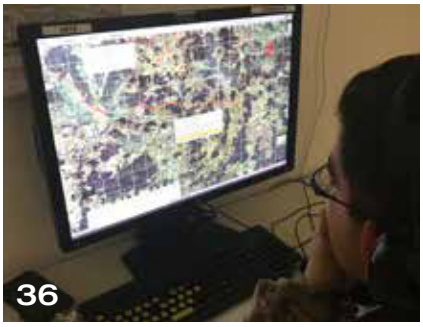

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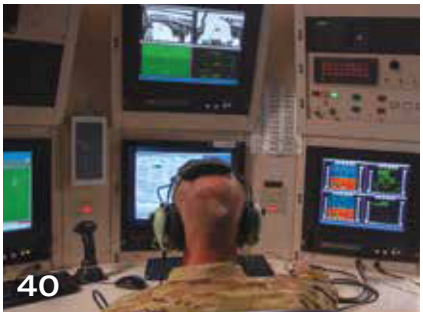

SPECIAL FOCUS

FEATURE

DEPARTMENTS

AAAA NEWS

ARMY AVIATION COMMUNITY NEWS

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On The Cover

Briefings ▶ *Late Breaking News - Announcements*

POTUS Taps Esper as Acting SECDEF/McCarthy as Acting SECARMY

DOD PHOTO BY USA FERDINANDO

U.S. ARMY PHOTO BY CPT ADAN CAZAREZ

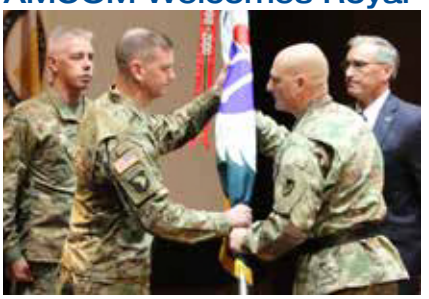
President Donald Trump announced that Secretary of the Army Mark T. Esper (left) would take over as Acting Secretary of Defense and Under Secretary of the Army Ryan McCarthy would become Acting Secretary of the Army on June 24th. Esper is backfilling the void left by Acting Secretary of Defense Patrick Shanahan's withdrawal of his nomination for the top Pentagon post. President Trump subsequently announced his intent to nominate Esper for secretary of defense, and McCarthy as secretary of the Army. McCarthy had served for four months in 2017 as the acting Army secretary.

Francis Takes Over USAACE

U.S. ARMY PHOTO BY KELLY MORRIS

MG David J. Francis accepts the U.S. Army Aviation Center of Excellence colors from LTG Michael D. Lundy, U.S. Army Combined Arms Center and Fort Leavenworth commanding general, as he assumes command of USAACE and Fort Rucker from MG William K. Gayler (back to camera) during a change of command ceremony on Howze Field, Ft. Rucker, AL on June 17, 2019. Francis comes to Ft. Rucker from his most recent assignment as the director of Army Aviation at the Pentagon. Gayler heads to Europe and his next assignment as the J-3 Operations/ Cyber, U.S. Africa Command.

AMCOM Welcomes Royar



U.S. ARMY PHOTO

BG(P) K. Todd Royar (left) receives the Aviation and Missile Command colors from LTG Edward Daly, deputy commanding general of the U.S. Army Materiel Command, during a June 10 assumption of command ceremony at Bob Jones Auditorium, Redstone Arsenal, AL. AMCOM Executive Director, Mr. William Marriott, and senior enlisted leader, CSM Mike Dove participated. A career Army Aviator, this is Royar's second time being assigned to AMCOM. He previously served as the AMCOM Chief of Staff from 2015 to 2017. He returns to AMCOM from his most recent assignment with the 101st Airborne Division (Air Assault) at Fort Campbell, KY, where he served as the deputy commanding general for support.

Koziol New CWOB

U.S. ARMY PHOTO

CW5 Jonathan P. Koziol receives the charter as the eighth Chief Warrant Officer of the Aviation Branch from MG William K. Gayler, then-commanding general of the U.S. Army Aviation Center of Excellence and the Army Aviation Branch Chief at Ft. Rucker, AL on May 3, 2019. Koziol comes to Ft. Rucker from the office of the Director of Army Aviation at the Pentagon and replaces CW5 Joe Roland who departed for West Point, NY where he took command of the 2nd Avn. Det. at the U.S. Military Academy.

Grinston Next SMA

U.S. ARMY PHOTO

CSM Michael A. Grinston (shown here taking a selfie with Soldiers from the 1st Combat Aviation Brigade) will be sworn in at the Pentagon as the 16th sergeant major of the Army on August 16, 2019. The combat veteran comes to the position from being the senior enlisted leader for U.S. Army Forces Command and succeeds SMA Daniel Dailey.

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Navigating the Winds of Change

Summer is often a time of change in our Army, as families move and Soldiers report to new positions and new duty stations. Our Army Aviation leadership is no exception.

MG Dave Francis assumed command of the Army Aviation Center of Excellence at Fort Rucker on 17 June. Dave is no stranger to Fort Rucker, having served as the commanding general of the Combat Readiness Center and before that as deputy commander at Fort Rucker. We welcome him and his wife Jodie back!

In Huntsville, MG Todd Royar assumed command of AMCOM on 10 June after serving as the 101st Airborne Division (Air Assault) DCG-Support. Todd previously served at AMCOM as the chief of staff. Again, we welcome Todd and his wife Mary Lou back to Huntsville.

Another key member of the Army Aviation leadership, BG "Mac" Mike McCurry took over as the director, Army Aviation in the Army G3/5/7 office as the backfill to MG Francis on 17 June. Mac is very familiar with the Pentagon, where he served as chief, DAMO-FDV prior to becoming DCG at 2ID, ROK. It will be great for Army Aviation to have Mac back in the Pentagon!

There is also a flurry of movements in the most senior civilian positions of the Pentagon as nominations for Secretary of Defense and Secretary of the Army are solidified for the Honorable Mark Esper and the Honorable Ryan McCarthy, respectively. Both are strong supporters of Army Aviation, and we wish them our best in their new positions.

In Washington, the budget has taken on critical importance as our elected officials seek to balance our defense needs with domestic requirements, and as they also seek to support Army readiness efforts while seeking to make investments in the modernization of our force. Kevin Cochie's article in this issue on page 54 gives great insights into how this process unfolds in our nation's capital.

As Army Aviation continues to build readiness with our current fleets and Soldiers, our leaders are also seeking to invest in the future through Future Vertical Lift (FVL) programs. Our focus this month, Training and Simulation, is incredibly important to both our current fleets and readiness and our future, and so I draw your attention to MG Dave Francis' To the Field article on page 10.

Our chapters continue to do their role to support Army Aviation, our soldiers and their families. In June, our National Senior Vice President and former PEO Aviation, MG Tim Crosby and I attended a superb dinner meeting with the North Texas Chapter, hosted by Chapter President Steve Mathias. The guest of honor was the Army's current PEO-Aviation,

AAPI PHOTO BY RENÉ IBÁÑEZ

AAAA National President, MG (Ret.) Jeff Schloesser talks with incoming commanding general of U.S. Army North/5th United States Army, LTG Laura Richardson, while at the 2019 Summit in Nashville, TN.

MG Thomas Todd, who gave a heartfelt and substantive update on everything his team of teams is doing to maintain our current "top of the line" helicopter fleets while setting the stage for FVL. It was a great night, and we sincerely thank General Todd for taking the time out of an incredibly busy schedule to be with us.

Within the National Executive Board, we are finalizing nominations for Emeritus status as well as adding board members to the National Members at Large team. Al Roberson and Bill Morris have graciously accepted our request to join the board. We are also very pleased to welcome SGT Ashley M. Sanchez to the National Executive Board as a representative of our junior enlisted Soldiers. We are in the process of identifying and bringing on to the board a junior warrant officer and a 1st lieutenant/captain to make sure those cohorts have a voice and direct input to AAAA leadership as well.

As a reminder, we have the Luther G. Jones Army Aviation Depot Forum in Corpus Christi, 20-21 August; our AAAA National Executive Board semi-annual meeting in Washington, DC, 13 October; and in Huntsville, our Aircraft Survivability Symposium, 18-19 November, followed by the Joseph P. Cribbins Army Aviation Product Sustainment Symposium on 20-21 Nov. It is a significant year of both change and continuity within Army Aviation, and I encourage you to get involved and stay engaged!

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

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Simulations to Enhance Aviation Training Capabilities

By MG David J. Francis

It is an honor for Jodie and me to sign on as your 17th Chief of the Aviation Branch. Our sincere gratitude to MG Bill and Michelle Gayler for their steadfast leadership of the branch over the last three years. MG Gayler set us on a path to maintain Aviation as an asymmetric advantage for our nation, and to develop and field leap-ahead capability in the future.

U.S. ARMY COURTESY PHOTO

COL John Ferrell (center) briefs (left to right) Mr. Tim Bishop, Deputy PEO STRI; MG Maria Gervais, STE CFT Director; and MG William Gayler, then-USAACE CG on the Aviator Training Next (ATN) Program while CPT Marisa Lock performs traffic patterns in a VR Black Hawk on June 4, 2019 at Ft. Rucker, AL.

His pursuit of training the best Aviators in the world endures and is highlighted in this article featuring Aviator Training Next. Our best wishes to the Gaylers in their next assignment, and it is our honor to serve beside the outstanding Soldiers, DACs, and leaders of this branch.

As the Army recalibrates and reorients for Large Scale Combat Operations (LSCO), the way commanders will train must continue to adapt. This training evolution will impact both individual and collective training while leveraging the latest technology tools. The U.S. Army Aviation Center of Excellence (USAACE) Directorate of Simulation (DOS) continues to spearhead this transition into the future with two key initiatives: Aviator Training Next (ATN) and the Synthetic Training Environment (STE) programs. The implementation of these programs could fundamentally transform the way we train aviators during the Initial Entry Rotary Wing (IERW) course and provide aviation commanders more effective means for conducting collective training in a synthetic training environment at home station. ATN will test new approaches to train Aviators by introducing innovative commercial-off-the-shelf (COTS) technologies that have already matured to a level that can readily support Army training requirements. This, coupled with a better understanding of cognitive science, has potential to considerably improve student learning. Augmented and virtual reality capabilities will be key drivers for synthetic training in the future and USAACE will work to stay on the leading edge. ATN, which focuses on individual training, combined with the STE, will fundamentally transform the way we train to meet tomorrow's challenges.

Aviator Training Next (ATN)

Beginning in July of 2019, USAACE will execute a series of IERW test programs at Fort Rucker, AL to assess the effectiveness of virtual reality (VR) flight training capabilities. USAACE intends to maximize modern technologies and advances in cognitive science to improve how we train pilots. The ATN concept is modeled on the Air Force's Pilot

Training Next (PTN) program and seeks to produce more proficient students by reinforcing basic pilot flight maneuver tasks. The program increases frequency and repetition through integration of additional VR training into the current program of instruction (POI) by using a training system consisting of a low-cost COTS virtual trainer and flight software, artificial intelligence/intelligent tutoring and cognitive measurement. In addition to scheduled POI training periods, students will have access to these training devices after hours and on weekends to practice more frequently.

The focus of the ATN program is within the Basic Army Aviator Course (BAAC) portion of IERW. Each pilot class will be divided into a control group and two test groups in order to determine the right mix of live / VR / simulation that results in increased proficiency in base tasks. The use of VR is introduced during ground school through the end of primary training and student progress will be measured through multiple live-flight check rides to capture analytics of proficiency, comprehension, and overall flight skill development as compared to the control group. The tasks being taught on the flight line will be reinforced with the VR systems which will allow students to practice maneuvers and be measured against the maneuver standard while being coached by an intelligent tutoring system that will measure the student's performance and provide real-time and post maneuver feedback. The concept proposes that by gaining a higher level of proficiency in VR and simulation, instructors can maximize each live flight hour and focus on more warfighter skill development during later phases of IERW. This enhancement to the training of individual tasks will lay the foundation for a successful collective training environment as well.

Synthetic Training Environment

The Synthetic Training Environment (STE) capability will support Army collective training in a multi-domain battlefield. The STE will address the challenges of multi-domain training by providing a scalable environment (live, virtual, constructive, and gaming) of common characteristics that use common standards, architecture, terrain and authoritative data. The STE will provide the Army a usable, realistic, and complex training environment that improves readiness through increased repetition to achieve mastery of warfighting skills.

For Army Aviation, the STE will provide emerging technologies like mixed reality visual displays and artificial intelligence (AI) to expand and enhance training efforts. The envisioned end state will incorporate actual aircraft operational flight program (OFP) into the synthetic environment and will reach concurrency with fielded aircraft within 90 days. Additionally, the STE will be able to import Aviation Mission Planning capabilities in conjunction with the STE's tools to preview, control, and assess training. To enable better training flexibility and to meet the commander's needs, the STE trainer will be modular to the extent that it can be brought to various locations to support unique training or mission requirements, whether at the hangar, in a classroom or at a deployed location.

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.

The Next Step in Simulation

By CW5 Jonathon P. Koziol

U.S. ARMY PHOTO BY GEORGIOS MOUMOULIDIS

Army Aviators assigned to B/1-214th Aviation conduct annual CH-47 Flight Simulator training at the flight simulator in Illesheim, Germany.

First, I am honored to be selected as the next Command Chief Warrant Officer of the Branch. I understand the importance of the position and my responsibilities to represent our aviation warrant officers, but more importantly, the aviation branch.

I will continue to work hard on initiatives that will better manage and benefit our aviation warrant officers. I will embrace the opportunity I have been given and work hard for our aviation warfighters. There are multiple efforts moving forward and I am excited to move them over the goal line.

At my previous position at the Pentagon, I witnessed the day-to-day hard work our Aviation Enterprise is doing in modernization, policies and doctrine that will continue to improve on an already lethal aviation warfighting force.

Of course, this all starts right here at Fort Rucker with our flight training program. To ensure we continue to produce the best aviation Soldiers in the world, the Branch must be funded to 100% of our training requirements. In the past several years, due to budget constraints, we have not always produced the number of aviators required annually; the bottom line is cost. We must continue to find solutions to produce a better aviator at the best value and advancements in simulation is one of many solutions.

Tech Innovations

We are on the brink of technical innovations that will reshape the way we train our future warfighting forces. Advancements in virtual reality (VR), artificial intelligence (AI) and advanced biometrics will aid us in training Soldiers more efficiently, which will optimize production at the schoolhouse.

As with anything in life, "practice makes perfect." In whatever profession we work in, frequency and repetition at tasks make you better. Unfortunately for

our aviators, especially flight students, the ability to just jump into a simulator or actual aircraft to practice is not always practical. Army aviation training is expensive. Especially, if we have to focus training in actual aircraft. Even though simulation devices are limited in number due to the cost being in the upwards of millions of dollars, they give us the ability to offset costs of maintaining proficiency in our fighting force.

Now, imagine there are companies out there who could produce new VR training devices and significantly drive down costs. Add in AI, who will be the virtual instructor capable of instructing a student with immediate feedback. Biometrics can tell if the aviation student is looking at the proper instruments or manipulating the controls properly and measuring the cognitive load of the student. Understanding when the student is task saturated or if it appears the procedures are too easy. The ability to adjust training immediately for the individual will allow us to harness proficiency-based training to standard instead of time.

Venues

As the technology improves and drives down costs, it will give us the ability to have greater access to training devices in the classroom, at work, and possibly at home. Classroom trainers for each student and multiple training devices at places like the technical library will allow the students to practice and hone their skills. It was not too long ago it was a huge step to transition to a fully digital classroom and issue computers to each flight student. Looking forward, one day we can issue VR devices that are part of the flight students training aides. The frequency and repetition afforded our students combined with the immediate instruction will allow us to gain efficiencies at the beginning of flight school and possibly with other aviation courses. This innovative training will allow us to reinvest training dollars into our advanced aircraft training and tactics.

With that being said, there is no replacement for the real thing. What VR and AI can do is allow us to optimize the training dollars while still producing a better Warfighter.

Change is coming. Let us all embrace this change and help to work towards the future. Think outside the box and not in the aspect of "that's how we have always done it" mentality. What I ask of you, the Warfighter, is this: Although the technical advancements we are working on here in flight school and what you work with in your aircraft are leading edge, we must remember the basics. Simple things such as reading a map and terrain recognition are the building blocks for the tactics we will use to counter our adversaries. Take advantage of the Aviation Warfighting Initiatives and exportable training packets that have been produced. Never quit on bettering yourself.

I look forward to working with all of you to better our Branch.

Above the Best!

CW5 Jonathan P. Koziol is the chief warrant officer of the Aviation Branch with the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.

Balance

By CSM Brian N. Hauke

PERSONAL PHOTO FROM CSM HAUKE

The author and his wife finding the balance with his 14' V8 powered airboat which he started in December 2018 and completed in March/April 2019.

To be 100% transparent with everyone, I am going to date myself with the following quote regarding "balance." For this article, I wanted to share some of my thoughts on "balance" from the movie, The Karate Kid (1984) – yes, over 35 years ago.

For those who are not familiar with the movie, there is a discussion over the course of the movie between Mr. Miyagi, "the karate master," and Daniel, "the bullied teenager," on having balance. The famous quote from Mr. Miyagi to Daniel, "Better learn balance. Balance is key. Balance good, karate good. Everything good. Balance bad. Better pack up, go home. Understand?" Wow! I don't think it can get much clearer than that! Bottom Line Up Front – ***You must have balance!***

Leaders, our Army asks so much from everyone, both Soldiers and families. I would share the most important part of Mr. Miyagi's philosophy, "Balance is key. Balance good, everything good!" If you're like me, you enjoy heading out to the garage, the driveway, the shady tree, or the shop for some wrench time. Whether you're in the middle of a full-blown restoration or just a simple oil change on your daily driver. Getting out to the shop is great for more than just the obvious reason of finishing a project. Wrenching, sanding, grinding, cleaning, and fixing is therapeutic to the mind, body and soul. To me, the shop is a great place to escape from the daily grind. It's an opportunity to enjoy your current project, hang out with family or friends, listen to some tunes, and enjoy a refreshment or two. Okay, maybe three!

It doesn't matter if your "escape" is into the shop, woods, lake, river, golf course, range, gym, volunteering, scouts, coaching, camping, movies, flying, motorcycles, yard work, and the list could go on and on. Whatever your choice may be, the key to balance, is to get out there, get moving forward, and enjoy your time. Your "escape" can be a de-stressor. It sounds funny but slowing down to work on your thing

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Enlisted Aviation Soldier Spotlight

Each month we will feature a past AAAA National or Functional Enlisted or NCO Award winner as part of our ongoing recognition of the Best of the Best in our Aviation Branch. The CY 2018 National winners were featured in the April/May AAAA Annual Summit issue.

SFC Eric D. Wright

Company B, Special Operations Training Battalion
Fort Campbell, Kentucky

AAPI FILE PHOTO

James H. McClellan Aviation Safety Award, 2014

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SFC Eric Wright performed outstandingly and with unwavering commitment as the Bravo Company, Special Operations Aviation Training Battalion's (SOATB) safety NCO and officer. This company is the most diversified within the Special Operation Aviation community. It is equipped with 32 helicopters of three different airframes. With the number of active duty personnel only the size of a platoon, in order to effectively execute the company's mission in the safest manner possible it takes a dedicated group of aviation professionals operating within a world class safety program; a safety program setup and run to perfection by SFC Wright. While serving as both the company safety NCO and officer, his accomplishments included: 10 site surveys for the unit's offsite training areas, completion of the Laser Safety Officer's certification, the safe execution of 10,000 flying hour program, two commendable ratings on separate inspections, and the training of all civilians, contractors, and active duty Soldiers in the pre-accident plan. SFC Wright's commitment and dedication to the organization and its safety program is unwavering and clearly identify him as the winner of the 2014 Army Aviation Association of America James H. McClellan Aviation Safety Award.

can help provide balance. Who would have thought?

You've heard me talk about our Branch and why the Soldiers make it so great. Indispensable relationships and lasting memories are built among these people of our branch. Take a step back and think about how many friends you have made from your passion or hobby.

Today's Army is moving faster than the aircraft we fly and maintain. Budgeting time to be in the shop and hanging with your family and friends accomplishes more than just progressing on your build or theirs. You foster a sense of accomplishment, self-pride, and probably the most important thing, making memories.

When your "car buds, golf buds, motorcycle buds, or hunting buds, etc." get into the mix, you become part of a fraternity. Developing a special feeling of camaraderie when you work on a project together. Pushing one another to meet a deadline, make a show, or just make it possible to cruise your ride is the whole point. Another bonus and possibly the best reason is the opportunity for some quality family time. When you have teenage kids, it can be hard to find a common topic or subject, but "shop time" can help bridge some of those gaps. Seeing your son, daughter or your better half get excited about working on a project is a remarkable feeling. As you look back, I'm sure there are many family memories you've made as you share your passion/hobby with your children and your spouse.

So, grab a friend, child, dad, mom, or spouse and start that project you've been thinking about. I urge you to get out there, whether it be in the woods or on the golf course. Set a deadline/goal, change the deadline, and then change it again! The key is to have fun and enjoy the entire process. It's the process of working with loved ones and friends, giving each other a hard time, making some memories, and doing something awesome! Thanks again to each and every one of you out there for all you do!

Remember, "Balance is key. Balance good, everything is good!"

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.

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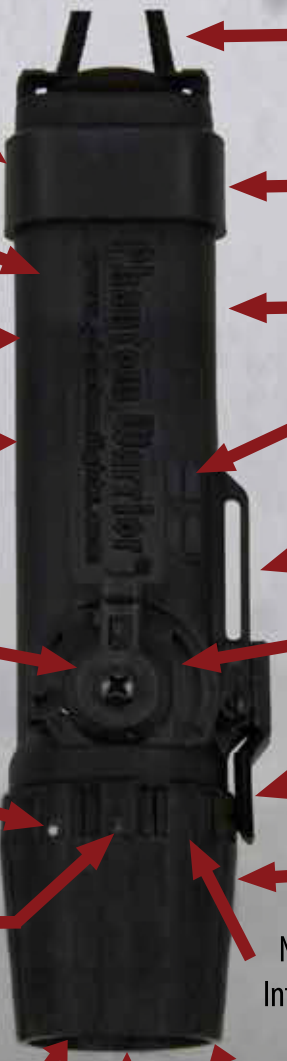

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The Heat is Rising

By COL Jason L. Miller

U.S. ARMY NATIONAL GUARD PHOTO BY PFC EMILY WHITE

Oklahoma National Guard Soldiers with Company C, 2-245th Aviation Battalion, 90th Troop Command refuel their UH-60 Black Hawk helicopter on May 25, 2019 in Tulsa before departing to Camp Gruber, Oklahoma to evacuate residence stranded by recent storms.

