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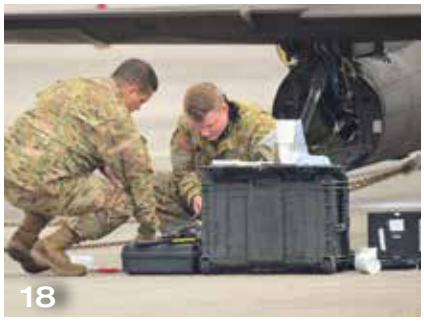

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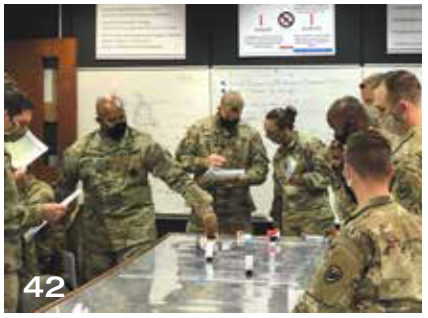

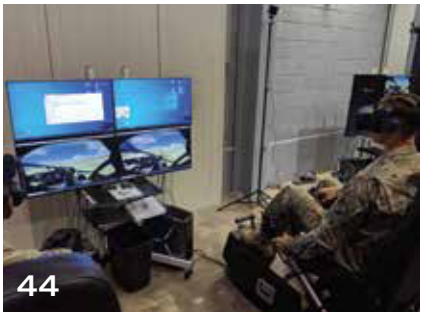

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Briefings

Hokanson Nominated for CNGB

U.S. ARMY PHOTO

Army LTG Daniel R. Hokanson has been nominated by President Trump to be the next chief of the National Guard Bureau. If confirmed by the Senate, Hokanson will be promoted to general and replace Air Force Gen. Joseph Lengyel, who assumed the position in August 2016. The head of the National Guard Bureau is also a member of the Joint Chiefs of Staff. Hokanson is currently the director of the Army National Guard and previously served as the bureau's vice chief as well as deputy commander of U.S. Northern Command and Oregon's adjutant general. He is a decorated Apache and Black Hawk helicopter pilot with deployments to Iraq, Afghanistan, and Panama.

Ryan Takes Command of USASOAC

U.S. ARMY PHOTO BY SFC J. TASHUN JOYCE, USASOAC PUBLIC AFFAIRS

COL Philip Ryan, incoming commander of U.S. Army Special Operations Aviation Command (Airborne), receives the command colors from LTG Francis Beaudette, commanding general, U.S. Army Special Operations Command, during a change of command ceremony at Fort Bragg, NC, June 26, 2020. Ryan, a former commander of the 160th Special Operations Aviation Regiment (Airborne), the Night Stalkers, recently served as the executive officer to the Secretary of the Army. Outgoing commander, BG Allan Pepin (center), will remain at Ft. Bragg as the deputy commanding general of USASOC.

Dixon-Carter Tapped as SWOA-CSA

U.S. ARMY PHOTO

CW5 Yolondria Dixon-Carter was announced by Army Chief of Staff GEN James C. McConville as the third senior warrant officer advisor to the chief of staff of the Army on April 7, 2020. She had been serving as the assistant executive officer (AXO) for McConville prior to his assuming the CSA position for almost three years while he was Vice CSA. As the SWOA-CSA, the Vero Beach, Florida native who enlisted as a personnel actions specialist in 1989 and was appointed as a warrant officer in April 2002, will chair the Army Warrant Officer Council which advises CSA and other senior Army leaders on current and future development of the warrant officer cohort. She will represent more than 25,000 warrant officers across all 17 branches and three components.

No More Photos in Officer Promotion Boards

The Army will no longer include official photos for officer selection boards beginning in August to help eliminate unconscious biases in the promotion process, according to Army Secretary Ryan McCarthy and Chief of Staff GEN James C. McConville at a Pentagon press conference on June 25, 2020. Promotion board processes for warrant officers and noncommissioned officers are being reviewed as well. Eliminating promotion photos is one part of a larger initiative that Army Secretary Ryan McCarthy called "Project Inclusion." It will involve sending Army senior leaders to installations around the force in the coming months to visit with soldiers and have "uncomfortable conversations" with troops about race, diversity, equity and inclusion.

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Adapting to the New Normal

As we go to print for this July issue, our country and much of the world is still facing major disruptions and challenges from the COVID-19 pandemic. There is no doubt we will rise above the virus, but it will cause us all, and our Army, to adapt to a New Normal.

U.S. ARMY PHOTO BY CPT TRAVIS MUELLER, 28TH ECAB

U.S. Army CW5 Chuck Doyno, command chief warrant officer of the 28th Expeditionary Combat Aviation Brigade, wears a facemask while exiting a HUMVEE Egress Assistance Trainer after being rolled over. This essential training is part of the 28th ECAB's preparations for their upcoming deployment to the Middle East during the COVID-19 pandemic.