The summer season brings new hazards aviators must mitigate, including increased temperature, dynamic and severe weather conditions, and generally higher operational tempo.

During the past five years, 57 percent of Class A mishaps and nearly 60 percent of all Class A-C mishaps occurred during the summer months of June through September. Last year alone, six of the 11 mishaps occurred during this time frame. Specific risks and challenges associated with the summer flying months manifest themselves in mechanical and physiological domains and are reduced through constant awareness and leader involvement.

As the spring fog and rain give way to summer, most units take advantage of the increased number of flying days. Based upon increased temperature, performance planning cards objectively identify the reduction in aircraft engine performance but don't intuitively indicate the inevitable decrease in maneuverability. Additionally, dynamic variations in the weather – from exceptionally dry to thunderstorms – all require changes to the actual techniques of maneuvering an aircraft. In dry conditions, degraded visual environments might become more prevalent due to dust and grass. During severe weather such as thunderstorms and lightning, an aircraft could encounter more intense turbulence even miles away from the actual storm cell. Professional aviators, using the weather forecast and knowledge of the fundamentals of flight, have greater success accounting for aircraft limitations due to the summer weather environment.

Reduced Crew Performance

A more subjective challenge during warm weather conditions is the potential reduction in crew performance. Long before an aviator would become a heat casualty, there is commonly fatigue associated with operating in a hot environment while wearing required aviation life support equipment — at least until the body acclimates. When fatigue is combined with dehydration and long work hours, crew and support personnel might experience reduced physical and mental performance well before the end of the duty day. Leaders must assess crews physically and holistically, and not let only the risk common operational picture dictate crew capacity.

Environmental Factors

Leaders need to address environmental factors using the lens of these mechanical and physiological challenges as they pertain to mission complexity. First, pilot briefings specifically dedicated to the effects of the environment on man and machine increase awareness, and environmental impacts can be further demonstrated through simulated flight. Next, mission briefing officers are the commander's first line of mitigation and have the responsibility to review overall mission planning (and performance planning), assess hazards and profiles, and assist in developing control measures to conduct operations effectively and safely. Finally, the mission approval authority needs to conduct a real-time assessment of the crews and mission to balance risk versus reward. Leaders must understand there are no routine missions.

Lastly, with extended daylight during the summer months, aircrews should be aware of potential hazards as NVG operations push later into the duty day and possibly outside an aviator's normal circadian rhythm. Leaders and mission briefing officers must be aware of the effects on fatigue and crew endurance, and plan operations accordingly.

Even the most professional aviators can become complacent when operating in a familiar environment without accounting for the change in summer weather. When environmental conditions change, leaders, mission briefers, and aircrews must remain vigilant to not fall prey to a comfort zone associated with repetitive missions. As a leader, are you looking forward, remaining vigilant, and considering the changing environmental conditions as you prepare for your next mission?

Readiness Through Safety!

COL Jason L. Miller is the deputy commander of the Combat Readiness Center at Fort Rucker, AL.

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Synthetic Aviation Maintenance Training Environment

By COL Andrew D. Cecil

Army Aviation has the opportunity to advance Aviation maintenance training into the synthetic training environment.

Aviation equipment and systems have advanced from the analog to the digital over the past two decades (UH-60A/L to UH-60M; CH-47D to CH-47F; AH-64A to AH-64D/E). The training for helicopter maintenance personnel has not changed commensurate to this change in complexity. We can and should now correct that deficiency.

Aviation maintenance training in Army units is essentially an apprenticeship program requiring close supervision, limited learner autonomy and restricted initiative. These controls represent necessary restrictions on the apprentice due to the high cost of mistakes on operational aircraft. This system restricts training at unit level principally to on-aircraft training and studying schematics. It is a system designed, implemented, and necessary for the 20th century.

Army Aviation is now solidly in the 21st century; a new system to train, certify, and track Soldier aviation maintenance training is required. Army Aviation needs a synthetic training environment (STE) aircraft maintenance trainer for training and maintaining perishable aircraft maintenance tasks without physically affecting an operational aircraft. The STE aircraft maintenance trainer should provide training in aircraft systems, subsystems, and component familiarization as well as fault identification, isolation, and remediation. Ideally, the STE would provide multiple levels of training including: guided task training with step by step instructions; unguided task training requiring the student to reference the appropriate maintenance manual; and advanced training on trouble shooting by use of faults included in the system. The system should track students by a unique ID to allow leadership to track and document individual Soldier training completed.

The Army Reserve Aviation Command (ARAC) consists of two expeditionary combat aviation brigades (ECABs), four tactical rotorcraft battalions and an aviation support battalion (ASB). The ARAC's tactical rotorcraft maintenance footprint is spread over 11 installations and nine states. Procurement of large or expensive systems is cost prohibitive for a geographically dispersed command. The STE maintenance trainer must be cost effective and updates should be "pushed" automatically rather than requiring user actions to update to a new configuration.

In order to advance our Aviation maintenance training programs, Army Aviation should partner with the Synthetic Training Environment Cross Functional Team (STE CFT) to identify and test appropriate systems. Our force will remain in high demand and will continue to execute at a high OPTEMPO. Our Soldiers deserve the best training we can provide. Moving to a synthetic training environment allowing our Soldiers to learn at an accelerated pace based on individual initiative is critical to changing the paradigm.

COL Andrew D. Cecil is the deputy commander of the U.S. Army Reserve Aviation Command located at Fort Knox, KY.

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Introducing Virtual Training into Aviation Maintenance

By SFC Matthew Harris

The 128th Aviation Brigade must focus on developing and implementing advanced technology training devices across all rotary wing airframes to remain relevant and improve the quality of training.

U.S. ARMY 128TH AVN. BDE. PHOTO

Soldiers now train in virtual reality – practice makes perfect!

Incorporation of virtual training across all the Brigade's Programs of Instruction (POI) will enable the organization to train more Soldiers, and train them faster. The 128th Aviation Brigade continues to work with program managers and members of the Aviation industry to plan for, develop and resource virtual training devices in order to effectively educate aircraft maintainers utilizing the adult learning model.

One of the ways the Brigade is currently using virtual training is the Virtual Interactive Environment (VIE) in the 15F Aircraft Electrician courses. The VIE is a computer-based system that can be configured to support classroom instruction, as well as maintenance training exercises in conjunction with a full mock-up aircraft training device. These devices enable instructors to provide lecture type instruction while simultaneously delivering visual concepts that demonstrate aircraft system theory and capability more comprehensively. Under instructor-controlled and self-paced training, individual trainees can cover systems location, descriptions, theory of operations, maintenance operational checks (MOC), simulated fault isolation procedures (FIP), and component removal / reinstallation tasks.

Throughout MOCs troubleshooting, and FIPs, this device can be used to enhance learning and enforce proper maintenance procedures in a controlled environment. Visual demonstration of how systems interact such as engine fuel and airflow or hydraulic systems and flight control functions, provides a clearer understanding when performing maintenance on actual hardware components. Thus, reinforcing a Soldier's ability to conduct research and seek the answers to their own questions, increasing their technical knowledge and knowledge retention. This device is not designed to take away from hands on training, it is meant to supplement training and increase overall knowledge. Instructors can use these devices to impart a deeper lever of understanding. These devices are also used for students attending Advanced Leaders Course. These devices have quick search capabilities and are excellent for refresher training for Soldiers at all levels.

Since these programs are computer-based, it is considerably less expensive than purchasing traditional simulated aircraft trainers. While each trainer is physically identical, the media can be designed for a specific aircraft system or interchangeable. When updates are required, the virtual trainer can be updated as a simple download of the new information, while other training devices might have to be transferred to the manufacturer. This once again shows the benefits of virtual training devices by limiting downtime for upgrades in comparison to individualized "mock-up" training devices.

Overall, virtual training provides an exceptional tool in the education and training of our aviation maintainers. When used to its full potential in conjunction with hands on training, higher qualified aircraft maintainers will be produced. It allows for better training to be accomplished faster, without sacrificing quality or standards. Additionally, once integrated into the POI there is a potential for cost reduction through decreased course lengths and constant wear on components. Just like any other tool, it's only as good as the individuals using it. The instructors across the 128th Aviation Brigade are some of the best NCOs in Army Aviation and they work every day to train and develop the future maintainers and leaders of our branch. Virtual training will ensure that before heading to their first duties stations around the globe, the aviation maintainers that graduate are knowledgeable, safety conscious, and capable.

SFC Matthew W. Harris is a 15K assigned to the 128th Aviation Brigade. Currently works as a training developer in the Systems Integration Division (SID) at Joint Base Langley-Eustis, VA.

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Commercially Derived Aircraft for the Army Aviator

By Mr. Daniel McClintock

Since the introduction of the TH-67, every Army Aviator has been involved with the Commercially Derived Aircraft (CDA) process.

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The Federal Aviation Administration (FAA) defines CDA aircraft as a commercial type-certified aircraft converted for operational use by the U.S. Armed Forces. U.S. law requires the Army to provide airworthiness oversight for its aircraft. The Army Aviation Enterprise is evolving its use of the CDA process to provide capability for the Army and for partner nations faster and more efficiently. There are some challenges in using the CDA process, but the rewards make it well worth it.

The CDA process can significantly improve the time to deliver aircraft. Using civil aircraft available, the Multi-National Aircraft Special Project Office (MASPO) was able to begin fielding twenty-four armed MD 530s to the Afghan Air Force with less than nine months of development and production time. Beginning from an established production line with a recognized airworthiness authority can be an incredible advantage.

There are differences in using the CDA process that can be challenges. First, continuing airworthiness instructions involved for commercial aircraft do not follow the same naming conventions system used for Army safety messages. Items such as Service Bulletins and Airworthiness Directives may indicate impacts on continued operation for CDA. The engineering staffs of the Program Managers and the Aviation Engineering Directorate work to review and incorporate the FAA based messages to ensure the field has the right information the right way to maintain airworthiness. Second, unlike the Army, the FAA does not centrally locate its engineering data for airworthiness. Rather, the Type Certificate or Supplemental Type Certificate holder is responsible for maintaining engineering data. This tends to make airworthiness decisions such as Maintenance Engineering Call (MEC, an engineering approval of a nonstandard repair) or depot level repair procedures more responsive than the FAA process. Typical MEC response time is less than 72 hours. Integrating the FAA continued airworthiness processes with fielded Army systems requires solid communication with its original equipment manufacturer and FAA partners. Finally, some requirements driven by the Army's lessons learned are required for Army airworthiness. Examples of more stringent requirements include operations above 131 degrees (the FAA halts operations in higher temperatures), crashworthy, ballistic tolerant fuel systems for helicopters, and higher electromagnetic protections for systems come from specific Army lessons learned in its operating environment.

Future Vertical Lift (FVL) will challenge us to find ways to equip the Army Aviator faster than we have done in the past. What may prove to be the highest payoff of the CDA process for the Army is in the exposure of its engineers to the different airworthiness processes of the FVL performers. Involvement in CDA efforts could see a broader base and perspective of the aviation industry. As each CDA effort is undertaken, we get the opportunity to improve our airworthiness basis of safety. We are learning more ways to approach our end goal of innovating airworthiness capabilities for increasingly complex Army aircraft systems.

Mr. Daniel McClintock is in the U.S. Army Combat Capabilities Development Command Aviation & Missile Center Aviation Engineering Directorate, Non-Standard Rotary Wing Division located at Redstone Arsenal, AL.

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Plantar Fasciitis

By CPT Frank Stafford, D.O.

Q: The bottom of my feet, especially my heels, have really been hurting. The pain is the worst when I first get up in the morning. It can get so bad that it makes it difficult to walk or stand for a long time let alone go for a run. I read on the internet that this could be plantar fasciitis. What is that?

FS: Plantar fasciitis is when the fascia, a thick, wide band of tissue that runs from the base of your toes to your heel, becomes inflamed and painful. This tissue acts as a shock absorber and supports the arch of the foot. Too much pressure on your feet can irritate or even tear the fascia causing pain and stiffness in the foot. Pain is typically worse after you have been off your feet and the fascia has not been stretched out for a while. The presentation of plantar fasciitis is a stabbing pain in your heel when you first get out of bed in the morning or when standing after a long car ride or flight. Plantar fasciitis usually starts off with minor irritation and can be tolerated reasonably well. However, as time progresses, the tears, inflammation and associated pain often increase to the point where running, jumping, or any impact on the foot becomes intolerable. This could prevent you from being physically active and may affect your ability to operate an aircraft safely. Safety of flight can be jeopardized by distraction from pain, physical limitations due to pain, inability to properly pre-flight or inability to safely egress.

Treatment

Diagnosis can be made by your aeromedical provider using the history of your symptoms and a physical exam in the office. All forms of treatment involve rest (but not inactivity) and allowing the tissue to heal from the tears. Initially, you will need to limit the pressure applied to the feet and not perform any activities that cause pain. Anti-inflammatory medicines such as ibuprofen or naproxen can be used to reduce pain and swelling. Additional therapies such

as ice baths for the feet, rolling a tennis ball or frozen plastic bottle of water under the arch of the foot may reduce inflammation and promote healing. A lower leg stretching routine as well as the nightly use of a foot brace may prevent the painful tightening of the fascia. Orthotics such as heel lifts and arch supports are additional options. X-rays are not required to diagnosis plantar fasciitis but may be used to identify other causes of foot pain like stress fractures or abnormal boney outgrowths called spurs that have their own treatment regimens.

As the pain decreases, you can begin increasing your activity levels. Examples are slowly jogging short distances and then adding distance and speed over 2-3 months. If you experience any worsening of the pain at any level, you should return to the previous comfortable level of activity. If given enough time, most cases of plantar fasciitis will resolve on their own without further treatment. If conservative therapies are not successful, then injections typically using steroids or even foot surgery may be considered. Same day surgery is generally considered after all other methods have been unsuccessful. Recovery time requires a few weeks and physical therapy is often initiated about two weeks after the surgery.

Prevention

Certain interventions can help prevent the occurrence or recurrence of plantar fasciitis. Extra body weight increases the stress on the arches of the feet and increases your chances of irritating the plantar fascia. In addition, quality footwear that provides proper arch support should a part of your prevention regimen. Shoes should support your arch and protect your heel or allow the use of properly fitted inserts. Even the best shoes wear out, losing their ability to support your arch and should be changed periodically. This is especially true if they get heavy use like running or other athletic shoes. A physical therapist is a great source of stretches and their proper execution. These stretches can include the "Achilles Stretch," "Stair Stretch," toe stretch and several others. Recent studies have shown that muscle strengthening of the foot and ankle may have a role in returning the injured back to physical activity sooner and help prevent the return of the problem. Please see your aeromedical provider for assistance with the right prevention and treatment plan for you.

Flight Status

This condition does not usually limit your ability to fly unless the pain interferes with flight activities. If pain and stiffness limit your ability to work the pedals or to safely egress the aircraft, then a period of grounding will be necessary as you work through the concern. Properly fitted orthotics can be used while flying without concern. Steroid injections only limit you from flying the day that you get the injection, otherwise you can fly. The surgery will keep you out of the cockpit until the surgical wound is healed, your pain is well-controlled, and you are able to safely perform your duties.

Stay safe!

Questions for the Flight Surgeon?

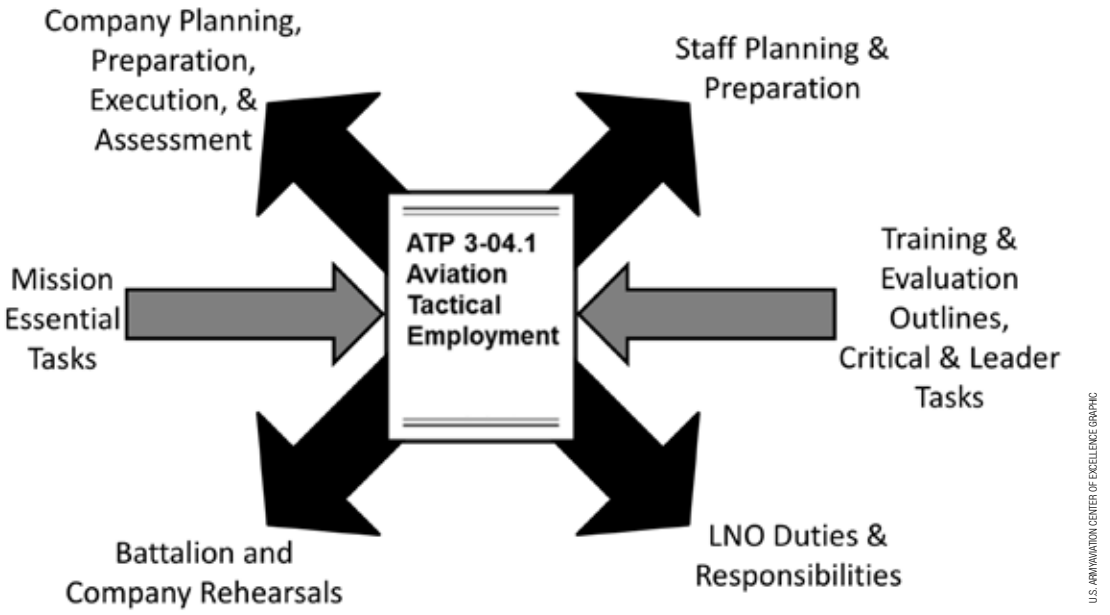
If you have a question you would like addressed, email it to AskFS@quad-a.org; we'll try to address it in the future. See your unit flight surgeon for your personal health issues.

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.

CPT (Dr.) Frank C. Stafford is a flight surgeon at the School of Army Aviation Medicine, Fort Rucker, AL.

Doctrine Update

By COL George G. Ferido and COL Jimmy L. Meacham, U.S. Army Retired



In an attempt to provide an update to the Aviation Enterprise, we decided to use this article to provide a quick snapshot of the major changes in our doctrine. When I assumed the role of Director of DOTD (Directorate of Training and Doctrine) for the United States Army Aviation Center of Excellence (USAACE), I knew very little about what we did for the branch. Other than flight school and a couple of TDY trips, my knowledge of the Ft. Rucker machine, the generating force for Army Aviation, was lacking. As a consumer of Ft. Rucker products for many years, I was now a part of the "they/them" pronoun that produce the training and doctrine material required by front-line units. The constantly evolving doctrinal manuals and training materials were enough to make your head spin. Terms like Multi-Domain Operations (MDO), Large-Scale Combat Operations (LSCO), and Aviation Warfighting Initiative were terms I was familiar with, but only understood superficially. Several years away from the operational force doing non-typical assignments eroded my doctrinal knowledge base and understanding of what I should know as an Aviation professional. Additionally, the ad-hoc approach to mission planning, preparation, and execution associated with repeated counterinsurgency and partner capability development deployments (think, "CONOP" mentality) have contributed to a lack of understanding of aviation doctrine. Although not an excuse, it's the reality that we have lived for the past two decades.

As I had the privilege of reviewing and approving doctrinal material for our force, I was immersed in current tactics, techniques, procedures, and terms. As the Director, but more importantly as a professional, I forced myself to learn where we are headed with our most critical doctrine publications. I am truly excited about the emphasis the Commanding General put on our company- and field grade-level manuals. Many of our 3-04 series publications have been revised and provide a better foundation for Aviation operations in LSCO. I'm proud of what the DOTD and USAACE team has accomplished in less than one year as we transitioned our focus to LSCO. I encourage all leaders to reorient on our doctrine and training publications as well as our training strategies to ensure we remain above the best!

We continue our recurring doctrinal updates with a focus on improving our "Ready Now" capability in LSCO. Several of our key documents will be released in the coming months.

FM 3-04, Army Aviation updates previous doctrine and describes how Army Aviation forces, as part of the combined arms team, shape operational environments, prevent conflict, conduct LSCO, and consolidate gains against peer competitors. It provides a foundation for subordinate doctrine and training literature, professional military education, leader development, and individual and collective training. Significant updates to FM 3-04 include implications for multi-domain effects on aviation units, added discussion of aviation unit survivability against peer capabilities (to include

command post survivability), and the addition of counter-air and air-volcano capabilities in aviation units.

For ***ATP 3-04.1, Aviation Tactical Employment***, we undertook a complete rewrite to better prepare small unit aviation leaders to operate as part of the combined arms team in LSCO. The intent for this rewrite was threefold: (1) Develop a manual to serve as the primary reference for all company-level planning, preparation, and execution for aviation tactical tasks; (2) Provide a teaching document that applies to any operational environment; and (3) Write the manual to align with, and expand on, the steps listed in training and evaluation outlines (T&EOs). The manual provides an expanded discussion of many of the performance steps leaders will see in T&EOs guiding aviation tactical tasks. We took steps to align the content in the ATP with T&EO performance steps and to fill in gaps as a more in-depth guide to planning, preparation, and execution of these tactical tasks. Just as an aircraft operator's manual provides expanded procedures when compared to a checklist, this manual provides added depth and context to the steps in the T&EO.

DOTD's Survivability Branch recently concluded the development of ***ATP 3-04.2, Aviation Combat Tactics and Survivability***. We are truly excited to see this manual provided to the force, as it contains enhanced survivability techniques and threat information. I suspect this document will help modernize mission survivability training in our warfighting units and improve our ability to be time-on-target in any environment. It will be available soon on the DOTD Survivability Branch IntelShare.

ATP 3-04.7, Army Aviation Maintenance, will be updated with adjustments derived from a series of Aviation Sustainment Table-Top Exercises (TTX) conducted during the last 9 months.

The TTXs were organized by chronological phases of a LSCO designed to generate in-depth analysis focused on sustaining aviation forces as part of an expeditionary operation through logistical actions during LSCO. In total, the TTX tested our ability to move from Ft. to fight, and then sustain operations against peer adversaries. TTX results should guide unit locations on the battlefield, maintenance team composition, capability, and size, and aircraft evacuation thought processes.

Except for ATP 3-04.2, all documents are available from *www.armypubs.army.mil*. The DOTD Doctrine and Collective Training Branch maintains a summary product showing the current status of all doctrine, training, and training support products available from DOTD. It is available from *https://www.ako1.us.army.mil/suite/files/8816809*.

Our doctrine and training strategies must evolve to address our current adversaries' capabilities. Maintaining status quo will mean losing a fight against a peer or near peer threat.

COL George G. Ferido is the director and COL (Ret.) Jimmy L. Meacham the deputy director of the U.S. Army Aviation Center of Excellence Directorate of Training and Doctrine, at Ft. Rucker, AL.

Common Challenges and Means to Mitigate Them

By LTC Eric Megerdoomian and numerous DES SMEs

The Directorate of Evaluation and Standardization (DES) is afforded a unique perspective of our branch. Through assistance and assessments of our aviation units, we are exposed to units who struggle with similar challenges and are witness to creative means to overcome them.

RCM

Leaders of Rated Crew Members (RCMs) allow improper procedures to manifest due to mission requirements. This creates a culture that accepts deviations from the standard dictated by our regulations. It is common to find organizations disregarding AR 95-1, TC 3-04.11 and their own unit Standard Operating Procedure in the execution of their Aircrew Training Program (ATP). Centralized Aviation Flight Records System (CAFRS) templates, Battalion and Brigade level oversight, and the use of the DES Individual Aircrew Training Folder (IATF) review checklist will address these shortfalls in the management of the ATP.

In addition to ATP management, RCM mission proficiency is decreasing because of a disproportionate focus on base tasks over mission tasks during Readiness Level (RL) progressions. Often, this is attributed to the large number of RL progressions required with a limited number of Instructor Pilots (IPs). When executing RL progressions, Aviation Mission Survivability Officers (AMSOs) and IPs must develop tactical scenarios that employ the crawl, walk, run methodology.

After RL progression, flight schedules often fail to maximize every flight to develop pilot-in-command and air-mission-commander candidates. Annual Proficiency and Readiness Tests must be tactically focused IAW the Aviation Warfighting Initiative, TC 3-04.11, and our Aircrew Training Module (ATM) and nested in doctrine.

Range constraints and time availability is affecting our gunnery training. The TC 3-04.3 is designed to give units as much freedom as possible and encourages creativity to overcome challenges and constraints. If we utilize these products and employ our doctrine, we will greatly increase readiness, survivability and lethality.

NRCM

Leaders must take a proactive approach in assigning Flight Instructors (FIs) or Standardization Instructors (SI) or Soldiers with the "N1" Additional Skill Identifier (ASI) deliberately to mitigate standardization challenges our Non-rated Crewmembers are facing. We have observed a rapid turnover rate in enlisted NRCMs challenging nearly every

Maintainers with 4-4th Attack Reconnaissance Battalion prepare an AH-64D for an attack against enemy forces out of friendly contact on 13 MAR 2015 during a field training exercise at Fort Carson, CO.

unit across our branch. With promotion rates, MTOE grade-plate restrictions, and the normal career glide path of mid-grade NCOs moving out of flight companies, we are not retaining vital ACM experience where risk is greatest. This loss of experience is clearly visible during DES assessments as academic knowledge is suffering, indicated by an average written evaluation pass rate below 55%. Marginal flight performance and low FI knowledge levels are also frequently observed. In order to man the Standardization Instructor (SI) at the Battalion level, commanders are forced to send junior E5s to the Air Crewmember Standardization Instructor Course (ACSI) with just enough flight time to meet course pre-requisites and then assigning them to E6 positions at the battalion level. These SIs who are now responsible for ATP management, gunnery, and junior FI mentorship, generally do not possess the experience necessary to be successful in these positions.

ASCI at United States Army Aviation Center of Excellence (USAACE) has found that less than 40% are still executing SI responsibilities due to promotion, End of Time in Service (ETS) and accessions to the Warrant Officer corps. We have also observed a negative career stigma in the NCO corps favoring (for promotion) those who directly lead troops verse those who choose a flight centric path. This stigma leads our experienced enlisted crewmembers to pursue positions outside of the flight companies leaving these units with considerably less capability.

The problem set is being addressed by our branch, but we can take some actions to mitigate the impacts of FI/SI shortages within our units We should also consider removing self-imposed restrictions in our Standard Operating Procedures (SOPs) that prevent sending candidates to the ACSI course based on minimal utilization or PCS dates. Rather, we should understand and utilize AR 614-200, (paragraph 4-6i) which enables commanders to adjust service-remaining requirements (SSR) with HRC's approval when Soldiers complete the ASCI TDY and Return to the unit. This allows the Soldiers to attain an assignment eligibility and availability (AEA) code of "G" giving stability under "special category" not to exceed 48 months.

Despite the great potential for change in the future, ultimately, we must find creative means to incentivize the importance of standardization for our NRCMs in the flight companies and better manage the resident experience within our formations to mitigate risk through training and standardization.

MX

Army Aviation maintenance is undergoing significant change. The development of the TC 3-04.71 Aviation Maintenance Training Program (AMTP) is the most significant which affects all units. The qualification, currency, and proficiency of enlisted maintainers has been over-looked for many years and the AMTP is a means to deliberately integrate the training of our maintainers. The .71 assists in formalizing the qualification and proficiency of our maintainers much like the ATP. Our units cannot stop maintenance and build combat power simply to focus on train maintainers. This program enables the training and qualification of our maintainers concurrent to execut-

ALL PHOTOS BY LTC ERIC MEGEROODIAN

A crewmember prepares to receive passengers on his UH-60 at the National Training Center on October 16, 2016.

ing maintenance tasks. Units should begin to implement the AMTP as this program will be in effect by FY21.

Parallel to the lack of a formal maintainer training program is the lack of mentorship we often observe in units. We assess the lack of mentorship is a result from two causal factors stemming from our senior warrant officers and non-commissioned officers. ***First,*** a minority of our maintainers do not understand how to execute the maintenance tasks to standard themselves making it nearly impossible for them to coach, teach, and mentor. ***Second,*** a minority of our senior maintainers do not spend the requisite time on the hangar floor or on the flight line mentoring junior Soldiers executing

their tasks. Combined, our Soldiers lack the development and mentorship necessary to execute their tasks to standard resulting in a reduction of our combat power.

UAS

The most prevalent challenge concerning Unmanned Aircraft Systems (UAS) across the aviation enterprise is the full integration of UAS into the Combat Aviation Brigades (CABs) and the Heavy Attack Reconnaissance Squadrons (HARS). On assessments we observe relatively less command involvement and oversight of UAS formations than manned aircraft formations resulting in poor ATP management, maintenance, reporting, support, and training. Though typically caused by the physical dislocation of UAS units, challenges with launch / recovery sites, training areas, or off-cycle deployments, leaders at all levels should continue to strive and find creative ways to provide oversight during training.

In execution, we often find UAS crews attempting to support the units' mission but lack the necessary security / reconnaissance guidance or tools to do so effectively. This inhibits the UAS Aircraft Commanders (ACs) ability to execute disciplined initiative and reduces the effectiveness of the crew. Use of the commander's security or reconnaissance guidance and Information Collection (IC) are critical elements that enables ACs and transform operators into scouts.

Lastly, we often observe relatively poor standardization programs within UAS organizations. The immediate cause is a lack of proficient ATP managers largely attributed to the Instructor Operator (IO) shortages across the Army.

Given these constraints, CAB and BN commanders (much like NRCM/N1s mentioned above) can set the conditions to develop and sustain a strong ATP. First, we must forecast early the loss or movement of IOs in order to ensure timely replacements are postured to provide the necessary oversight. Second, we must commit our Standardization Pilots (SPs) of units with UAS to become intimately aware of UAS training requirements themselves, then train, mentor, and develop IOs within their formations. Finally, the SPs and commanders should provide the same level of oversight of the UAS formations and their ATPs as any other within their purview.

Summary

DES witnesses firsthand the challenges our units must face in training as we prepare to fight in large scale combat operations (LSCO) and Multi-Domain Operations (MDO). The challenges in standardization of rated and non-rated crewmembers, training of our maintenance personnel, and integration of our unmanned aerial systems operators are very real. Although Aviation Branch is working diligently on training and doctrine initiatives to build the combat power of our future forces, we must develop and employ near term innovative solutions to help lead and develop our current force. Consider the options mentioned above to mitigate these challenges at least as "A Way" of counteracting the challenges and building lethal and survivable formations able to fight and win in a complex environment.

LTC Eric Megerdoomian is the deputy director of the Directorate of Evaluation and Standardization at the United States Army Aviation Center of Excellence, Fort Rucker, AL.


NTC EAGLE TEAM COURTESY PHOTO

Building Aviation Readiness & Lethality at the National Training Center

By LTC Clint Cody, LTC Peter Schmitt, and LTC Cameron Gallagher

Over the past twelve months the aviation trainers at the National Training Center have been extremely busy observing, coaching and training our aviation formations as they endure the 14 toughest days in the Mojave Desert. Below, we will discuss Eagle Team's initiatives and how they play a crucial role in building readiness and increasing lethality within our formations across Army Aviation.

China Lake IADS Training

During FY 2019, Eagle Team continued building and expanding our partnership with Naval Air Weapons Station, China Lake, CA and as such, our Integrated Air Defense System (IADS) training mission sets. This complex mission requires rotational training unit (RTU) air crews to skillfully navigate, tactically maneuver and fight their way to their Attack By Fire (ABF) positions and Landing Zones (LZs) through an IADS comprised of Tier 1 threat systems that rotary wing aircraft are likely to see in the current order of battle. Unlike current permissive environments in Afghanistan or Iraq, our air crews must fight their way in, fight on the objective and fight their way out in order to survive in the decisive action training environment.

As designed and scripted, the mission is executed both during the day and under night vision devices to fully test our aircrew's ability to fly and fight in all modes to include under live fire conditions. Once the day mission is over, we conduct a thorough hot wash at the unit's Jump FARP and prep for the night iteration and re-attack. Immediately after the mission concludes, Eagle Team secures all gun tapes along with video from the threat systems and builds a comprehensive 10-15-minute classified AAR video, which matches both friendly and enemy actions in time and space. This allows the air crews to see how specific threat systems acquired, tracked, and engaged their aircraft and which TTPs were successful. Specifically, the AAR video is invaluable because it highlights that the use of terrain, altitude, airspeed and properly programed and functional aircraft survivability equipment (ASE) will allow them to successfully and safely get to their ABFs or LZs in order to either put troops on the ground or steel on target.

TF 3-17th CAV, 3rd Combat Aviation Brigade, conducts a combined arms rehearsal for a deliberate attack out of friendly contact at their tactical assembly area.

The big win for the Team was the securing of funding to increase execution from once per quarter for select units to every active component rotation that comes to the NTC,

which is currently eight times per year. Our standard mission sets continue to be the following: attack out of friendly contact (AH), attack out of friendly contact with follow on raid (AH, UH, CH) and the fly through (all MDS). We also have shifted this event to occur during the live fire portion of the rotation, which provides an opportunity for the Aviation Task Force's crews to receive advance gunnery table credit. Based on the rotational construct and amount of aircraft that the Aviation Task Force brings with appropriate ASE, will dictate which mission set the unit will be able to execute.

Since our update last year, three combat aviation brigades have employed their tactical command posts (TAC) in support of their respective Aviation task forces. All three elements received the mission order from 52 Infantry Division (ID), coordinated for division and joint enablers to include fires, fixed wing, and UAS to both gather intelligence and set the conditions for their respective TF and air crews to execute. After conducting a repetition of MDMP, each TAC briefed their respective TF on the mission, which allowed each TF to focus on RP inbound maneuver and EA Development. Another benefit of CAB TACs – ranging in size from 6-20 personnel – is that they provided the requisite subject matter expertise not typically assigned to a BN/SQ TF to assist with planning and coordinating a 52 ID shaping operation. The feedback from these three organizations – both from a HICON and EXCON perspective – has been vital to improving the quality of the mission products and injects we provide to the RTU.


PHOTO COURTESY OF CPT CODY THOMPSON

AH-64D refueling and re-arming at the Jump FARP.

Advanced Table Gunnery

In order to meet advanced table gunnery requirements (Table IX and XII) as outlined in TC 3-04.3, Aviation Gunnery (March 2019), Eagle team has incorporated different mission sets into the force on force under live fire conditions phase of the rotation. Based off of the Aviation TF's crew qualification status and commander's training objectives we are able to include hasty attack missions in support of the BSA defense (Table VIII/IX) and deliberate attack missions (Table XI/XII) so that air crews are able to not only leave NTC as recent participants in the world's largest combined arms live-fire exercise but also with team qualification (Table IX) and platoon training (Table XII).

Either as part of a China Lake "fly through" mission in Echo Range or deliberate attack into Leach Lake, 52 ID will direct the aviation TF to conduct a deliberate attack mission to destroy Donovian forces. In a recent example of a 52 ID shaping operation, the aviation TF had four days to develop a plan to support an ingress and egress route over 125 km each way through a contested IADS environment, stretching lines of communication, the need for employment of a Jump FARP and over the horizon communications (both voice and digital). In addition, the Aviation TF was able to plan for both live and constructive EAB assets to include UAS and AF FW as well as 52 ID Fires from High Mobility Artillery Rocket System (HIMARS). The mission stressed every warfighting function from planning to execution. After the day iteration, the crews conducted a hot wash and executed the same mission at night. This mission set met not only the advanced table gunnery requirements, but more importantly exercised planning at echelon from CAB TAC to Aviation TF to the company/troop level.

What's Next?

The Eagle Team will continue to lead our Aviation branch in observing, coaching, and training Aviation Task Forces in the conduct of decisive action operations. The components that define world-class combat aviation training at the NTC are and will continue to be the pace and mission complexity. However, by far the most important resource at the NTC are the quality of Aviation, Intelligence, Fires, Signal, and Sustainment professionals which comprise our team. It is through our member's collective ingenuity, guided by doctrine and facilitated by a "how to get to yes" attitude, that the out of friendly contact attack scenario at China Lake was born. That said, one must ask, "what's next?"

The next step is for our Aviation community's supporting agencies to bear witness to the training taking place and to take lessons learned back in order to foment change in the greater force. Product Office for Common Systems Integration (PdD CSI), along with the Threat Warning Product Office and representatives from Northrop Grumman, were the first to jump at this opportunity during rotation 19-07. Topics discussed ranged from how the IADS threat is replicated at NTC, where training shortfalls exist, technological limitations that contribute to those shortcomings, and timelines/capabilities for PMO ASE developmental efforts (i.e. ASE B-Kit Emulator [ABE]).

We invite all – from the Army Reprogramming and Analysis Team (ARAT), the DOTD Aviation Mission Survivability Officer (AMSO) branch, and other PMOs come to witness firsthand the real-world training successes and challenges in order to guide future institutional and material efforts so that army aviation continues to be the most lethal asset on the battlefield.

LTC Clint Cody is the senior aviation trainer at the National Training Center at Fort Irwin, CA and former commander of 1st Squadron, 6th Cavalry Regiment at Ft. Riley, KS; LTC Peter Schmitt is the deputy aviation trainer / XO mentor at NTC and the next commander of 4th Bn., 2nd Avn. Regt. (Attack/Reconnaissance) at Camp Humphreys, Korea; and LTC Cameron Gallagher is the senior aviation operations trainer at NTC and the next commander of 1-501st ARB at Ft. Bliss, TX.

A Shadow UAS simulation at JMRC.

U.S. ARMY PHOTOS BY LTC DARYL VON HAGEL

Focusing on the Deep Fight to Build Lethality: A JMRC Perspective

By MAJ Troy Gillett and MAJ Durward Johnson

In March of this year in front of the Senate Armed Services Committee, the Army Secretary, Mark T. Esper and the Chief of Staff of the Army, General Mark A. Milley, reaffirmed their vision and way forward to building the Army of 2028. Their vision focused on readiness as the number one priority as we man, equip, and train our forces for large scale combat operations (LSCO). As we build the Army of 2028, the message from senior leaders is pretty clear—build unmatched lethality![1] A recent interview with General Milley emphasized increasing the number of rotations at combat training centers (CTC) in an effort to build readiness.[2] We ask ourselves, "are we doing things right and are we doing the right things?" Through observations as observers coach trainers at the Joint Multinational Readiness Center (JMRC), the Army's forward-deployed CTC, we are increasing the number of rotations – we are doing things right. However, are we doing the right things to effectively build unmatched lethality?

Cost to Readiness?

JMRC and the other CTCs currently focus on brigade combat teams (BCT) as the primary training audience. When units are slotted to participate, a majority have limited time and resources to properly adhere to a training glide path to validate mission command systems and prepare standard operating procedures necessary for decisive action in the European environment. This trend is especially true for regionally aligned forces (RAF) observed deployed in Europe who normally have a JMRC rotation prior to redeployment and experience significant personnel turnover or major fielding upon return to home station. Most BCTs fight for limited home station training resources prior to CTC rotations, which usually affects the most important step of the 8-step training model—conduct retraining. As we modernize our Army, units will need additional time to train and develop tactics, techniques, and procedures focused on LSCO. While the Army continues to reduce unnecessary training requirements, most commanders would likely argue they still do not have the time to properly retrain a collective task to standard or higher prior to a CTC rotation. Getting another repetition or attempting to improve at a collective task eludes most formations prior to participation in a CTC. Would increasing the number of CTC rotations for BCTs be the right answer to get after lethality? Or would allowing the BCTs more home station repetitions at collective tasks be a better fit for building readiness and lethality prior to participation in CTCs? How could we build the necessary white space on the training calendar to conduct retraining at the BCTs?

Deep Fight Focused CTC Rotation

One possible solution is for CTCs to dedicate rotations to the division deep fight. The Army's ability to shape the division deep fight enables the BCT fight to be successful during LSCO. A rotation focused on aviation maneuver and Joint and Army fires is critical in building lethality in our Army. While the Army currently simulates the deep fight through division warfighters conducted by the Mission Command Training Program (MCTP) and many key observations are made to help shape our doctrine, are simulations enough to build lethality in the deep fight? The trends and observations from both MCTP and CTCs demonstrate both divisions and BCTs are not as lethal as they could be in their respective deep fights. A few examples of these observed trends include asset synchronization, massing effects, targeting efforts, and lack of a common operating picture

that provide a shared understanding. A way to reverse trends and build lethality in the deep fight may be to treat the warfighters conducted by MCTP like a Leaders Training Program (LTP) conducted at CTCs and provide another repetition focused solely on shaping the deep fight in a LSCO replicated environment. General Milley said it best, "In order to have maneuver, and we're supposed to be a maneuver Army, you have to have mass fires… we're recapturing it.[3]" "Recapturing it" through simulations is "a way," but is it the best way to ensure unmatched lethality?

Put Me in Coach, I'm Ready to Build Lethality

A combat aviation brigade (CAB) is inherently the most agile and lethal organic formation in a division to conduct deep operations. Fighting as a CAB is typically only trained during warfighters through simulations – great for training staffs and validating processes. When asked to participate in CTCs, most CABs send formations as a battalion task force. A conglomerate of aircraft/aircrew form prior to a rotation and more times than not disband immediately upon redeployment back to their organic headquarters. This is not ideal training when the goal is to build lethality and readiness. The training environment at CTCs is by far the most realistic combat training environment for aircrews to participate in. Participating aviation task forces usually end up supporting and/or focusing on the BCT fight. However, aviation would likely already be employed by the division in the deep fight, yet, current CTC rotational designs do not effectively replicate this fight.

JMRC in concert with a highly motivated CAB recently developed a scenario focused on the division deep fight. Utilizing all live, virtual, and constructive capabilities, JMRC developed a deep fight scenario that facilitated participation of a CAB HQs, heavy attack reconnaissance squadron (HARS), general support aviation battalion (GSAB), and an aviation support battalion (ASB). Prior to the start of the Combined Resolve series exercise, the CAB received a division order to shape the deep area prior to the BCT occupying tactical assembly areas (TAAs). For the first time, a CAB commander was able to focus on his training objectives at a CTC since the CAB was the dedicated training audience for that portion of the rotation. Operations during the exercise included deliberate attacks against division high payoff target list (HPTL), reconnaissance (both manned and unmanned to include SIGINT), downed aircraft recovery teams (DART), personnel recovery, air assaults, evacuation of causalities, and air movements focused on sustainment low cost low altitude (LCLA) drops. At the conclusion, JMRC observed value in executing the division deep fight and will implement similar scenarios into each rotation. JMRC is currently developing an entire autonomous deep fight rotation strictly focused on the CAB.

Recommendation for Way Forward

As the Army is recapturing how to mass fires in order to facilitate maneuver, why not send CABs and other division level assets to CTCs to build lethality through repetitions of the deep fight? In order to ensure the Army is better prepared for future fights, CTCs should dedicate rotations focused on the division deep fight. The deep fight during LSCO is where the commander will assume great risk in employment of his combat power, as well as, where the initiative can be gained enabling the odds for a successful BCT fight. A rotation dedicated to CAB and Fires training objectives along with exercising a division staff, particularly the Joint Air-Ground Integration Cell (JAGIC), will replicate the necessary repetition needed to build lethality that can only be replicated at CTCs. Innovation and maximizing live-virtual-constructive capabilities at our CTCs can help build the unmatched lethality our country expects of us.

Combat aviation brigade CAR.

Notes

[1] "The Army Vision" Office of Secretary of the Army, 7 Jun 18
[2] "Army Gains in readiness are just the beginning, chief of staff says" by Sean Kimmons, Army News Service, 17 Jan 19
[3] Ibid

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U.S. ARMY PHOTO COURTESY, JRTC

Reflections on a Year in Atropia – Good, Bad, and Ugly

By LTC Jason Davis

"We haven't been in East Atropia for 25 years… we've been in East Atropia for one month 250 times."

That quote plays on the adage about Americans' penchant for relearning lessons, but after a year serving at the Joint Readiness Training Center (JRTC) I can attest that when it comes to combat training centers (CTCs), it is true. Not pejoratively. 'Groundhog Day' in Atropia is intentional. The JRTC commander of Ops Group (COG) says 'CTCs are the antidote to America's first battles.' The antidote is effective only when observer/coach/trainers (OCTs) provide consistent crucible experiences based on current threats.

JRTC's decisive action training environment (DATE) provides that crucible to brigade combat teams (BCTs) in preparation for large-scale combat operations (LSCO) as well as support to security force assistance brigades (SFABs) in preparation for deployment. My tenure included both DATE and SFAB rotations representing all components.

The year in Atropia included some good, some bad, and some ugly just like any mission. The good news: the coalition liberates Atropia. Even better, every Soldier leaves the CTC with more experience and confidence and a healthy appreciation for peer threats. This year's bad news provides an opportunity for Combat Aviation Brigade leaders to shape their training plans and turn weakness into strength. The Army enterprise is already attacking 'the ugly.' The field can assist by providing input to the enterprise and turning their own 'bad' into good.

The "Good"

When a "COIN hangover" emerges, commanders break through the friction in the battle staff to drive success. BCT leaders understand the peer threat and the need to mass aviation assets against it. They can visualize attack aviation bringing more firepower to the forward line of own troops (FLOT) than most BCT weapons systems. BCT commanders can describe to their staffs how to seize key terrain by massing assault aviation assets, and they regularly direct the integration of division-level aviation capability through their staffs.

Aviation task force (AvTF) commanders know their craft and often play the dual role of commander and "aviation coordinator" with the BCT. The AvTF typically integrates well into the BCTs command structure. Successful integration manifests itself in staff-to-staff synchronization, mirrored planning horizons, shared threat understanding, and battle-staff knowledge of capability in space and time.

Maintenance units have motivated Soldiers able to operate in austere environments using P4T3. Maintenance leaders who rigorously analyze demand signals prior to rotation have better readiness rates. Units who empower junior NCOs perform downed aircraft and area defense better than the rest. Those empowered NCOs exist in units with focused leader development / certification programs.

Aircrews accept the austere operating environment, with minimal requests to OCTs for adding a Green Beans Café to "The Box," and embrace low-level flight profiles. Crews leave JRTC knowing that "old school and low tech" works against the opposing force (OPFOR) radar systems. OPFOR often struggle to acquire and track the attack or assault force inbound to the objective and rely on human observers and to their knowledge of the terrain to identify and counter inbound assault/attack aviation forces.

An AH-64D pilot from 2nd Battalion, 25th Aviation Regiment prepares to conduct deliberate attacks in support of 2nd Brigade Combat Team, 25th Infantry Division.

The "Bad"

The "bad" typically occurs "left of crank" and begins in the military decision-making process (MDMP). AvTFs fail to manage talent and time to ensure the best possible staff processes, manifested in poor mission analysis and fighting products. OCTs often see the XO/S3 delegate staffing actions to young officers lacking experience in the mission set or operation and without an example to use as a start point.

Aviation branch Majors often struggle to think critically, anticipate friction, and provide for subordinates' development. Their failure to integrate half of the battle staff and ignore the contribution of our talented NCO

corps is an example of battalion S3/XOs at JRTC 'doing' MDMP but failing to lead the staff through the process demanded by mission complexity.

DATE also requires detailed synchronization between warfighting functions and among subordinate units of the AvTF, but staffs fail to build shared understanding through production and dissemination of fighting products. AvTF fighting products are usually weak and do not describe the commander's expected tactical decision. The decision support matrix (DSM) often lists "GO/NO GO" criteria such as weather. The DSM should describe the conditions required to change from a phased- to continuous attack, or when to re-prioritize loads on the pickup zone.

Weak Battalion-level MDMP results in subordinate units unable to conduct troop leading procedures to standard. Regardless of the order's quality, TLP completion directly correlates to mission accomplishment according to JRTC statistics. It seems obvious, but units that brief, back brief, and rehearse using written orders succeed. Units reliant on folklore and PowerPoint slides fail to achieve results.

U.S. ARMY PHOTO COURTESY JRTC

A platoon leader from 3rd Infantry Brigade Combat Team, 10th Mountain Division loads his Soldiers onto a CH-47F from 3rd Bn., 10th Avn. Regt. during an air assault.

The "Ugly"

Aviation units are among the most committed forces in the Army, with limited dwell between deployments. Those deployments require detailed train-ups and often force commanders to make decisions on what mission essential tasks (METs) to train and pressure units to build collective task proficiency in a short amount of time. The need for a supported ground force to build true MET proficiency adds to the complexity. If home station BCTs only execute company-level Air Assaults, the CAB struggles to build readiness in assault helicopter battalions. Divisions struggle to train the deep fight outside the constructive environment when artillery is unable to source multiple battalions to conduct Table XVIII alongside the attack reconnaissance battalion (ARB) for combined DIVARTY/CAB training.

CTCs replicate a Division-level fight, with the BCT as the cornerstone of the physical manifestation of that environment. Within the live CTC environment, the AvTF provides a CAB's complement of capability using less than one third of the assets. AvTF staffs are less familiar with aviation core competencies not typically assigned to their organic battalion unless the CAB manages talent well. The attack recon battalion HQ will not execute a battalion air assault as well as an assault helicopter battalion (AHB), and the AHB cannot organically execute a deliberate attack out of contact at the ARB's level of competence.

Long-term Battalion task organization comes at a cost to organic expertise and places DATE readiness at risk, a risk currently mitigated by senior Army headquarters through careful management of augmentation packages during rotations. Current mission requirements and historical precedence result in suboptimal task force organization and a BCT exposed to massed aviation utilization at less intensity than desired to build familiarity. BCT staffs exposed to the occasional AH-64 platoon deliberate attack in contact or company air assault will not provide clear task and purpose or assign battlespace to the AvTF and reduce the effectiveness of the AvTFs role in the BCT deep fight.

The Way Ahead

Leaders must leverage the good to address the 'bad' during rigorous home-station training plans developed holistically within the CAB. Focused staff training, hard force protection exercises, and tactical decision-making events like Warfighters provide the reps needed to build readiness. Away from home station, the CAB must make the most of opportunities, such as 4th CAB's blended training to certify "How the Ivy Eagles Fight" for their Division.

The 'ugly' takes time and enterprise-level energy to address. FORSCOM and the Army Staff see the challenge balancing current mission support with LSCO readiness. Successful balancing requires leaders at the operational level and below to resource and synchronize training at echelon. That synchronization prevents premature collective training when individual readiness does not support execution.

These challenges are not new. CALL newsletters in the 1990s outline similar challenges. We fought through them then and will overcome them again. One rotation at a time.

LTC Jason S. Davis is the senior aviation trainer (A06) at the Joint Readiness Training Center (JRTC) at Fort Polk, LA. He commanded 2nd Battalion, 25th Aviation Regiment and is a graduate of the U.S. Army War College.


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Special Focus ▶ Simulation & Training

The Simulator Instructor Operator: Setting Conditions for Success

By CW5 (Ret.) Jack Bartol and CW4 (Ret.) Wade Boynton

Instructor/operator training for the Longbow Crew Trainer at Fort Rucker, AL, May 30, 2019, Fort Rucker, AL.

What does a good home station simulator program or facility look like? It is a simple question that somehow defies common understanding. The USAACE Directorate of Simulation's (DOS) Simulation Development and Accreditation Division (SDAD) Helicopter Flight Simulator Evaluators (HFSE) are often asked this question during simulator accreditation visits, which is the nexus of this article. While the Army has invested a significant amount of resources into technical solutions, success is completely dependent upon the expertise of the person assigned the specific mission to enable & realize the training device. In simple terms, it takes a craftsman to wield the tools to produce a quality product.

From the SDAD's HFSE's perspective, the success of any simulation program is the responsibility of the permanent party personnel assigned to the facility, especially the instructor operators (I/O). The I/O is the key expert, normally stationed at or near the flight simulator, and is the most familiar with the day to day operations. The working relationship between the unit and the instructor/operators can greatly assist in the administration of the commander's aircrew training program (ATP).

Simulator Employment

There has been a subtle shift in ownership and responsibility for simulator employment over the past 15 years. In the early 2000s, Army senior leadership decided to discontinue regional simulation (full motion) centers and transition to transportable devices. This decision put the responsibilities of device manning and maintenance on the local tactical commander. Before the turn of the century, the requirements to train an I/O were usually obvious and certification programs were well documented. The legacy full-motion Synthetic Flight Training System (SFTS) with analog cockpits posed more safety hazards such as stairs, ramps, actuators, and locking gates. Today's transportable devices don't pose the same safety threats and are equipped with intuitive I/O consoles and operators are generally more familiar with many different computer functions. Because of these technological advances, instructor pilot (IP) and I/O training and certification are sometimes taken for granted or viewed as not as important as they were in the past.

Instructor/Operators

Regardless of the historical challenges noted above, it remains a clear requirement that someone other than a military flight instructor operate the synthetic device. Normally the unit IPs are the primary trainer, but they are traditionally short in supply and are more involved in ATP administration and readiness level (RL) progression in the aircraft. To supplement the unit's training efforts, I/Os are provided to ensure the simulators are ready for training. Every aviator is usually familiar with the I/O at their duty station, but not all are aware of what duties the I/O can actually perform. The acronym I/O (instructor/operator) is itself ambiguous. At some installations the I/O is purely a console operator, while at others, the I/O operates the device and provides varying levels of instruction and sometimes even administers evaluations. I/O responsibilities are usually based on the individual's training and background. Hence a simulator operator may or may not be an instructor. It is incumbent upon the unit to clarify its I/O needs and to what standard the I/O should be trained and evaluated. A good I/O can make a huge impact on the development of an aviator and can rewardingly supplement/complement the unit ATP.

Defining I/O Duties

Neither AR 95-1, nor TC 3.04-11 clearly define the duties or description of the I/O. Although each Aircrew Training Module has a Task (ACC-5000): Operate a Flight Simulator from Instructor's Station, a tangible standard is not defined. AR 95-1, paragraph 4-11.f. does state, "Commanders working in coordination with Installation Management Commands (IMCOM) establish I/O responsibilities, competencies, and requirements to support the aviation mission of the unit designated to utilize the facilities." Some people would argue that a clear I/O definition has been historically avoided in order to provide the commander flexibility when determining their home station needs; others would stress lack of clarity enables a lower funding support option. In the past, commanders sometimes used unit trainers (UT) as console operators to train selected tasks. Mission requirements at some installations dictate the use of contractor I/Os, while other simulation centers choose to utilize DOD civilians; normally GS 1712 Training Specialists. Both positions must be managed IAW AR95-1, paragraph 4-11.f. The position description is the key to meeting the local commander's mission requirements.

At USAACE only the AH-64 Instructor Pilot Course (IPC) has a formal I/O block of instruction included in the course management plan (CMP). The other airframe IPs must rely on the training that they will receive when they arrive at their duty station. Due to the current OPTEMPO and readiness requirements this training may or may not occur and the military IP may never learn of the full capability of their SFTS. Hence the need for effective communication with IMCOM.

IMCOM Coordination

The initial transportable SFTS fielding concept in the early 2000s delivered the modern device directly to the tactical unit commander. As the frequency of deployment increased, IMCOMs had to assume the responsibility for device staffing and maintenance. This transition to IMCOMs has surfaced difficulties at some Army installations. For example, in the past DOS has been called by brigade commanders and asked why they didn't have a particular airframe I/O assigned to their post. These types of situations dictate adherence to AR 95-1, paragraph 4-11.f. and the need for effective communication between standardization personnel and the installation. To reiterate, the command has the responsibility to implement a viable standardization/quality assurance program to ensure I/O proficiency. I/O job description is key to program success. Military IPs must be educated as to the limitations (accreditation memorandum) and training capabilities of their individual airframe SFTS in order to effectively administer the ATP.

In closing, a good tool in the hands of a poor craftsman will not yield good results. The craftsman must fully understand the capability of the tool.

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ALL PHOTOS: 160TH SOAR COURTESY PHOTO

Special Focus ▶ Simulation & Training

Field of (Simulated) Dreams

By CW5 Michael J. Hangge

Flight simulators are the impenetrable tents of our collective childhood where even the most vicious bears cannot hurt us. They are a safe place to practice dangerous maneuvers and morph rote memorization into applicable knowledge. They provide an environment where the worst conditions can be replicated without risk, maneuvers can be trained to proficiency, and crews can gain confidence and experience.

The 160th Special Operations Aviation Regiment (Airborne) has five of the world's most advanced Combat Mission Simulators (CMSs) integrated together on the same acreage. They are the most capable and highest fidelity helicopter simulators ever built with a uniquely tailored task list twice the size of any other.

Keeping Current – A Team Effort

The Night Stalker Simulations Team has accomplished so many great things that only a small snapshot could fit in this publication. Every simulations tool from DeskTop Trainer to CMS is currently concurrent with, and will soon be ahead of our aircraft, allowing crews to train in the box before they fly in the air. Our motion systems are finely tuned to simulate how closely we operate to the limits because few units fly their fleet like Night Stalkers do. Our visual environment is so immersive that even the most impressive Virtual/Augmented Reality (VR/AR) technologies may not be able to provide significant improvements. Our Special Operations Forces Planning, Rehearsal, and Execution Preparation (SOFPREP) team builds background databases to utilize semi-automated forces, creates mission rehearsal builds to support deployed personnel, and works in simulated reality to create precise, geo-specific, 3D visualization databases used in the CMSs and standalone systems for mission planning/rehearsals of planned or short-notice missions. Our current Mission Rehearsal and Exercise Training System (MRETS) was built as a Field of Dreams proof of concept to integrate semi-automated enemy systems as well as imitate near-peer capabilities to simulate operations against virtual enemies replicating real world threats.

Top left: LASAR Simulator – Few helicopters are as maneuverable as the A/MH6 and even fewer units fly their fleet as close to the limit as the 160th SOAR (ABN). The LASAR Simulator emulates the flight conditions of the A/MH6 helicopter.

Top right: LASAR Pic – Rain, sleet, or snow – if we fight in it, then we train in it too.

'Longhaul connectivity,' both inside and outside our fence line, will soon connect our simulated federation to the greater military enterprise. And we are now experimenting with VR/AR technologies which retired regimental simulations officer Will Ellison believes will "soon permeate every aspect of crew training to enable full crew participation in iterative and mission training in both standalone and distributed modes."

Dan Lynch, PEO-STRI Simulations Lead Engineer, adds that "VR/AR technology may allow crews to sit in a 'virtual cockpit' used for collective training at a significant cost savings, allowing crews to interoperate with other VR stations/CMSs/CFTDs to enhance the training capabilities of all devices. The VR/AR training stations could also be packed-up and used as mission rehearsal devices to allow crews to fly their routes in 3D environments before executing their actual mission."

Taking a Fresh Look

Yet the Regiment is never satisfied with just 'the best' because there are always ways to be better. Right now, helicopters are straddling the edge of a long-anticipated technological leap to make '90 knot helicopters' as antiquated as Igor's fedora. And

Top left: The Beginning – Entire simulator computer rooms were once filled with the technology now available in most teenagers' cell phones.

Top right: MJH60L Simulator – The MH60L Combat Mission Simulator was so advanced for the 90s that you could forget it was a simulator.

flight simulators are perched patiently for that same trust fall.

So, we are taking a fresh look at everything we do, how we can do it better, and working to implement the most revolutionary new distributed training program utilizing the most technologically advanced simulator systems. Our vision is an all-encompassing federated simulations environment of total and complete immersion from aircraft maintenance to planning, briefing to rehearsal, and execution to debriefing – JTACs to jumpmasters, medics to evasion/resistance, drivers to shooters… We envision wooden walled planning areas with dirt floors and countdown calendars; fully-simulated TOCs in ship compartments with storms raging over the thrumming of diesel engines; Flight Leads meeting their ground force peers in fully-accurate virtual buildups of the target area with weather and enemy forces; and yanking mission crews out of simulators to be worked on by medics, worked over by SERE specialists, or tossed into hurricane waters. All of this will ensure that the first time a crew is thrust into any situation will not be the first time they have experienced it.

Keeping It Real

Jeff Stafford, Simulations SME, suggests we can no longer simply "throw on a headset and climb into a climate-controlled simulator just to log time. We must increase all aspects of reality and difficulty by making our simulators less sterile. We must 'dirty up' the simulations environment by matching extreme simulator temperatures with mission conditions; inserting automated 'non-playing' personnel and vehicles; lighting billboards and traffic lights; and pumping in the smells of jet fuel, cordite, and third-world funk." The MRETS is the first step towards this dream and, as it continues to mature, all-encompassing mission rehearsal and execution centers will be perfectly poised to replace singularly tasked simulators. We are currently researching numerous new technologies and capabilities to uncover the most advanced means to accomplish our lofty goals. We are also highly conscious that, despite the many impressive new technologies emerging every day, all technology will eventually falter while plain paper still excels – it is a fine line to advance without losing touch with the basics.

Of course, money is always an immense hurdle, but the eventual cost savings of this vision would be tremendous. Chris Conrad, owner of Veraxx, estimates that "simulations cost about a fifth of the price, operate at about a nickel on the dollar, and produce more than six times as many available flight hours per month as an actual aircraft." But operational cost comparisons alone barely scratch the true savings potential. Cutting back on, but never eliminating, actual training exercises would pay for this vision just in TDY expenses.

The most critical aspect of simulations training, however, will never be the simulators themselves. The actual tool used isn't necessarily as important as the knowledge of how to accomplish the task and it is far too simplistic to believe better fidelity alone equals a better simulator or better training. Too often, the training is adapted to the available tools rather than the right tools being developed for the best training. A well-designed training program is an absolute necessity for continual evolution and improvement throughout every spectrum of training to remain ahead of potential enemy efforts.

The True Value

Simulators have always been the backbone of initial and continuation flight training focused on basic flight skills and emergency procedures, especially as aircraft become more complex and cognitive. The majority of training efforts must focus on creating the 'expert aviator', however distributed simulated training is now capable of also making crews who are highly adept at employing those aircraft as part of an entire task force. By evaluating how to best learn, we can learn how to best teach, and we can then design better simulation experiences.

"The true value of simulated training cannot be measured in dollars spent or lost, it can only be measured by the lives of husbands and wives, fathers, sons, mothers, and daughters who have been saved by the proficiency, experience, and confidence provided in a simulated environment of complete safety." – Joe McManus, MH60 Simulations SME.

Special thanks go to the amazing Night Stalker Simulations Team of SMEs, coordinators, instructors, RSOs, PMs, SOFPREP, and vendors who do the heavy lifting every day.

CW5 Michael J. Hangge is currently assigned as the 160th/SIMO Mission Planning, Simulations, and Future Technologies Branch Chief. He can be contacted at michael.hangge@socom.mil.

Feature ▶

Army Aviation in Army Futures Command

By COL Michael J. Best and Mr. Glenn A. Rizzi

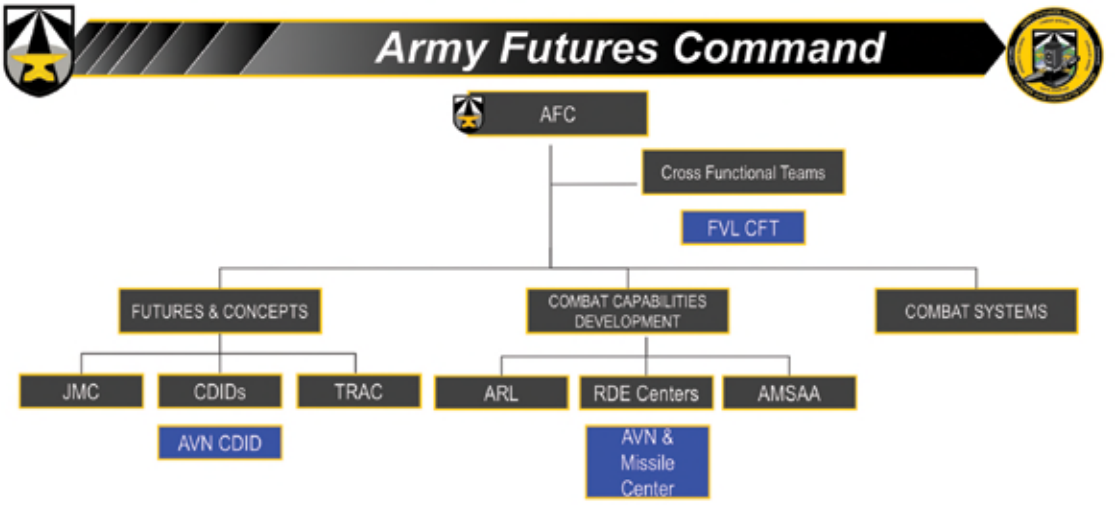


Figure 1. U.S. Army Futures Command Task Organization with Aviation

On June 4, 2018, the Honorable Mark T. Esper, Secretary of the Army, approved Headquarters, Department of the Army, General Order Number 2018-10, establishing Army Futures Command with a full operating capability date of July 1, 2019. Similar to 40-plus years ago when General Starry's Air Land Battle doctrine created the most feared combined arms Army in the world, the Army Futures Command is now charged with leading the Army's future force modernization enterprise to respond to new multi-domain security challenges.

AFC establishes unity of command and effort by consolidating the modernization process under one command. The Army leadership is directing AFC to turn ideas into actions through experimenting, prototyping, improving acquisition business processes, and pursuing appropriate commercial options. Most importantly, AFC must directly incorporate requirements from the warfighter and reduce the time to deliver those requirements in order to maintain the Army's competitive advantage.

So how does the Army Aviation Enterprise fit within this new command structure and new paradigm? Army Aviation is well represented and a part of every aspect in the new AFC Command structure to determine and develop greater reach, lethality and protection solutions for the future (see Figure 1.).

Cross-Functional Teams

One of the first efforts established by the Army senior leaders was the establishment of cross functional teams (CFTs). The CFTs in general terms are small, laser focused staffs designed to bring the top priorities to the field quickly to enable multi-domain operations (MDO), the Army's new operating concept. The Future Vertical Lift (FVL) CFT located at Redstone Arsenal, Alabama, coordinates the requirements generation, science and technology (S&T) initiatives, and program management (PM) office activities for the FVL Lines of Effort: Future Advanced Reconnaissance Aircraft (FARA), Future Long Range Assault Aircraft (FLRAA), Advanced UAS (AUAS)(includes brigade combat team (BCT) Future Tactical UAS (FTUAS) and Air Launched Effects (ALE)), and Modular Open System Approach (MOSA). The FVL CFT is also tracking closely the development and fielding of Improved Turbine Engine (ITE) as a complementary enabling capability for current and future forces.

CCDC

In the Combat Capability Development Command (CCDC), all the research centers and the Army Research Laboratory are combined under a single organization. Of course, the Aviation Enterprise continues to have first rate support for aeronautical science and technology from the CCDC Aviation and Missile Center at Redstone Arsenal, Alabama. They are involved with all the CFT and non-CFT aviation efforts developing and coordinating research and development activities.

Combat Systems

Combat Systems has the responsibility to refine, engineer, and develop the solutions to meet identified requirements. The Program Executive Office, Aviation (PEO AVN), working with Combat Systems and other PEOs across the office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology), continues to provide the procurement processes and support structure for delivery of aviation materiel solutions. PEO AVN established the Program Manager for FVL to work efforts with the FVL CFT.

FCC

Finally, the Futures and Concepts Center (FCC) is responsible to identify and prioritize development needs and opportunities for the Army. FCC, formerly known as the Army Capabilities Integration Center (ARCIC), is still located at Joint Base Langley-Eustis, Virginia. FCC is creating more horizontal and vertical synchronization of concepts, experimentation, and integration of capabilities across warfighting functions and overall capabilities. FCC leads the conceptual transformation of the Army into MDO. In the

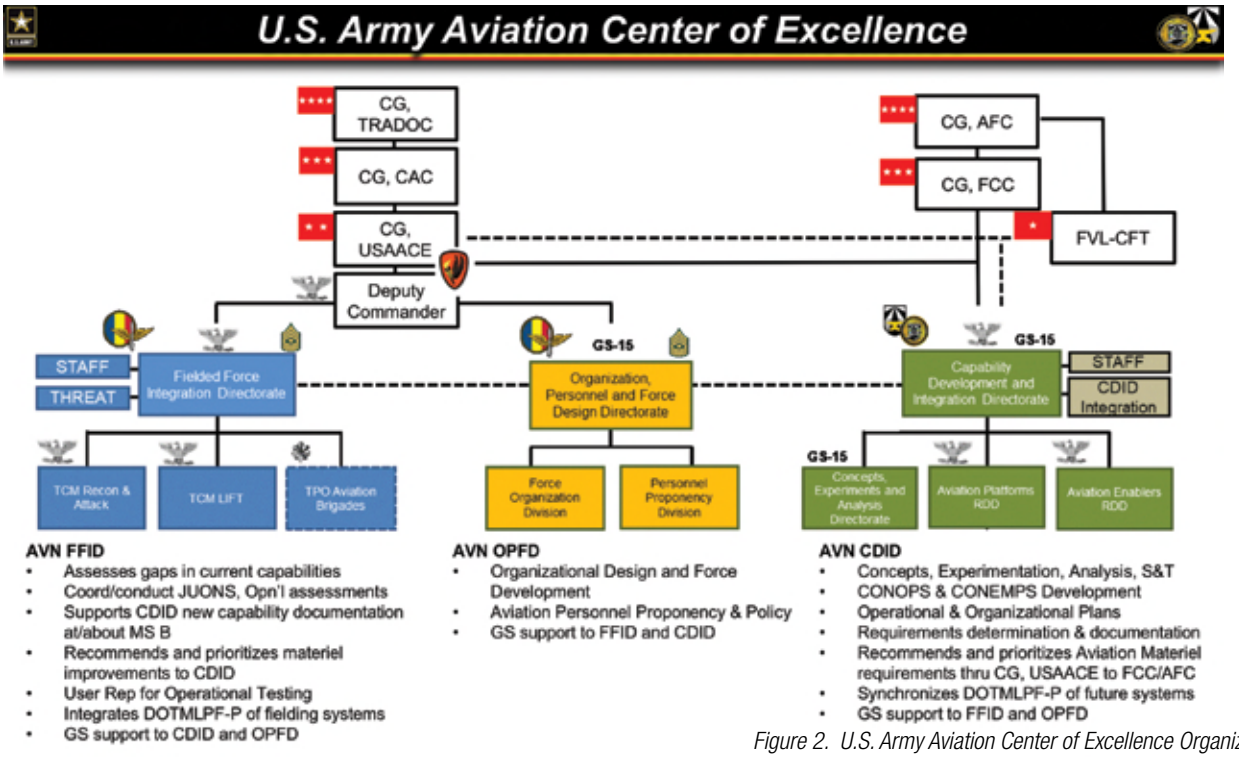


Figure 2. U.S. Army Aviation Center of Excellence Organization

new Future Force Modernization Enterprise, Army materiel requirements come from one of three sources: CFTs, Capability Development and Integration Directorates (CDIDs), or Sprint IPTs. Sprint IPTs are like mini-CFTs created for a specific, short period of intense requirements determination and development based on an emerging operational need.

CDID

As a subordinate of FCC, all the centers of excellence (CoE) CDIDs provide proponent warfighting material requirements and priority recommendations through their respective CoE commanding generals, who remain the branch force modernization proponent. The Aviation CDID still resides at the U.S. Army Aviation Center of Excellence (ACoE), Ft. Rucker, Alabama. The Aviation CDID retains the responsibility to develop concepts, conduct experimentation and analysis, and document requirements for all aviation needs. The CDID is the Materiel Developer for all conventional force Army Aviation materiel capabilities. The Aviation CDID realigned into three subordinate organizations: Concepts, Experiments and Analysis Directorate (CEAD); Aviation Platforms – Requirements Determination Directorate – (AP-RDD); and Aviation Enablers – Requirements Determination Directorate – (AE-RDD). Together, we are a leaner, smaller version of our previous CDID structure focused on and dedicated to developing the future Aviation force with the needed capabilities to fight effectively in MDO.

FFID

CDID's partner in fielding and integrating capabilities is a new/old TRADOC organization under a new banner: the Fielded Force Integration Directorate (FFID). FFID retains the TRADOC Capability Manager (TCM) offices of Reconnaissance/Attack and Lift, a new office proposed as the TRADOC Program Office (TPO) Aviation Enablers, the Threat Office, and the Aviation Survivability Development and Tactics (ASDAT) Team.

OPFD

The Organization, Personnel and Force Development (OPFD) Directorate, responsible for Army Aviation force design and personnel proponency policies, is a separate reporting directorate to the deputy commander, ACoE. The TCMs will retain their traditional duties as user representatives for currently fielded capabilities and the responsibility for executing testing and fielding new capabilities as they emerge.

Together, the CDID, FFID, and OPFD will be responsible for developing and integrating the doctrine, organization, training, material, leadership and education, personnel, facilities, and policy (DOTMLPF-P) solutions for Army Aviation. The CDID focuses on future requirements, the FFID focuses on current and near-term capabilities, and OPFD spans the lifecycle of formation design and aviation Soldier development. (See Figure 2.)

No matter the organizational structure of the Aviation Enterprise, the CDID, FFID, and OPFD together are dedicated to developing and fielding the best capabilities needed for Army Aviation. Collectively, we continue to represent the Aviation Enterprise and are responsible for significant national treasure to provide over-matching third dimension reach, lethality, and protection in support of our ground commanders. All three organizations are well partnered with HQDA, the Army Futures Command, Training and Doctrine Command, Futures and Concepts Center, the FVL CFT, Aviation and Missile Center, PEO AVN, and all of the other organizations, staffs and commands that make up our Aviation team to provide America's finest resource, The American Soldier, with the capability to win on the next battlefield.

Above the Best!

COL Michael J. Best is the director and Mr. Glenn A. Rizzi the deputy director of the Aviation Capability Development Integration Directorate (CDID) of the Futures and Concepts Center, U.S. Army Futures Command, located at Ft. Rucker, AL.

Aviation Systems Reorganizes

By COL Johnathan Frasier and Ms. JoAnna Wright

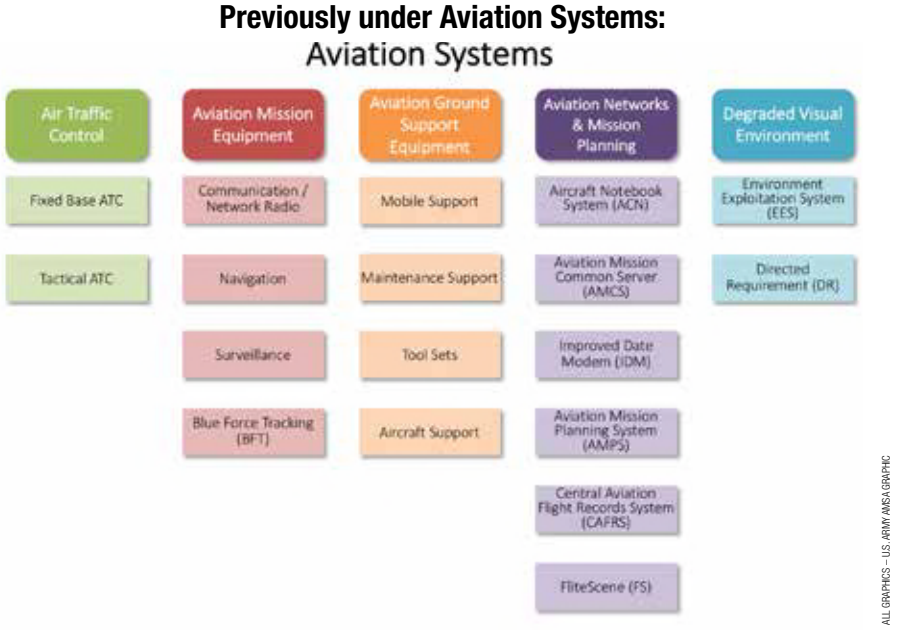


Figure 1. Aviation Systems organizational structure of product offices prior to reorganization.

I am proud to announce the Aviation Systems Project Office has undergone an internal reorganization and is now the Aviation Mission Systems and Architecture (AMSA) Project Office.

AMSA is an Aviation project office located within Program Executive Office Aviation (PEO Aviation) under the leadership of MG Thomas Todd at Redstone Arsenal, Alabama.

AMSA has reorganized its operational structure in order to better support U.S. Army and PEO Aviation priorities, optimize alignment and execution of crosscutting capabilities, and align talent to better serve mission success during a period of declining budgets.

In late 2018, Aviation Systems conducted an organizational study asking one question: Does the Aviation Systems organization need to change, and if so, how? The objective of this study was to consider how a realignment of our current structure might enable our organization to work more efficiently despite the challenges project offices face due to budget changes, changing sustainment resources, shifts in workload, and contract requirements. The goal of a reorganization would enable Aviation Systems to provide the best support to the Army Mission, our people, and provide our product offices (PdO) with the necessary authority and control to complete their missions.

AMSA as Aviation Systems was previously organized into five distinct PdOs and a combined portfolio of 49 product lines. Figures 1 and 2 show our organization's realignment.

These changes require the PdOs to work across organizational lines to execute their responsibilities. The reorganization of our internal structures allows the AMSA workforce to operate as a fully integrated organization where product offices depend on each other and AMSA headquarters to achieve mission success.

As Project Manager for AMSA, it is my intention that our Soldiers are never in a fair fight and have the ability to win our nation's wars. To achieve this intent, my focus is always on the Soldier first and foremost. I work continuously to develop a professional workforce that extends trust inside and outside the organization, embodies the Army Values, and is committed to excellence. With these tasks in mind it was, and still is, critical to ensure the incredible talent that existed in Aviation Systems carry over fully into AMSA to provide the best support to our mission.

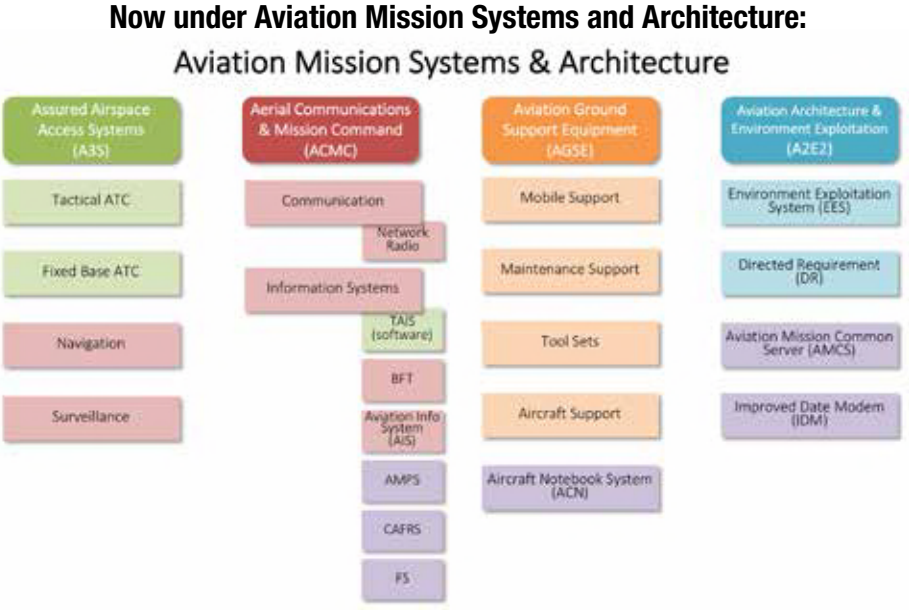


Figure 2. Aviation Mission Systems and Architecture organizational structure following reorganization. Five Product Offices realigned into four.

AMSA's portfolio includes 49 distinct product lines which are now realigned under the four PdOs. The tireless work put into the organizational study ensured no product lines were dropped and talent and personnel were realigned to shift the workload toward a balance that enables all personnel to focus on the Soldiers and the mission. The successful implementation of this reorganization means AMSA can provide focused and responsive stakeholder alignment with the Army and PEO Aviation's priorities. With a fully engaged workforce, skills are aligned to the products and processes, so they can contribute at a high level to mission success.

New organization and product office names mean new logos as well; our PdOs are currently in the design phase and will announce new logos in the next edition of *ARMYAVIATION*.

COL Johnathan Frasier is the project manager for PEO Aviation's Aviation Mission Systems & Architecture Project Office, and Ms. JoAnna Wright provides communications-operations support on AMSA headquarters' Special Staff. Both are located at Redstone Arsenal, AL.

Reprinted from the August/September 1979 Issue of ARMY AVIATION Magazine

Historical Perspective ▶ 40th Anniversary of the Black Hawk First Unit Equipped

A GREAT DAY for the ARMY and The 101st!

By General John R. Gutherie, Commander, USA Materiel Development and Readiness Command

Good morning, Ladies and Gentlemen and members of "D" Company, 158th Aviation Battalion.

This is, indeed, a great day for the Army, for American industry and for the 101st Airborne Division (Air Assault). It is also, for me, a personal and professional pleasure and honor to participate in another ceremony marking the achievement of a major milestone in the fielding of one of the "Big Five," and to represent not one but two Chiefs of Staff of the Army who would, except for pressing duties, be here today. They did, however, ask me to express both their regrets at not being able to come and their great satisfaction that we have achieved this milestone in the Black Hawk program.

Too often we hear it said that you can't put your finger on who's responsible for what happens – good or bad – to a program. Normally, this is caused by the lack of continuity of people in the job. It is a personal pleasure, therefore, for me to point out that there are at least four of us here – Bill Crawford, Gerry Tobias, Dick Kenyon, and I – on whom you can put the finger.

I'm proud to say that I was Director of Development in the Office of Chief, Research and Development when the demonstrator engine program began, Deputy Commanding General for Materiel Acquisition at AMC when the UTTAS request for proposal was issued and the program began, that I contributed personally to structuring the program (we had no engineering development phase}, and that I was again back in a responsible position to help Bill, Gerry, and Dick through their trials of initial production and deliveries. Now, Dick will be leaving us, at an appropriate time in that this development phase is now complete with the deliveries of these first production models to a TOE unit, but the rest of us will still be here to see how well his integrated logistics support plan works.

Another first for the 101st!

So much for such reminiscing. This is, by any measurement, a truly historic day for the Army and for the 101st Airborne Division (Air Assault). Another first for the 101st! Like that day 21 months ago when, with the help of Jim Thorpe's son, Carl, we named the UTTAS the Black Hawk. This morning represents another milestone in the Army/Industry effort to provide the total Army with modern equipment to enable it to meet the threat of the 80s.

We are fielding the first production models of a modern, much needed troopcarrying helicopter of greatly increased capabilities to a regular TOE active Army unit, "D" Company 158th Aviation Battalion, the Ghost Riders. In so doing, we not only fulfill a commitment made 14 months ago when the Black Hawk colors were presented to this unit upon its designation as the Army's first Black Hawk Company, but also initiate a process which will see some 48 new systems fielded over the next 5 years.

ACCEPTANCE—General John R. Guthrie, left, Commanding General, DARCOM, and MG John N. Brandenburg, the CG of the 101st Airborne Division (AASLT), are shown with the "Acceptance Plaque" presented to the US Army by Gerald J. Tobias, Sikorsky President, at the time of the turnover of the operational Black Hawks to the Fort Campbell unit.

The two aircraft you have seen in flight are symbolic of the culmination of many hard years of effort by General Electric Sikorsky Aircraft, their sub-contractors in 43 states, and the government. Those years, I assure you, were sometimes very eventful for all of us who believed -who knew - that the Army had to have a new troop transport helicopter which could survive on the battlefield of today and tomorrow. I said we are fulfilling a pledge to "D" Company. We are doing so despite the crash of a prototype in May 1978. That the program despite an initial two-month delay, is now just one month off its original schedule. This is a tribute to everyone involved in its development and production.

A firm and steady hand

In particular, I would like to acknowledge the very firm and steady hand which guided the Black Hawk program through this period – *COL Richard Kenyon, who, as I said, with the initial Black Hawk fielding almost completed, leaves the program. Because of his outstanding accomplishments, COL Kenyon was awarded the 1978 Secretary of the Army's Award for Project Management. He leaves the program in good shape and for once, we are making the transition of PM's at a rational point - when the system is making its own transition from development to production and support.

Unquestionably, Black Hawk is a major improvement over the 20 year faithful workhorse of the Army, the UH-1. Black Hawk is our first true squad carrying helicopter with greatly improved survivability, reliability, and maintainability. (Just how greatly improved will be something for "D" Company to demonstrate.) It is not too much to say that Black Hawk is the first Army aircraft designed, developed, and produced specifically with the soldier in mind, from the combat squad members to the mechanics who will appreciate the modular concept used for the T700 engine and other aircraft parts. I might add that this aircraft is so highly regarded that, in addition to its primary role as a troop carrier, it is also being considered as the basic airframe for both Army and Navy electronics equipment.

Most of you know that Black Hawk is already being used at Fort Rucker for training, and I'm happy to say that we've had "good vibes" from there. The pilots have been elated by its performance and handling qualities, and I am confident that your experience with Black Hawk will be the same.

"D" Company is, I am sure, proud to be the first operational unit to receive, maintain, and operate the Black Hawk. From a review of its history, I doubt that the Army could have found a better unit to which to entrust this new aerial combatant. "D" Company's record in war - 2 Presidential Unit Citations, 2 Valorous Unit Awards, 9 Vietnam campaigns - and in peach - on training exercises and in civilian relief - bespeaks the courage, dedication, and unselfishness which have always marked the American soldier.

As I looked, upon our arrival, from the men and women of "D" Company, 158th Aviation Battalion, to this helicopter, I was struck anew by the fortuitous circumstances which unite Black Hawk and the "Ghost Riders" for I understand that the latter have chosen as their unofficial song a ballad of many years ago entitled "Ghost Riders In The Sky."

The pursuit of lasting peace

Like the Ghost Riders of the song, "D" Company's modern Ghost Riders, mounted on the Black Hawk, are also engaged, with the rest of this proud Division and all of our forces, on what must seem at times an equally endless chase - the pursuit of lasting peace in our world. Their mission - our mission - is, by being ready, to protect that peace by deterring war; but if that proves impossible, to fight to defend and protect our national interests - and to win.

Let me, in that spirit, close by repeating for the benefit of "D" Company and all those who will use this fine aircraft what Carl Thorpe, son of the great Jim Thorpe and member of the Sauk Indian tribe from which sprang the great Indian Chief whose name this helicopter bears, said of Black Hawk twenty-one months ago when it was christened:

To this bird we say -
"Go to the skies,
To the clouds, and
Challenge the thunder.
Bring upon your strong wings
The peace of Black Hawk."

I would only add that, God willing, we trust that peace - and not war - will indeed be the Ghost Riders and Black Hawk's destiny.

AAAA Chapter Affairs By LTC (Ret.) Jan Drabczuk

I greatly appreciate the support from the Phantom Corps Chapter for authoring and sharing this information to our membership.

The Phantom Corps Chapter

The Phantom Corps Chapter is located on Fort Hood and supports the aviation professionals and families of the 1st Air Cavalry Brigade (1ACB), 166th Aviation Brigade, 15th Military Intelligence Brigade, US Army Operation Test Command, Aviation Test Directorate, and Army Futures Command.

CHAPTER GRAPHIC

Fort Hood is also home to Hood Army Airfield and Grey Army Airfield. The Phantom Corps Chapter has been serving and supporting aviation professionals and their families on Fort Hood for decades. The chapter ensures that this tight knit community has a voice before senior leadership, government, and encourages the Army Aviation profession. The Phantom Corps Chapter currently has approximately 300 members and will soon become a super chapter thanks to the engagement of aviation leaders throughout Fort Hood.

Fort Hood History

Fort Hood was named after John Bell Hood, a famous Confederate Army General who commanded the Texas Brigade during the American Civil War. In 1861, John Hood resigned his commission in the Union Army to join the Confederate Army where he was quickly promoted to Brigadier General. A leader who always took the fight to the enemy, General Hood was placed in command of the Army of Tennessee and aggressively opposed Union General Tecumseh Sherman during the infamous "March to the Sea." Today, Fort Hood is comprised of 340 square miles. The post stretches 26 miles from east to west and 24 miles from north to south. Live-fire exercises take place on 50 ranges and 2 scaled-down ranges located throughout the posts maneuver area. Fort Hood is approximately 60 miles from the state capital of Austin, and borders the cities of Killeen to the east, Copperas Cove to the west and Gatesville to the north. Fort Hood is "The Great Place."

Leading the Way

In early 2019 the Phantom Corps Chapter was reinvigorated by the addition of new chapter officers from 1st Air Cavalry Brigade and 166th Aviation Brigade. The goal of the Chapter President is to have chapter leadership from officers and enlisted as well as current and retired military, that represent the great variety of different aviation units and assignments in and around Fort Hood. The current chapter leadership includes Chapter President: CSM(R) Doug Greene who retired from the Air Cav, Treasurer: Joann Courtland (former CW2) from US Army Operation Test Command, Vice President of Awards: CW5 Immanuel DelaCruz, the Senior Warrant Officer of 166th Aviation Brigade, and the Vice President for Membership: CW2 Cristobal Quiroz from 1ACB.

Supporting Aviation Readiness for the Future, and Beyond

The Chapter has instituted monthly chapter meetings with special guest speakers planned quarterly. Having a robust military community around Ft. Hood, speakers are planned from the Army Futures Command, US Army Test Command, Aviation Test Directorate, Fort Hood Garrison Command, and the Aviation Center of Excellence. The Phantom Corps Chapter plans to host three events in 2019. The first is a planned visit to Army Futures Command in Austin, Texas. The second will be a family-style golf scramble that will include an 18-hole golf tournament, a driving range social, and a putt-putt tournament. The final event of 2019 will be an AAAA formal that all the aviation units, aviation professionals, and aviation support on Fort Hood will be invited to attend. The Phantom Corps Chapter will be using the proceeds from these events to give back in scholarships, recognitions, and other incentives to aviation unit members and their families within the chapter. These events will network, support, and recognize not just the aviation professionals in uniform, but also their spouses and family members.

Summary

It is good to see the Phantom Corps Chapter gaining momentum at Ft. Hood. Chapter growth and monthly/quarterly chapter events will help the chapter provide a strong membership base. This will allow the chapter to also grow its support to Soldiers and their families in the Ft. Hood area.

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

Bluegrass Chapter Recognizes Returning Aviator

CHAPTER COURTESY PHOTO

Once again, CPT Ron Shashy is back in uniform to serve his country after a 24-year break in service. He is currently assigned to 63rd Theater Aviation Brigade with the Kentucky National Guard and flying UH-60L Black Hawks. He has invested in the AAAA Bluegrass Chapter scholarship program to help others with a $5,000 donation; AAAA helped him with scholarships in 1995 & 1996 while he pursued his medical degree. The chapter recognized CPT Shashy for his extremely generous contribution.

SoCal Chapter Golf Outing and Quarterly Meeting

CHAPTER COURTESY PHOTO

The Southern California Chapter held their second quarter meeting on June 1, 2019 at the Fiddlers Green pub patio on the Los Alamitos Army Airfield, Los Alamitos, California. Pictured in front of a recently restored Huey, UH-1 M-model gun ship are some chapter members and officers including: (far left) CSM Ron Cabrera, VP Enlisted/Awards; LTC Tom Lasser, Sr. (3d from left) VP; 2d from right LTC John Hendrickson, President; and 3d from right, Mr. Mike Letson, VP membership. The meeting was preceded by the chapter's annual scholarship fund-raising golf outing held at the Seal Beach Navy golf course in Cypress, CA.

Tennessee Valley Chapter Fishing Tourney

The chapter hosted the Vlasics' Classic Bass Fishing Tournament on April 15, 2019 at Lake Guntersville, AL. Program Executive Office, Military Deputy, COL Robert Barrie was on hand and took part in the presentation of awards. Organized by Tod Glidewell, VP Veterans Affairs, and Leon Hite, VP Enlisted Affairs, over 60 people from AAAA chapters across Kentucky, Tennessee, Georgia and Alabama braved windy conditions to attend. And this year an anonymous donor sponsored members of "Heroes on the Water" (HOW) and TVC AAAA staff partnered to sponsor wounded warriors to fish the event which concluded with Laura & Jack Bequette providing a Jambalaya and Brats luncheon.

Pictured left to right COL John Fraiser, Blake Douglas & COL Robert Barrie with the winning catch from the boater division; and,

Left to right – Bubba White, Yulista (sponsor of Big Fish); Mark Cory, Big Fish Boater Div.; Dan Hardy, Kayak Big Fish; and Mike Key, Yulista Big Fish Sponsor.

A special thanks to the sponsors for making the fishing tournament possible: TVC AAAA, Boeing, Boenker Hill, Defense Enterprise Solutions, Radiance, PAE, Parker, Quantitech, Big Oh's, People Tec, 82nd Airborne Association, Screaming Eagle Aviation Association and Yulista.

ORDER OF ST. MICHAEL and OUR LADY OF LORETO INDUCTEES

Black Knight Chapter

CHAPTER COURTESY PHOTO

National AAAA Secretary MG (Ret.) Wally Golden (left), together with Black Knights Chapter president, COL Richard Melnyk, induct **MAJ Walter Thomas** (center left) and **MAJ John Wlasniewski** into the Bronze Honorable Order of St. Michael at the U.S. Military Academy, West Point, NY on April 25, 2019. Both individuals were recognized for their mentorship to the cadets and service to the chapter as they prepare for change of duty. Thomas, who served as chapter secretary and an instructor in the Department of Physical Education, will move to Hawaii as the battalion aviation officer for 2-25th Infantry; and Wlasniewski, the chapter treasurer and regimental executive officer, 2nd Regt., U.S. Corps of Cadets, USMA, heads to Europe and the 12th Cbt. Avn. Bde.

CHAPTER PHOTOS BY SHERRY LOORNER

Tennessee Valley Chapter

LTC Rod Turner, product manager for Infrared Countermeasures is inducted into the Silver Honorable Order of St. Michael by chapter president Gary Nenninger during a ceremony at LogiCore Event Hall in Huntsville, AL on May 23, 2019. Turner was recognized for managing the current ASE portfolio of Infrared Countermeasures: Advanced Threat Infrared Countermeasure (ATIRCM) and Common Infrared Countermeasure (CIRCM).

Continued on Page 55

AAAA Membership Update

By CW4 Becki Chambers

The Membership Corner

My husband, Greg, is always asking me to keep this question in mind as I perform the duties of Vice President of Membership: Why should people join AAAA?

One of the many reasons that comes to mind is the statement that "Professionals join professional organizations." But you might be asking yourself why is that true? One person that can answer this question is CW3 (Ret.) Becky Pinckney.

Becky first joined the Army in 1994. She was attending college at Austin Peay State University near Ft. Campbell, KY, and, in her words, "the Army just seemed cool." After initially joining the Reserves, she switched to Active Duty in order to travel more and to change her MOS. She first enlisted as a personnel records specialist before becoming an air traffic controller.

While on active duty Becky was an air traffic controller for the first 10 years stationed at Ft. Rucker, AL, Germany, and Korea. She became an air traffic and airspace manager warrant officer for her last 12 years, stationed at Ft. Rucker, AL, and Ft. Hood, TX, with deployments to Iraq and Afghanistan. She culminated her career as an instructor/training developer. Becky retired in 2019 and is now a training developer for PM A3S (formerly PM ATC) for Tactical Air Traffic Control Systems.

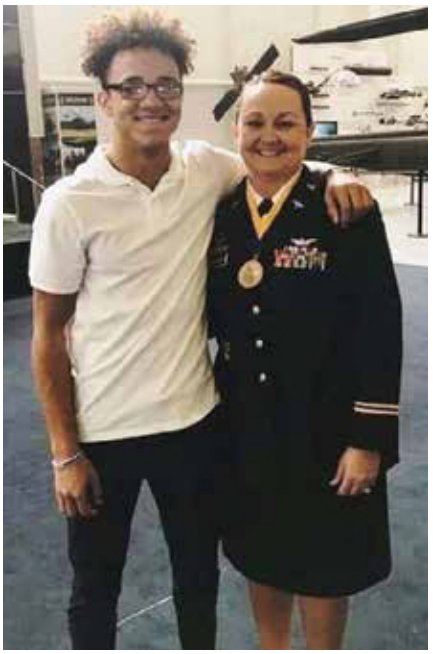
Becky has been a member of AAAA for over 10 years. In addition, she has also been an active member of the United States Army Warrant Officer Association for over 11 years. She is a Lifetime Member of USAWOA and served as the secretary for The Above the Best Silver Chapter, Ft. Rucker, AL for the last 2 years.

I asked Becky to share her thoughts on why she believes it's important to join a professional organization. She summed up her reply perfectly in one sentence: "Professional organizations are a platform for Soldiers to voice opinions, learn the near long-term changes occurring in the Army, volunteer for great organizations, meet Soldiers and Officers from all branches and places all while serving the community in which they are living."

Additionally, Becky believes that every military leader needs to remember where they came from and continue to grow. "Never be too big to admit your faults and continue to learn from everyone around you." Becky has no regrets about retirement as she made numerous acquaintances along the way, a great deal of friends, and gained a handful of family members. She will continue to be active in the local chapters of both AAAA and the Warrant Officer Association.

Like Becky said, networking, knowledge sharing, and leadership opportunities are all great reasons to join a professional organization. AAAA chapter meetings can help facilitate these reasons: from guest speakers at the meetings, to developing leadership skills as an elected chapter officer. Ultimately, being involved in a professional organization fosters the development of relationships that allow you to learn and grow in your profession.

Did you know that there is a joint Warrant Officer Association/AAAA membership available? Visit *www.usawoa.org* and select "online" store. As you scroll down, you will see the joint membership option.



PERSONAL PHOTO FROM BECKY PINCKNEY

CW3 (Ret.) Becky Pinckney and her son, Jaylon Porter, at her retirement ceremony.

By the time you read this article, we will have finished the Spring Fever Membership Contest. I look forward to revealing the winners in next month's magazine. This contest is just another way to help us reach our goal of 20K by 2020. We've made great strides in the last year towards reaching that goal, and the momentum keeps building. Besides these specific contests we keep running, please think of each day as a recruiting day. Ask yourself every day, who can I ask to join AAAA today? Make it your goal to sign up a minimum of one new member every month. Remember, anyone that has an interest in Army Aviation is eligible to join. And remember, the top recruiter for each month, with a minimum of 10 new members signed up in that month, will receive $100 from AAAA!

CW4 Becki Chambers
AAAA Vice President for Membership

New AAAA Life Members

Aloha Chapter
LTC Kacie Lee
Arizona Chapter
LTC William F. Hipple, Jr. Ret
Badger Chapter
COL Larry R. Boehme, Ret.
Central Florida Chapter
LTC Thomas E. Rountree, Ret.
COL Delloyd Voorhees, Jr. Ret.
Connecticut Chapter
LTC Paul B. Hoar, Ret.
Mrs. Natalie Pelland
Great Lakes Chapter
2LT David Bindon
CW5 James F. Wise, Ret.
High Desert Chapter
LTC Cameron G. Gallagher
Keystone Chapter
MG Jessica Wright, Ret.
Lonestar Chapter
MAJ Thomas M. Kolb, Ret.
Minuteman Chapter
LTC James J. Lonchiadis
Mount Rainier Chapter
SFC Fabian Bandoo
Narragansett Bay Chapter
Mr. Michael O'Keefe
North Texas Chapter
CPT Sean C. Thomas
Pikes Peak Chapter
Cw2 Jerid Hitchens
Tennessee Valley Chapter
Ms. Kathy Willerton

New AAAA Members

Air Assault Chapter
WO1 Daniel J. Adams
Bryan L. Corbett Sr.
Arizona Chapter
John P. Graham
Aviation Center Chapter
WO1 Cornelius J. Kettles
SFC John Timothy Pryor
2LT Paul J. Rankin
WO1 Julie Reinking
WO1 Andrea J. Romberger
WO1 Sally R. Thomas
Desert Oasis Chapter
James Allen Lippencott
Follow Me Chapter
1SG Deborah Ann Countryman
Griffin Chapter
SGT Jacob F. Casner
PFC Jean E. Etienne
SGT Matthew T. Golding
SPC Matthew S. Gunn
1LT Joseph LaMagna
SGT Dakota R. Mercer
SSG Justin C. Middleton
SGT Nathan A. Miller
Peter J. Mock
SSG Daniel W. Pennington
SPC Carlos M. Rivera
SPC Paul G. Rodriguez
MAJ Jonathan M. Romaneski
SPC Joshua M. Sailer
SGT Bryce D. Wood
Idaho Snake River Chapter
WO1 Brandon T. Anderson
Magnolia Chapter
WO1 Andrew L. Eaves
Morning Calm Chapter
CW5 Michael A. Corsaro
SGT Andrew Ji
SFC Uziel T. Lopez
Mount Rainier Chapter
MAJ Nicole Solana
North Texas Chapter
Ms. Haley Hartwick
Phantom Corps Chapter
WO1 Travis D. Watson
ShowMe Chapter
SPC Lyza Jamerson
Tennessee Valley Chapter
Tim Aultman
WO1 Jackie C. Bottoms
John Bullock
Linda D. Diedrich
April L. East
Daniel S. Gadomski
Aimee D. Ghee
Brian M. Sullivan
Washington-Potomac Chapter
SPC Suraj Raj Mali
Winged Warriors Chapter
SFC Brandyn D. Andres
SGT Alicia A. Baum
SGT William F. Bavetta
1LT Jordan D. Carbol
CW3 Matthew M. Christopher
SFC Donald L. Cribbett
SPC Enrique M. Cuevas
SGT Travin O. Dashell
SSG Jose F. Esperacion
CPT Kevin T. Filip
CPT Philip H. Fons
CW2 George L. Howard
1LT David A. Jackson
CW2 Jayson D. Johnson
CPT William T. Lane
SGT Tavarus D. Lewis
SPC Natalie A. Li
SSG Timothy J. McGrath
SPC Kevin B. Muldrow
SGT Janay L. Nutter
SGT Timothy A. Robinson
SGT Kali T. Saini
CPT Carey Wade Shepard

UPCOMING EVENTS

AUGUST 2019
1 Award Submission Deadline – Logistics Support Unit of the Year; Materiel Readiness Awards; Fixed Wing Unit of the Year; UAS Soldier & Unit of the Year
20-21 AAAA Luther G. Jones Army Aviation Depot Forum, Corpus Christi, TX
30-2 Sep NGAUS 141st General Conference & Exhibition, Denver, CO

SEPTEMBER 2019
30-2 NGAUS 141st General Conference & Exhibition, Denver, CO
28 National Aviation Hall of Fame Enshrinement – Denver, CO

Top Recruiter Program

AAAA awards $100 to the member who recruits the most new members in a given month (minimum of 10 members to qualify).

AAAA congratulates the following Top Recruiters:

SGT Shawn Bourke
Sinai Chapter
Recruited 12 new members in March 2019!

1LT Ryan Fiore
Winged Warriors Chapter
Recruited 27 new members in May 2019!

For more information on this and other programs, contact your Chapter officers or go to quad-a.org.

SGT Perceiver Tozaygono
SSG Jose A. Vasquez
SGT Edison M. Vera
SFC Phillip K. Webb
CW3 Joshua D. Weston
SPC Austin G. Wim

Lost AAAA Members
Help AAAA locate a lost member and receive a FREE one month extension to your AAAA membership.

PFC Anthony Aleman
CPT Robert Boham
Harold Bowie
MAJ James Bruckart
SPC Brett Butler
E. Cavanaugh
LTC Richard Cercone
LTC Tzu-Shan Chang
Kenneth Clark
MAJ Harry Connors
Cynthia Crutchfield
Bruno Cussigh
SGT Travis Darnell
CW3 Matthew Decker
2LT Arthur Galloway
Michael Glass
MAJ Gregory Glover
LTC William Goforth
Mary Gorman
COL Gerhard Granz
Tashia Harris Smith
COL Jose Hinojosa
CW4 Delbert Jackson
MAJ Gregory Jenkins
MAJ David Jobe
LTC Peter Kowal
Beth Kramer
CW3 Vladimir Kultschizky
CW3 Timothy Larz
MSG David Little
SPC Poblo Lopez
CPL Williams Marquez
SFC Jim Moore
Fred Newcomb
SFC Henry Rathbone
SPC Cameron Rumbo
LTC Martin Scheld
Thomas Schiltz
LTC Jerry Scott
SPC Jeremy Sharkey
SPC Shelton Shia
SGT Nishi Shogo
Brian Skiltow
Jeremy Smith
MAJ James Speelman
LTC Friedrich Stern
WO1 Armando Torres
Kevin Tucker
SPC Mark Villaluazo
MAJ L.D. Walker
Rose Weast
Nadia Whatley
SSG Johan Zarae

AAAA **Legislative** Report

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

Defense Budget Fight Ramps Up

A lot has materialized on Capitol Hill since last month's article with the Senate and House both finalizing their versions of the National Defense Authorization Act (NDAA) for FY20. We will focus on this because it sets the stage for the political dance we will witness in the coming months.

Budget Authorizations

As discussed in previous articles, the NDAA is the annual piece of legislation that "authorizes" the DoD to spend dollars for research and development, procurement, and sustainment. The other thing the NDAA does is guide and influence policy. When industry disagrees with the direction DoD is going on programs, they use their lobbyists to influence through the House and Senate authorization committees (HASC and SASC). Each of these committees pass a version of the NDAA that will eventually be resolved in a conference period for a final version. Each of these versions comes with their own accompanying report that issues directive report language (DRL) to DoD mostly in the form of report and briefing requirements. These are aimed at making the DoD do more homework on the decisions they are making. The HASC and SASC versions of the FY20 NDAA reveal that Congress remains very interested in the current state of Army Aviation readiness as well as the future of our enterprise. The President's budget request has a topline of $750B in defense spending. The Senate, controlled by the GOP, published their version of the NDAA in alignment with the President's request while the HASC, controlled by the Democrats, published a version with a topline of only $730B. That's $20B that must be resolved by the end of the fiscal year in September. In the coming months, our Aviation general officers will move back and forth across the Potomac to underscore our needs and advocate for funding and policy that aligns with our needs. They are busy because at the same time, they are in parallel working the budget request for FY21 and they are working to answer the mail on the directive report language that have hard deadlines.

Directive Report Language (DRL)

Let's take a little closer look at the directive report language. When you look at the hundreds of pages of DRL published in conjunction with each chamber's version of the NDAA, it reveals interesting insight into parochial and non-parochial interests that effect Army Aviation. Political influence happens on and off Capitol Hill, but it is very powerful and often comes in the form of DRL. In the Senate's report, they add detail on why they cut or add funding authorizations to the budget lines requested by the President. Apache new builds is one example. We requested zero new build Apaches in the budget request, but the Senate disagrees and added an authorization of $105M (3 new aircraft). UH-60M procurement had a budget request of $1.4B, but the Senate felt that was too much and reduced the authorization by $140M specifically stating that 7 aircraft to be built for the active force would be reduced out of the procurement plan. UH-60V also saw action as Congress increased the $169M request for the upgraded platform by $35M (+8 conversions) noting the need for these aircraft in the National Guard. What drives these decisions and changes? The answer is two-fold. Remember, the FY20 Army Aviation Budget request was built over a year ago and went to Congress this past March. Life in DoD is dynamic, and requirements change over the course of 12-18 months, but changing the budget request right before it goes to Capitol Hill is impossible. So, our Aviation general officers confer often with congressional staff on these changes so when lawmakers move into their actions to make edits to the President's budget requests, some of them such as those noted above are coordinated between the Pentagon and Capitol Hill. This is the part of the process that works very well. The other influence on changes occurs through parochial influence by industry lobbyists and partisan organizations. We'd be fooling ourselves if we did not recognize that Sikorsky, Boeing, and large companies as well as organizations like the National Guard Association contributed to the adjustments noted above. This is not a bad thing, and a natural part of the process. Another piece of DRL that seems very promising also came out of the Senate. They published a long and detailed piece of language encouraging the future vertical lift (FVL) acquisition strategy be accelerated. There is strong support on Capitol Hill to give our next generation warfighters advanced rotary wing technology, but again, everything comes at a price and aviation is expensive so the puts and takes is a very challenging balance for our Aviation leaders to achieve.

Aviation Engagement Continuity

We've had quite a few general officers on the move this summer and one to note is the return of BG "Mac" McCurry to Army G3 Aviation in the Pentagon. This is good for Army Aviation because of his lengthy experience in Army G3 and G8 and extensive experience working with congressional staff and members. BG McCurry needs very little ramp up speed as he already knows the process inside and out and has existing and productive relationships with the key influencers on the Hill.

AAAA Awards

Order of St. Michael Recipients

GOLD
CW5 Joseph Roland

SILVER
CW5 Steven N. Russell
COL Rick Zampelli
COL Geoffrey Crawford
COL Bernard J. Harrington
COL Erik Gilbert
COL Christopher W. Waters
COL Brian Hughes
COL Scott Beall
CW5 Richard J. Rylee
LTC Bryan Wiley

BRONZE
MAJ Erika Holownia
CW4 Edward C. McKiver
1SG James P. VanAlstine
MAJ Lauren G. N. Fernando
SFC Michael L. Manwaring
1SG Perry Molden
CW4 James T. Brzezinski
MAJ Lukas B. Berg
1SG Daniel J. Allan
1SG Brain McFarland
1SG Jason M. Schad
1SG Jesse Taitingfong
1SG Edzel Yadao
CPT Michael Haynes
CPT Michael Casares
CPT Jay Irwin
CW4 Brett Haskin
MAJ Jared H. Brynildsen
MAJ Aris J. Comeaux
CW4 Charles S. Rhoden
CW3 Anthony S. Marion
CW3 Andrew Lau
MAJ Billy D. Blue III
CW3 Phillip Owens
CW3 Charles R. Berry
CW2 Vito McMillian
CW3 David Southall
CW4 Shawn D. Linnean
SSG Aldreaka Battle
SSG Curtis J. Phelps
SFC Dustin A. Esewein
SFC Lamont Womack
SFC Chad A. Tieben
CPT Aaron W. Amacker
CPT Michael Bramel
CPT James R. Duffy, Jr.
CPT Charles B. Hale
CPT Richard D. Kubu
CPT Peter B. Todsen
CW3 Robert L. Renny
CW4 Travis R. Michael
CW4 Shai M. Bardfield
SFC Uziel T. Lopez
SSG Jonathan H. Mize
CW2 Rocky A. Myers
CW2 Victor M. Trinidad
1SG Lee A. Dalton
CW4 Travis N. Westfall
MSG Charles Raines
CW4 Dominick J. Petro
CW4 Don-Carlos Moniz
CW4 Benjamin Foster
CW3 Craig Tomko
CW3 Jay M. Thompson
CW3 Derrick R. Nunley
CW3 Bobby L. Escarciga
CW3 Christopher Hise
CW3 Francisco Cervantes
CW3 Joshua Bosak
CW3 David Droste
1SG Eric A Beilfuss
1SG Jorge H. Cobo
CW3 James N. Bueby
1SG Jason Setliff
CW4 John Kinard
CW3 Richard Satterfield
CW4 Nicholas Quinn
CW3 Heath B. Robinson
1SG Christopher Cheasty
CW4 Sean Martin
1SG Eduardo Alvarran
CW3 Brian Tallent
CW5 Bryan Synder
CW4 Steven Farabaugh
CW3 Mark Sluss
CW2 Erik Bartelt
CW5 Bernard E. Litaker Jr.
MAJ Anthony Snipes
CW4 Thomas O'Grady
CW4 Jason Nazarenko
SFC Christopher Rennie
MAJ Lisa Klewkowski
MSG Fidel DiazSantiago
CW2 Eric D. Hauser
CW4 Bradley J. Renneke
CW4 Michael A. Gazda
LTC Michael S. Johnson
Mark D. Smith
Bruce D. Benson
CW5 Larry R. Kulsrud, Ret.
SFC Matthew W. Gagnon
MSG Billy J. Hardwick
1SG David L. George
MAJ David Cook
MAJ James Seale
1SG Anthony Mintz
MSG James S. Lange
LTC Nathan Lewis
CPT Joshua J. Waddell
CW2 Derek Wilkinson
CW3 Dupree Bartley
1LT Justin Hall
BG Marcus Evans
1SG Shawn A. Burns
CPT Francesco Candelmo
CPT Ryan Beilstein
CW2 Eric Lopez
1SG Robert K. Derk
CPT Jennifer Schaus
CSM Francisco J. Declet
CPT(P) Savannah Livingston
SSG Abimelec Santiago
CW4 Lorenzo J. Key
CW5 Doug Finstad
CW5 John J. Blank
LTC Robert Klarenbach
LTC Adam Reed Keown
COL Steven Braddom
CW3 Jason Plonka
Harry Statia

Honorable Knight Recipients

MG Kirk F. Vollmecke SFC
Andrea M. Sieg
SSG Michael D. Reyes
SFC Rodrigo Valdivia
CPT Daniel Cannon
COL Brendan Raymond
BG Joel Vowell
1SG Jermaine S. Grandison
BG Adnrew Preston
CSM Kevin Donegan
CPT John T. Walsh
CPT Nathaniel Berger
CPT Lauren E. Seibt
CPT Pepito A. Purugganan
CPT Kathleen Rojewski
SFC Ricky Amon
MAJ Jamie Wright
MSG Jerome Rogers
MAJ Jonathan Neal
CW2 Kyle Brouillette
MAJ Kevin Hoffman
Latana Pempleston Erves
CPT Jeremy M. Weeks
CPT Andrew J. Ware
CPT Russell D. Woody
MSG Nicholas Nyberg
MAJ Christopher Malone
CSM Victor Fernandez II
CSM Todd W. Sims
BG John W. Brennan Jr.
CPT Jae J. Kim
CW3 Derrick L. Doyle
Chong Man Lee
MAJ C. Haywood McMillian
BG Olliver Kingsbury

Our Lady of Loreto Recipients

Paige Forrester
Courtney Miralrio
Erin Hubert
Sasha Moen
Stephanie R. Vokert
Lisa Michelle Edmonds
Melissa Kellum
Kathryn McNeal
Tiffany Walker
Sabrina Glaze
Suzzane Harmon
Elena Trawick
Linette O. Neal
Jennifer Lee Rhoden
Sabrina Spurrier
Jackie Schad
Jessica Loeza
Michelle Hernandez
Lydia Garza
Dana Clark
Sarah Anne O'Rourke
Christina C. Ehteridge
Tammi Von Hagel
Jenna Severs
Heather Meyerhoff
Wendy Buzzard
Abby Griffin
Brittney Myers
Katherine Waters
Wanetta Armitage
Tammie Friel
Amanda Gulsby
Shari Hutcins
Kalie St. Onge
Jennifer Griswold
Christa Ploetz
Marsha Setliff
Samantha Weston
Lorena Blackwell
Christie Scott
Penny Goddard
Jennifer Roley
Michelle Waleski
Stephanie Lange
Sarah Mintz
Karen Blomberg
Lori Wilsher
Ashley Konesko
Allie Minsinger
Amy Outlaw
Brooke Lewis
Daneisha Wilson
Krista Waddell
Laura Black
Sarah Malo
Whitney Saari
Tiffany Bergemann

OSMs *Continued from page 51*


CHAPTER PHOTOS BY SHERRY L. LOGRANER

His wife, **Paula Turner,** was also inducted into the Honorable Order of Our Lady of Loreto at the same ceremony for her unfailing support of her husband over the past 23 years.


CHAPTER PHOTO BY GARY A. JONES

Chapter President, Gary Nenninger, inducts **Gregory D. Gore**, deputy project manager, Utility Helicopters, into the Silver Honorable Order of St. Michael on June 5, 2019 at Redstone Arsenal, AL. Gore was recognized for his selfless and exceptional service which enabled the transformation of the Army's utility helicopter fleet


CHAPTER COURTESY PHOTO

MSG (Ret.) Tom Migliozzi, UH-60 A/L Modifications office, is inducted into the Bronze Honorable Order of St. Michael by chapter president, Gary Nenninger, at the Tennessee Valley Chapter AAAA Mission Area Awards on June 13, 2019. His blend of accomplishments over 21 years in the Army before his retirement, along with his 11-year career supporting the UH-60 Black Hawk office are not only impressive but will have a lasting and overwhelmingly positive impact on Army Aviation.

AAAA **Family Forum** By Judy Konitzer

Past President BG (Ret.) Steve Mundt and Janis Arena introduced me to Gabriela during the AAAA Functional Awards Ceremony held at Fort Rucker on January 30, 2019. We were impressed by her positivity and appreciation of being a military spouse, and I invited her to share her thoughts with our readers.

The Military Does Take Care of Us!

By Gabriela Lopez, With Edits by Judy Konitzer

My husband, Chris, and I met in 2001 while attending Oxnard college in California. He had transitioned from active duty to California National Guard.

When he finished college, he announced he was returning to active duty and in the next breath asked me to marry him.

I came from Mexico as a teenager and became naturalized. I had a daughter and worked paycheck to paycheck all thru college, just wanting to make a better life for us. Chris convinced me that the military would take care of us, although I had no idea what that meant.

Our first duty station was Fort Drum. I had never been out of California, and the only thing I knew was that my mother told us that when we married, you follow your spouse wherever it may take you. We arrived in April with Chris deploying in June. I worried about how I was going to find a job, get healthcare, pay for the house, and get childcare all while being thousands of miles away from my family. Before deployment, the unit held a marriage retreat. The chaplain spoke of marital/family issues and how to work through them, and I was comforted knowing the military really cared about its families.

After the unit deployed, I attended a family readiness group (FRG) meeting and was honestly disappointed when one of the FRG leaders began discussing dealing with issues while our spouses were deployed. She stated we were basically single parents - the straw that broke the camel's back, I could not keep quiet. I told her our spouses volunteered to be in the Army, and a few months prior to that day, the only thing I knew about the Army was that it went to war. I didn't want my husband to be at war, but he volunteered, and I was going to support his choice. I felt secure knowing that every two weeks we had a paycheck. I felt safe living in a house provided by the military on base. I felt reassured knowing that if my children were sick, they would be taken care of. I felt relieved that organizations were actively helping with employment after relocating. Having never been exposed to the military before this, I explained these benefits did not exist in the civilian world. To think she was a single parent with her spouse risking his life to provide ALL these benefits to us was not only shameful, but disappointing to her spouse's sacrifice.

Now nearly 14 years later, we have had four more duty stations and three more deployments. Our three children have grown knowing nothing but the military as a way of life. It has been a roller coaster of ups and downs, but we have never worried about being able to provide for our family. We have met some great people and have seen some great leadership and units that genuinely care for families.

Since Fort Drum, I have engaged in other FRG events with mixed outcomes. Some were good; some were not; but there was often an underlying thought of what is owed to us as families. I have volunteered at local post Red Cross organizations, because it is one way I can pay forward what has been done for us.

Chris has been in the military for more than 20 years. He has a master's degree, without a penny of student debt. I completed college and certifications including dental assistant and radiology technician, at no cost to me. Our daughter is in college using her dad's GI bill and can concentrate on school without worrying about work. Our son has aspirations of going to West Point and serving as an Army officer. To say or think the military owes us is troubling knowing how much it has given. I never felt like a single parent, and I am grateful for my life as a military spouse.

AAFI PHOTO BY RENÉ BIBEZ

Author Gabriela Lopez with her spouse, CPT Laurencio C. Lopez, 2nd Squadron, 17th Cavalry Regiment, 101st Combat Aviation Brigade, who received the 2018 Army Aviation Medicine Award sponsored by Gentex Corporation during the AAAA Functional Awards dinner on January 30, 2019 at Ft. Rucker, AL.

Gabriela Lopez is a dental assistant and spouse of CPT Laurencio C. Lopez, 2/17th CAV, 101st Combat Aviation Brigade. The Lopez'es have 3 children and live in Clarksville, Tennessee.

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

Thank You to Our Scholarship Fund Donors

*AAAA recognizes the generosity of the following individuals, chapters and organizations that have donated to the Scholarship Foundation from January through June, 2019. The list includes donations received for all scholarships, as well as the General Fund which provides funding to enable the chapter, corporate, heritage and individual matching fund programs as well as national grants and loans. Donors marked with an * are partially or totally donating to the Families of the Fallen Scholarship. Every penny donated to the Scholarship Foundation goes directly to a grant or loan as a result of the Army Aviation Association of America subsidizing ALL administrative costs!*

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LTC (Ret.) Jerry O. & Vivian A. Obert
LTG William Phillips, Ret Marilyn H. Phillips
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Masaki Sudo
Matthew J. Sheedy
MG (Ret.) Andy & Artie Andreson
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Michele Lynn Broshear
Mimi F. Boulden
AAAA Minuteman Chapter
AAAA Mount Rainier Chapter
Munsch & Co. Aeromechanics
N. L. Amato
Network for Good
AAAA North Star Chapter
AAAA North Texas Chapter
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AAAA Phantom Corps Chapter
Phantom Products Inc.
Piasecki Foundation
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Rudolph & Pamela N. Ostovich III
S D Mundt & B J Mundt
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Scott Kubica
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William Newby
William Phillips
William S. & Sara S. Johnson
AAAA Wright Bros. Chapter
Your Cause LLC

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.

People On The Move

Aviation General Officer Promotions/Assignments

Todd Promoted to 2 Stars

PHOTO FROM PEO AVN FACEBOOK PAGE

MG Thomas H. Todd III takes the oath of office during his promotion ceremony on June 6, 2019 in front of the PEO Aviation headquarters, Redstone Arsenal, AL. BG (Ret.) Edward M. Harrington administered the oath, with Todd's wife, Tracy, by his side.

Mangum Selected For DACOWITS

AAPI PHOTO BY RENE BIDEZ

LTG (Ret.) Kevin W. Mangum was selected on June 11, 2019 as one of five new members to the Defense Advisory Committee on Women in the Services. DACOWITS provides the secretary of defense with advice and recommendations on matters and policies relating to the recruitment, retention, employment, integration, well-being and treatment of women in the armed forces. The committee is comprised of up to 20 members, who include military retirees, veterans, civilian women and men from academia, industry, public service and other professions. Selection is based on military experience or with women-related workforce issues.

Yeager Makes History as First Female Infantry Division Commander

U.S. ARMY PHOTO SPC BENJAMIN COSSEL

On June 29, MG Laura Yeager, was promoted to her current rank and took command of the 40th Infantry Division, at Joint Forces Training Base, Los Alamitos Airfield, Los Alamitos during a ceremony hosted by California Adjutant General MG David S. Baldwin, Yeager is the first woman in history to lead a U.S. Army infantry division. A Senior Army Aviator, she flew Black Hawk helicopters on a combat deployment to Iraq in 2011 and commanded the California National Guard's 40th Combat Aviation Brigade.

Changes of Command/ Responsibility

Cutchin Takes Command of TF Warhawk

U.S. ARMY PHOTO BY CPT FERNANDO OCHOA

COL Harvey A. Cutchin, 244th Combat Aviation Brigade commanding officer, out of Joint Base McGuire-Dix-Lakehurst, assumed command of Task Force Warhawk, in a ceremony at the Camp Taji Airfield, in support of Operation Inherent Resolve, May 1, 2019. The 244th CAB has deployed to Iraq to support OIR, which is the operational name for the military intervention against the Islamic State of Iraq.

FY 2019 Colonel Army Competitive Category Selection Board Results

The fiscal year 2018 colonel army competitive category selection board results were released May 21, 2019. AAAA congratulates the following 24 Aviation/Acquisition lieutenant colonels on their selection.

Seq #

0116 Arriaga, Thomas Jason +
0002 Buss, Darren W. *
0013 Cook, Jason Thomas +
0001 Didier, Hannon A. *
0051 Duus, Andrew John *
0071 Hay, Marcus C. *
0036 Herman, Joseph M. *
0009 Hogan, Kyle Martin *
0064 Holcombe, Robert J. +
0072 James, Jeremy Wayne *
0127 Kirk, Christopher J. +
0152 Lamb, Phillip Hayes *
0016 Mannion, Michael J. *
0033 Martin, Elizabeth A. +
0141 Miller, Jacob W. *
0168 Mykins, Jennifer A. +
0123 Rowland, Matthew L. *
0158 Ruisanchez, Joshua +
0060 Schuck, Gerald P. +
0061 Shaffner, Jonathan *
0079 Surrey, Nathan S. +
0076 Tucker, Richard P.
0032 Von Hagel, Daryl S. *
0044 West, Jason L*

* Below the zone selection
* = AAAA Member
+ = Life Member

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 009-19
PFC Johnny Silva-DG
PV2 Dhanvi Achanta
PV2 Payne Stewart Harris
PFC Nichols Javier Labastida
PV2 Hagan Gibbon Mcintosh
PV2 Luis Felipe Jesus Medrano
PV2 Mark Gathogo Muturi
PV2 Chase Scott Prince
PV2 Michael Jose Rivera
PV2 Terrell Chase Wadsworth
PV2 Noah Alexzander Whitlow
PV2 Barrington L. Williams
Class 010-19
PV2William Loyd Dunnam II-DG
PV2 Ryan James Adams
PV2 Sergio Adrian Armendariz
PV2 Cameron Noah Bergin
PV2 Derek Rashad Covington
PV2 Christopher Diaz
PV2Ryan Alexander Esqueda
SPC Dustin Friedrich
SPC Michael Patrick Keavey
SGT Arun Kumar Srivastava
CPL Kranti Prasad Thyadi
Class 011-19
SPC Casey Sean Hietala-DG
SPC Zachary Ryan Brooks
SPC Shawn Thomas Calchera
PV2 Darrell Blaine Esteppe Jr.
SGT Mouncef Ettayeb
PFC Jordan Isaiah Maize Griggs
PV2Jacob Ingual Hanson Jr.
SPC Jacob Matthew Hull
SSG Justin Joseph Humphrey
SPC Hunter Michael Irby
PV2Jason Edward Keefover
PFC Javier David Soria
Class 523-19
PFC Brooke Lynn Weaver-DG
SPC Nora Jane Malate Grover
PV2 Devon Fredrich Lurch
PV2 Spencer Thomas Madison
PV2 Gevanei Donovan Malcolm
PV2 Zachary Dewitte Mangrum
PV2 Eitan Nathaniel M.Comacho
PFC Ryan Christian Paradise
PV2 Brian Eugene Peevy
PFC Luis Ernesto Perez
PV2 Gerardo Pimentel
Class 012-19
PV2 Stephen J.Drake Jr. - DG
PV2 Kyler Michel Applebee
PV2 Omari Malique Bell
PFC Soulisa Tai Bountathip
PV2 Steven Mauricio Cabrera
PV2 Christian Eugene Campbell
PV2 Jong Ho Choi
PV2 Joshua McCabe Cole
PV2 Jackson Nicholas Despas
SPC William Kenneth Miller
PV2Bianca Danielle Yanez
Class 524-19
PV2 Nickolas J. Siciliano-DG
PV2 Adam Michael Gonzales
PV2 Austin Morgan Hatch
PV2 Gavin Anthony Lopez
PV2 Cristian B. Lopez Cornejo
PV2 John Henry Merritt Jr.
PV2 Christopher R.Piñeiro
PFC Gepaul Saldivar
PV2 Kelton Wade Shriver
PFC Anthony Bruce Skubic Jr.
PV2 Isaac Anthony Roy Weller

UH-60 Helicopter Repairer (15T)
Class 025-19
PV2 Tyler Grant Absher

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.*

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

58 Officers, May 23
Commissioned Officers
1LT Territo, Dominick G. – DG
1LT Sinopoli, Nickolas J. – HG
1LT Solo, Scott N. – HG
2LT Stoesser, Dominic R. – HG
2LT Acevedo, Jean C.
2LT Burgess, Braden T.
1LT Bybee, Tyler M.
CPT Diaz, Dana C.
2LT Elliott, Kyle M.
2LT Kendrick, Austin R.
2LT Mattos, April M.
1LT Milani, Andrew N. *
1LT Mitchell, Zachary T.
1LT Nguyen, Jonathan D.
CPT Phan, Vinh Q.
2LT Phillips, Abby V.
1LT Sleek, Ashley B.
1LT Thrasher, Donald J.
2LT Wortham, Maurissa N.
2LT Zacharias, Roy J.
Warrant Officers
WO1 Crockett, Samuel R. – DG
WO1 Maroon, Douglas M. – HG
WO1 Plummer, David L. – HG
WO1 Williams, Jason A. – HG
WO1 Wright, Dustin K. – HG
WO1 Adams, Brandon M. *
WO1 Adams, Daniel J.
WO1 Aegerter, Jacob J.
WO1 Anderson, Brandon T.
WO1 Anderson, Daniel J.
WO1 Bobroff, Nathaniel B.
WO1 Brown, Timothy D.
WO1 Coleman, John M.
WO1 Creed, Daniel T.
WO1 Dean, Austin M.
WO1 Emge, Matthew J. *
WO1 Galloway, Kyle W. *
WO1 Gomez, Diego M.
WO1 Hamilton, Patrick K. *
WO1 Hancock, Justin A.
WO1 Harris, Diantha R.
WO1 Hawkins, Dylan C.
WO1 McEvers, Brantley A.
WO1 Mertens, Joshua M.
WO1 Montiel Brito, Miguel A.
WO1 Neidner, Robert C. *
WO1 Prais, Joseph K.
WO1 Ramirez, Eduardo
WO1 Rodriguez, Jorge A.
WO1 Sharpe, Joshua A.
WO1 Taran, Constantin V.
WO1 Ungles, Corey D.
WO1 Vaughn, Justin D.
WO1 Watson, Travis D.
WO1 Wiederspan, Michael S.
WO1 Winn, Clayton T.
WO1 Yogore, Morgun C.


IERW May 23

42 Officers, June 6
Commissioned Officers
2LT Oveson, Lars P. – DG
2LT Brewer, Coburn G. – HG
2LT Scales, Austin R. * – HG
1LT Schroeder, Zachary T. – HG
2LT Cabe, Anthony C.
CPT Crum, Dustin R.
2LT Dente, Mark A.
1LT Ezdebski, Paul H.
1LT Holcomb, Leighann B.
2LT Jackson Haney, Jonathan R.
CPT Parish, Matthew R.
2LT Peace, Korbahn C.
2LT Porter, Meredith L.
2LT Roach, Christopher A.
2LT Rompel, Austin D.
1LT Roudbari, Rebecca S.
2LT Schmersahl, Alexander J.
2LT Shuey, Michael D.
1LT Yoo, Michael A.
Warrant Officers
WO1 Krustchinsky, Jacob A. * – DG
WO1 Gross, Michael C. – HG
WO1 Guest, Christopher M. – HG
WO1 Kraus, Andrew J. – HG
WO1 Swain, Bryce K. – HG
WO1 Baird, Jackson E.
WO1 Behnke, Benjamin J.
WO1 Brandon, Matthew C.
WO1 Carda, Christian D.
WO1 Clark, Brody
WO1 Clark, Phillip A.
WO1 Delgado, Emanuel A.
WO1 Dittrich, Tanner S.
WO1 Garcia, Jorge L.
WO1 Giger, Kimberly R.
WO1 Goetze, Damon M.
WO1 Jordan, Matthew F.
WO1 Krynauw, Cheyenne F.
WO1 Leake, Gerald C. Iii
WO1 McFann, James P.
WO1 Michalsen, Bjorn H.
WO1 Moye-Linehan, Lewis P.
WO1 Taylor, Eric M.


IERW June 6

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

ADVANCED INDIVIDUAL TRAINING (AIT) GRADUATIONS

PV2 Cody Allen Bentley
PV2 Gabriel Ray Bettencourt
PFC Raymond M. Bodtmann
PV2 Julian Peter Bonaguro
SGT Troy Dean Chambers
PV2 Cody Albert Cloteaux
PV2 Justin Michael Cook
SPC James John Dzurica
SPC Juan Carlos Gaytan
PFC Branden Thomas Miller
SPC Oscar Javier Rios, Jr
Class 026-19
SPC Adam Shaffer Taylor -DG
PV2 Malsawmtluanga J.Bawitlung
PVT Tyler Wayne Bond
SPC Billy Daniel Grayless
PFC William Wyatt Hutter
PVT Zackary Brian Mott
PFC Roman I.Petrashishin
PV2 Joseph Ernest Rastelli
PFC Kyle Matthew Thompson
PV2 Journey Rock J.Wright
SPC Daniel Patrick Wycklendt
PFC Wameng Yang
Class 523-19
PFC Loen Scott Langley - DG
PV2 Dorian David D.Enequist
PV2 Austin Michael Ewing
PV2 Rivera Andres Ferrer
PV2 Benjamin Lee Hymel
PV2 Jacob Charles Manzanares
PV2 Steven Michael McCain
PV2 Soto Luis Ortiz
PV2 Johnathan Tyler Sanders
Class 027-19
PV2 Nicholas Michael Self - DG
SPC Carter Acton
PFC Petaann Ramona Campbell
SPC Thomas David Geary
PFC Tristan Ernest Gurry
PV2 Morgan Elizabeth Leal
SPC Jessica Ann Lynch
SPC Martin Mekina
PV2 Wiridalis Perezortiz
SPC Sarah Jo Ward
PV2 Jackson Mathew Willem
Class 028-19
PFC Alexander J.Garcia - DG
PV2 Christopher Lee A.Baird
PV2 Liam Tobias Belhumeur
PV2 Matthew Dylan Bramble
PV2 Ethan Makenzie Crawford
PFC Jax Anastasi Currington
PFC Brody Charles Feind
PV2 Brandon Edward Fleming
PV2 Tyler Mackenzie Herndon
PV2 Michael Dewayne Watkins
SPC Justin Taylor Webber
PV2 Duane Andrew Wilbur, Jr
Class 524-19
PV2 Jason Allan Sharik - DG
PV2 Devin Isaiah Buckhannon
PV2 Carter M.Hildebrandt
SPC Daehyeok Kweon
PFC Nicholas Athonio Nance
PV2 Yohan David Paduacintron
PV2 Brandon Lee Parrish
PV2 Devin Ray Phillips
SPC Jared Ott Pope

Continued on page 60

People On The Move

AIT GRADUATIONS *continued*

PV2 William Bryce Sanders
PV2 Alexander David Snyder
PV2 Jahsiah Kaleokamalani Arthur Vasquez
Class 029-19
PV2 Nathan T. Weinel - DG
PV2 Kathleen Phyllis Doane
PV2 Jordan Reece Hooper
PV2 Jessica Marie Long
PFC Justin Lee Massie
SPC Reco Emmanuel Moody
PV2 Jahbari Dayne Moses
PV2 Carlos Miguel Silva-Ortiz
PFC Callie Estelle Stevens
PV2 Brayner Valencia
SPC Joshua Velazquez
Class 030-19
PFC Timothy D. Dawson - DG
SPC Jack William Anderson
PVT Jermaine Monte Blocker
PV2 Gregory Paul Brame
PVT Torin Matte Bryant
SPC Jackson Niles Caldwell
PV2 Ian Patrick Callahan
PV2 Timothy Edward Carter
PFC Isaiah Daniel Cook
SPC Ivan Diaz
PV2Clayton Warren Elliott
Class 525-19
PFC Andres J.Gonzalez - DG
PV2 Taylor Michael Fowler
PV2 Nicholas Sean Fox
PV2 Alfred Ronald Fraser, III
PV2 Bryan Joel Gradney
PV2 Cody Harmon
PV2 Anthony Sage Harper
PFC Jacob Michael Manaska
PV2 Lewis W. Manning, Jr
SPC Michael A. Quirindongo
PFC Wycliff Kemal Rumble
Class 031-19
PFC Robert M. Dodson - DG
SGM Faiz B. H. Al Balawi
SGT Moayad Omar H. Alluhaybi
SSG Mohammed O. Al Osaimi
SFC Sultan H. K. Al Wathnani
SFC Abdulaziz J. M. Al Zahrani
SPC Joshua Drake
SPC Tyler James Flath
SPC Dante Jeome Horne
SSG Guan-Yu Lin
SPC Justin James Quiggle
SPC Duncan Lanier Watts
Class 032-19
PV2 Joshua Barajas - DG
PV2 Cody Zacshary Ackerman
PV2 Cristian Ricardo Anoceto
PV2 Kyle Christopher Couly
PV2 Zachary Alan Eversman
PV2 Joshua David Eyeington
PV2 Jason Michael McGurl
PV2 Jahbari Dayne Moses
PV2 George Stephen Roosen
PV2 Zachary Allen Santos
PV2 Corbin Scott Smith
Class 033-19
PV2 Ranger O. Collard - DG
PV2 Trenton Allen Bates
SGT Christopher J. Duplantis*
PV2 Jeffrey Tyler G. Ebert
PFC Ricky Henderson
SPC Nathaniel Paul Jackson
PV2 Dominic Joseph Luciani
PV2 Cameron Anthony Tralle
PV2 Joshua Danyael Valentin
PV2 Charles Wallace Wood, Jr
Class 034-19
SPC Matthew R.Coyner - DG
PFC Diego Eduardo Alcantara
PFC Justin Gabriel Deluna
PFC Tyler Shea Hayes
PV2 Dylan Scott Leach
SPC William James Liles
SPC Joao Carlos Limao
SPC Jonathan Patrick McClain
SGT Benito Muniz-Velez
SPC Steven Douglas Parker
PV2 Conner Allyn Woodford
SGT Alexander Douglas Zwicky

CH-47 Medium Helicopter Repairer (15U)
Class 008-19
PV2 Nicolas J.Costonzo - DG
PV2 Tyler Austin Avila
PV2 Brendan Irving A. Barney
PV2 Andrew Carson Carlisle
PFC Kayn Kevin Forsyth
PV2 Cameron Michael Dovidio
PV2 Rigoberto G.Gonzalez
PV2 Erick Guevara
PV2 Mendez A.Hernandez
PV2 Devan Alexander Jeffries
PV2 Nicholas Ryan Jordan
SPC Garcia Josue Lemus
Class 511-19
PV2 Justin Carl Metheny - DG
PV2 Cory Joseph McElfresh
PV2 Sydney Marie McMahan
SGT Maximilian Molina
SPC Connor Patrick Oneil
PV2 William Michael Sattizahn
PV2 Paul Joseph Scherling
PV2 Tristan Calvin Siegers
PV2 William Francis Smith
PFC Phillip Michael Voluntad
PV2 Camron L.Weatherbee
PV2 James Michael Welch
Class 010-19
SFC David J. Danielson - DG
PV2 Joshua Monroe Blanchard
PV2 Matthew Jacob King
PV2 Trenten Jonathan Lewis
PV2 Bailey Paul Maynard
PV2 Anthony R. McCormick
PV2 Leslie McCoy Pitts
SGT Jared Keil Quigley
PV2 Nickolas W. Rasmussen
SPC Victor Shawn Shotts, Jr
PFC Derek Scott Wilke
PV2 Daniel Weatherbee
Class 011-19
PV2 Brent Isaac Ballard - DG
PFC Rachel Nadine Benson
SPC Brandon Phillip Carpenter
PFC Mercado Christian Cruz
SPC Jared Christopher Fossek
PV2 Rodriguez Victor Galvez
PV2 Charles Cody Johnson
PFC Spencer Jones
PV2 Erik Daniel Meehan
PV2 Phillip Robert Meridith
PV2 Davied Allen Montgomery
PV2 Nicole Thomas Nate
Class 506-19
PV2 Alex Theron West-DG
PV2 Matthew Charles Agan
PV2 Carlos Moreno
SPC Shelby Ray Ogorman
PV2 Luis F. Ordonez-Salvatierra
PV2 Braydon McCall Postma
PV2 Diego Rodriguez
PV2 Zachery Allen Rogers
PV2 Michael Jay Rosso
PV2 Corey Randolph Settle
PFC Justin David Simons
PV2 Love Andre Taylor

Aircraft Powerplant Repairer (15B)
Class 004-19
PV2 Justin Tyler Adwell - DG
PV2 Johnathan Michael Beris
PV2 Ilisha Ishmael Bottomley
PV2 Jeremy Chase Bradley
PV2 Jonathan M. Castrechino
PV2 Daijon Marquez Cooper
PV2 Shon Michael Cox
PV2 Dakota William Crump
PV2 Pauloroberto Dasilva
SPC Anthony C. Edwards
PV2 Mishael Josiah Esper
PV2 Ernesto Garcia
PV2 Robert Daniel Krim
PV2 Joshua Elias Lopez-Sigala
PV2 Kaleb Malachi Meadows
PV2 Daniel Adam Shreeve Jr.
Class 502-19
PFC Ji Hoon Song
PV2 David Spencer Tribble
PV2 Curtis James Williams
Class 005-19
PV2 Stewart A. Ludwig - DG
PV2 Bryant Bernal
PV2 Thomas Dwayne Bradley
SPC Michael David Burns
PV2 Michael Monoru Cloward
PV2 Bryson Trevon Davis
SPC Andrew Stephen Gordon
PV2 Marshall Tylor Gwyn
PFC Evrard Kevin Loue
PV2 Lorenzo Antonio Martinez
SGT Amber Rai Moffett
PV2 Keegan Emerson Murphy
PV2 Zachary Scott Yerkie

Aircraft Powertrain Repairer (15D)
Class 003-19
PV2 Mckay Aaron Pelsue - DG
PV2 Dusty Leroy Clark
PV2 Adam Tyler Devoe
PV2 Bryan Anthony Guy
PV2 Tyronn Jamel Jackson
PV2 Nicolas Hunter Lowery
PV2 William Russell Mansfield
SPC Michael Kayle McCallum
PV2 Joshua M.McCandless
SPC Bryan James McDowell
PV2 Dalton James Pelham
PV2 Nicolas Alexander Ramirez
SSG Jason Robert Reynolds
Class 503-19
PV2 Charles T.Tompkins - DG
PV2 Buster Mitchell Dreksler
PV2 Cameron Adonis Shaw
PFC Dwight Ricardo Spence
PV2 Dalton Leon Watson
PV2 Jacob Ryan Wilson

Aircraft Electrician (15F)
Class 005-19
PV2 Russell Espinal-Cardenas
PFC Victor Gracia
PFC Bernard Clinton Leblanc
PV2 Jared Samuel Meyers
PV2 Quinton Troy Surfus
PFC Kyle Aaron Woods

Aircraft Structural Repairer (15G)
Class 004-19
PV2 Ryan Charles Bailey - DG
PV2 Thomas Edward Finley
PV2 Cecil Edward Hardin
SPC Andrew Lorin Hubbard
PV2 Lane Michael Kurtz
PV2 Cody Allen Roote
PV2 Jordan Michael Sevin
SPC Pramod Shakya
SGT Benjamin Dale Spencer
PV2 Landen James Yowell

Aircraft Pnedraulics Repairer (15H)
Class 005-19
PV2 Nathaniel Michael-Cole Asiatico – DG
PV2 Gashian D.D.Cotton
PV2 Breonna Faith Hill
SPC William Joseph Luketich
PV2 Christopher J.Washington

Avionic Repairer (15N)
Class 001-19
PV2 Shamarah R.Tezeno - DG
PV2 Lane Valentine Bartz
PFC Landon Scott Carter
PV2 Adam Lee Gonzalez
PV2 Hailey Marie Hearn
Fitzritson Eglon Ingram Jr.
PFC Thalia Mercedez Windley
PV2 Stephanie Marie Wright
Class 002-19
SPC Arron Donovan Arnold
SPC Dirk Lanakila Harber
PV2 Colton Montgomery Jones
SPC Christopher Wayne Moore
PV2 Joseph Stanley Moore
SPC Gary Nathan Salsgiver
SPC Iguere Serge Togo
SGT Christopher David Ventre
Class 501-19
PFC Marqies N.Burnett – DG
PV2 Cameron Jerome Lagace
PV2 Cameron D.Mathewson
PV2 Elbert Scott Self
PV2 Andrew James Smith
PV2 Joshua Hayden Templeton
PV2 Aaron Joseph Weaver
PV2 Charles Collin Willingham

AH-64 Armament/ Electrical/Avionic Systems Repairer (15Y)
Class 001-19
PV2 Raymond D.Coones-DG
PV2 Jesus Jhoel A.Calderon
PV2 Caleb Galen Boucher
PV2 Nickolaus Wyatt Chvojka
PV2 Michael W. Crawford Jr.
PV2 Alexzander Jay Everlen
PV2 Christopher A. Gonzalez
PFC Karson Gonzales
SPC Tarvaris Grant
SPC Kathryn Ann Peeples
PV2 Christopher Adrian Smith
Class 002-19
PFC Cyle Justin P. Paulino-DG
PV2 Cameron Scott Elliott
PV2 Chris Gonzalez
PV2 Ethan James Hook
PV2 Nicholas Taylor Martin
PV2 Shawn Michael McCraith
PV2 Tyler Nicholas McDade
PFC Mateo Brendon McDonald
PV2 James Thomas Mettlach
PV2 James Stanton Miller
PV2 Derek Jonathan Olsen
PV2 Rashad Jamal Queen
Class 501-19
SPC Patrick Thomas Boring
PV2 Jarred Blake Cotton
SPC Joshua Andrew Dyer
SPC Joshua Lawrence Gibson
PV2 Robert Andrew Goad
PV2 Douglas Paul Koosman
PV2 Jaime L. Velazquez Jr.
PV2 David John L.Shackelford
SPC Cameron Avery Stanko
PFC Ethan Jarett White

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

UNMANNED AIRCRAFT SYSTEMS (UAS) GRADUATIONS

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

Shadow UAS Repairer Course
10 Graduates, 09 May 2019
CPL Christian PerezCabral - DHG
SPC Connor P. Keegan - HG
SGT Kevin Aviles
SGT Garrett R. Keiper
PFC Osbaldo Robles
PV2 Devin C. Brown
PV2 Stephen A. Reed
PV2 Frank E. Wood
PVT Jacob S. Newhart
PVT Edward J. Wilkins Jr.

DHG = Distinguished Honor Graduate
HG = Honor Graduate

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.

Improved Turbine Engine Development Resumes

U.S. ARMY PHOTO

For 100 days, the Improved Turbine Engine Program (ITEP) was in a holding pattern while awaiting the conclusion of an official protest by The Advanced Turbine Engine Company (ATEC) against the ITEP Engineering and Manufacturing Development (EMD) contract award to General Electric Aviation. The wait ended on May 30, with the contract award to GE Aviation for their T901 turbine engine upheld as the Army's Improved Turbine Engine, a state-of-the-art 3,000 shaft horsepower class turbine engine. With work now able to continue, the next step for ITEP in EMD will be reaching the Critical Design Review in FY20 followed by the First Engine to Test build completion in FY21.

Lockheed Martin Flies Unmanned Tech for First Time

SIKORSKY COURTESY PHOTO

Lockheed Martin announced on June 6 it has flown its Optionally Piloted Vehicle (OPV) technology aboard a Sikorsky UH-60A Black Hawk testbed helicopter for the first time. The flight, which took place at Sikorsky's West Palm Beach facility in Florida on May 29th, marked the official start of the flight trials program for the OPV technology following an earlier test aboard a S-76B Sikorsky Autonomy Research Aircraft (SARA) testbed helicopter. Lockheed said this was the first full authority fly-by-wire retrofit kit developed by Sikorsky that has completely removed mechanical flight controls from the aircraft. The UH-60A will continue flight-envelope expansion trials to the third quarter of 2019.

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

DynCorp International LLC, Fort Worth, TX, was awarded a $129,666,053 modification to contract W58RGZ-17-C-0011 for logistics support services; work will be performed in Fort Worth, with an estimated completion date of May 31, 2020.

International Enterprises Inc., Talladega, AL, was awarded a $24,500,000 firm-fixed-price contract for depot level repair of the Aviator Night Vision Heads-Up Display family of repairable assemblies and subassemblies; work locations and funding will be determined with each order, with an estimated completion date of May 30, 2029.

Northrop Grumman Systems Corp., Sierra Vista, AZ, was awarded a $163,588,331 cost-plus-fixed-fee contract for Hunter unmanned aircraft system fleet support for operations, maintenance, engineering, re-engineering and remanufacturing; work will be performed in Sierra Vista, with an estimated completion date of May 9, 2020.

Rockwell Collins Inc., Cedar Rapids, IA, was awarded a $49,114,577 firm-fixed-price contract for maintenance and overhaul of the display unit for the UH-60 Black Hawk helicopter; work locations and funding will be determined with each order, with an estimated completion date of June 3, 2024.

S.B. Ballard Construction Co., Virginia Beach, VA, was awarded a $40,457,981 firm-fixed-price contract for construction of an aviation maintenance training facility; work will be performed in Newport News, VA, with an estimated completion date of Nov. 4, 2021.

The Boeing Co., Ridley Park, PA, was awarded a $10,115,993 modification to contract W58RGZ-17-C-0059 to support CH-47F Block II Engineering and Manufacturing Development program; work will be performed in Ridley Park, with an estimated completion date of July 27, 2021.

The Boeing Co., St. Louis, MO, was awarded an $18,943,540 firm-fixed-price contract to implement, integrate, test, upgrade and field to the Longbow Crew Trainer Generation 4 and Generation 5; work will be performed in St. Louis, with an estimated completion date of April 1, 2022.

Advertisers Index

Art's Attic

By Mark Albertson

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

25 Years Ago

July 31,1994

Briefings

Working under the U.S. Army/NASA Advanced Rotorcraft Transmission (ART) Program, McDonnell Douglas Helicopter Systems and Lucas Western Gear have designed a 5,000-horsepower transmission for the Apache attack helicopter. This latest design is almost twice as powerful as the present transmission, but, weighs nearly half as much as it would if it were designed using existing technology. The technology is applicable to virtually any conventional rotorcraft.

160th In Norway

An MH-47D, from the 2nd Battalion, 160th Special Operations Aviation Regiment (Airborne), over a Norwegian fiord, March 1994.

Army Special Forces and the Navy

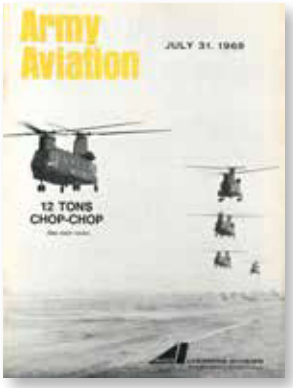
An MH-47 on the flight deck of the USS George Washington (CVN-73), during recent joint exercises with the Navy and the 75th Ranger Regiment.

Briefings

The Aviation Applied Technology Directorate of the U.S. Army has selected Simula Inc., to develop an airbag system for the cockpit on the UH-60 Black Hawk. The order, valued at some $4 million, will see to the installation of airbags in the instrument panel in an effort to reduce crewmember injuries in the event of crashes.

West Point Grad

The 1994 AAAA award for the Top West Point Cadet who has branched Aviation went to Cadet Spencer T. Kympton. MG Richard E. Stephenson, (Ret.), AAAA Senior V.P., presents Cadet Kympton with a Certificate of Appreciation. Presentation was made at West Point, in the Thayer Room, May 24, 1994.



50 Years Ago

July 31, 1969

One Millionth Hour

Fort Wolters—WOC Richard E. Adams (left), Class 69-3581, and CWO Larry R. Hanson, Flight B-2, accept congratulations for logging the 1,000,000th hour of flight time recorded for FY69; the highest total yet recorded in a single training year at the USAPHS. Pictured at Dempsey Army heliport are (left to right): Colonel John F. Roberts, Director of Training; Major Ronald C. Clarke, Flight Safety; Candidate Adams; CWO Hanson; Captain Brent J.` Artley, B-2 Flight Commander; Colonel Lloyd G. Huggins, Center Commander; and Lieutenant Colonel C.M. Crain, Director of Flight Department B. The new hour mark was established in an OH-13 aircraft.

Help Wanted:

Pilots with Chinook or Vertol 107 experience... Primarily for construction work throughout the United States, including Alaska, Starting as co-pilots. Applicants should have 1,000 hours minimum. Pilot for Hiller 12-E or SL-4… Flying for Forest Service and Bureau of Land Management. Job entails mountain flying, sling loads, fire patrol and suppression, and personnel transportation. Applicant should have at least 500 hours in the model and at least 1,000 hours total helicopter time and be willing to travel. Send resume to: ARMY AVIATION MAGAZINE, Attn: Box 9155, Westport, Ct. 06880.

From USAAF to Army Aviator

Lieutenant Colonel Samuel P. Kalagian graduated from the U.S. Army War College in June of this year; this prior to assuming the duties of Deputy Director of the Department of Rotary Wing Training at USAAVNS. LTC Kalagian, a World War II fighter pilot, transferred to the Army in August 1950. He was rated a Master Army Aviator in 1963.

Army Aviation Hall of Fame

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

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

The deadline for nominations for the 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

Major Delbert L. Bristol

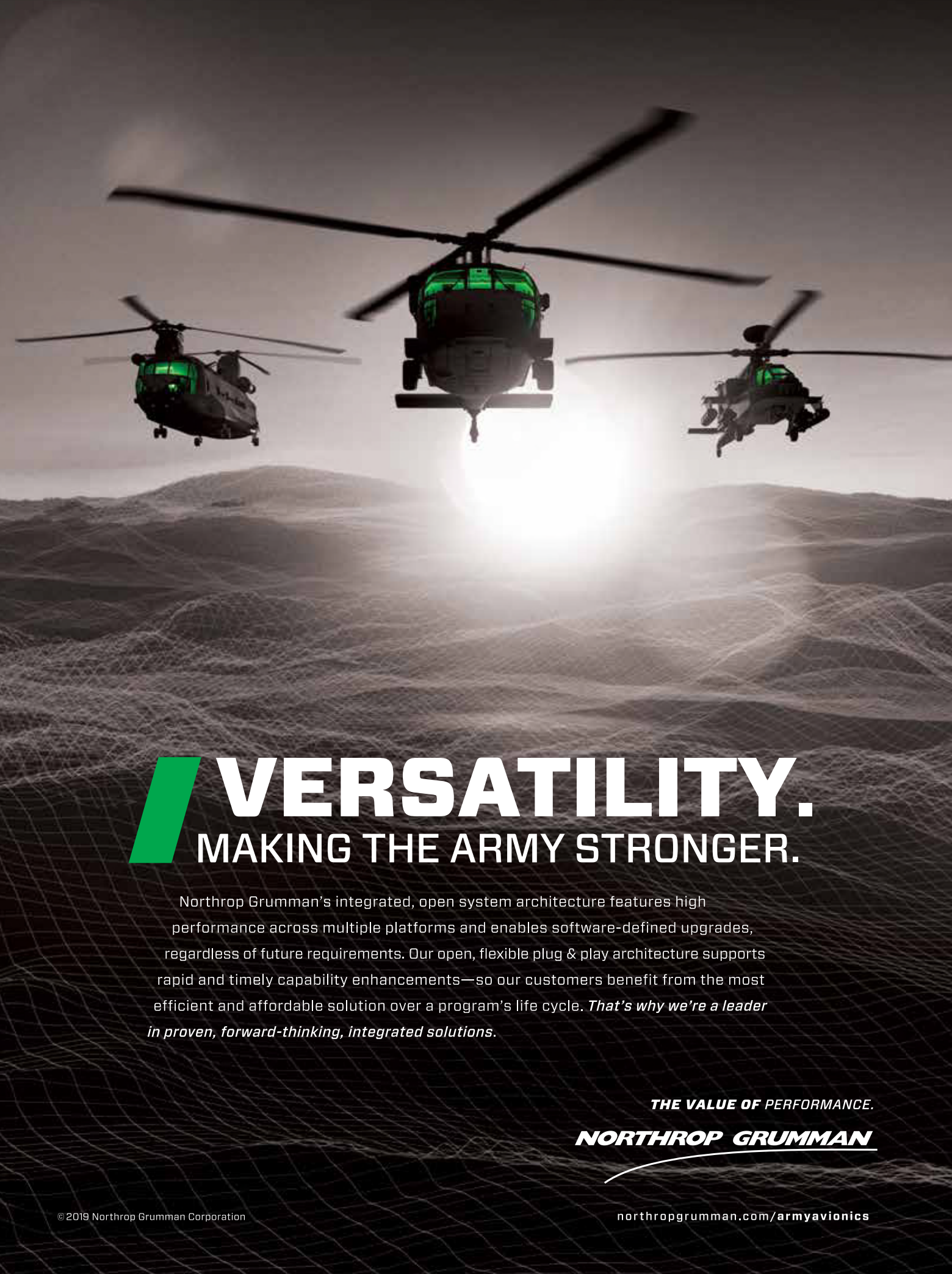
Army Aviation Hall of Fame 1976 Induction
(Inducted to represent the 1942-1949 period)

Major (later Colonel) Delbert L. Bristol served as an Army Liaison Pilot in the early test that established organic air observation in 1942. After serving briefly on the faculty of the Department of Air Training, Lieutenant Bristol left the continental U.S. with the first group of pilots and aircraft mechanics deployed overseas in October 1942.

After his arrival in England, and during late 1942 while in North Africa, he was the driving force in the organization of a combat zone school that trained additional pilots and aircraft mechanics to meet the Artillery's combat aviation needs until replacements from Fort Sill became available in sufficient numbers.

While serving as the Artillery Air Officer for II Corps during the Tunisian and Sicilian campaigns, Major Bristol directed and coordinated the employment of the Air Observation Posts [Pilot and Field Artillery Observer teams in radio-equipped Piper L-4 Cubs] that later was acclaimed as one of the great innovations of World War II. Calling on his experience as First Army Artillery Air Officer in Northern Europe in 1944-45, he contributed in great measure to the success of the Air OP's in combat.

In 1948-1949, while a Major on the Army General Staff in Washington, D.C., his negotiations in the Army Staff and with the Air Force, sometimes against heavy odds, assured the foundation of the Army's organic aviation following the unification of the services.



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