In this issue, the TRADOC Commanding General, General Paul Funk, lays out just how TRADOC and the Army is leading the way in operationalizing the Generating Force across the enterprise: as he calls it, leading to a new operating paradigm: A New Normal.

Our country is also undergoing a different but much needed transformation, as civil protests are leading many of us to stand up and insist that systemic racism be totally eliminated in our country. Let me be clear: AAAA stands for 100% equality for all, throughout our nation, our Army, and within Army Aviation.

The majority of the issue continues with a primary focus on training and simulation. Our Branch Chief, MG Dave Francis, focuses on the leading role simulations of all types play in Army Aviation. As he notes, we are leveraging every possible technology to enhance our training experience across the board, which includes aircraft survivability, low cost virtual reality, and the Reconfigurable Virtual Collective Trainer (RVCT-A).

Reports from the field make up the majority of the rest of the magazine, including from our training centers: NTC's Eagle Team, JRTC's Alpha Team, and JMRC's Falcon Team. We also spotlight Corpus Christi Army Depot and its new commander, Colonel J. Parker.

Summer always includes changes in leadership, and so we want to highlight a few at the senior levels. At PEO Aviation, SES Mr. Pat Mason reverts to the deputy PEO position after successfully leading the enterprise for several months, and BG Rob Barrie assumes the charter as PEO-A. We congratulate Pat on his term and look forward to continuing to work with him as the deputy PEO. We want to say a special congratulations to Rob on his promotion and assumption of the PEO position and wish him the very best!

Next up is the U.S. Army Special Operations Aviation Command's (USASOAC) Commanding General, BG Al Pepin, who is moving to be the Deputy Commanding General at U.S. Army Special Operations Command, as BG Tom Drew moves to the Pentagon. Taking over as Commander of USASOAC is Colonel Phil Ryan. Again, congrats to both BG Pepin and Colonel Ryan!

As of this writing, we are still planning to hold the Luther Jones Depot Forum at Corpus Christi 25-26 August. Bill Harris and I are watching the COVID-19 issues closely and will coordinate decisions with AMCOM Commanding General MG Todd Royar and CCAD Commander Colonel J. Parker.

We are very hopeful that our enhanced Cribbins Symposium in Huntsville 16-18 November can be held safely – we have a superb agenda of presentations, and industry has really stepped up with a large number of what look to be highly interesting exhibits. Should be a great and very interesting forum! Please plan on attending!

As I noted last month (and the month before that), 2020 will be challenging for our members and their families. I continue to be proud of what Army Aviation does to support America, our Army and our citizens. I am very confident all of us will successfully adapt to the challenging environment caused by the virus – the "New Normal," to borrow from General Funk's great article.

Stay healthy! As always, I pledge to ensure that AAAA does its part to help YOU: our Soldiers, families, and senior leaders!

MG Jeff Schloesser, U.S. Army Retired
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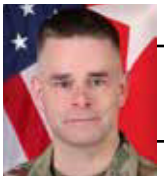

U.S. ARMY PHOTO BY GEORGIOS MOUMOULIDIS

Modernizing In Stride – Training Focus

By MG David J. Francis

Over the last several months, I've talked about modernizing our fleets, updating our doctrine and refreshing our leadership development strategy.

U.S. Soldiers with B Company, 1st General Support Aviation Battalion, 214th Aviation Regiment, 12th Combat Aviation Brigade conduct door gunnery training at the Non-Rated Crew Member (NCM3) flight simulator on Aug. 15, 2018 at Storck Barracks, Illesheim. Germany.

We must do all these things while remaining globally committed with a high OPTEMPO and building readiness to fight and win in a complex Large-Scale Combat Operation (LSCO) operating environment.

Army Aviation's July issue focuses on simulations, which is a critical enabler for the Aviation Branch. As aviators, we historically rely on simulations to develop proficiency in flight tasks that are too difficult to replicate or too dangerous to execute in a live flight environment. But simulations also allow us to take a hard look at our doctrine, our tactics, techniques, and procedures (TTPs), mission planning processes, and assess how we will fight collectively against a near peer adversary in large scale combat operations. Several initiatives at Fort Rucker highlight how the branch is using simulations to improve our doctrine and change the way we train.

Aircraft Survivability

As we evaluate the Integrated Air Defense Systems (IADS) threat we face on today's and tomorrow's battlefields, we must ensure our equipment and tactics are synchronized to effectively mitigate and/or neutralize those threats. Recent experimentation highlights the need to leverage simulations, to the maximum extent possible, to understand how the 'see/be seen – kill/be killed' probabilities can be swung in our favor. Developing high fidelity physics-based models, radar cross sections of our aircraft and accurate behavioral modelling for both red and blue forces on the battlefield is critical to our ability to rapidly adapt to new threats, and provide accurate training capabilities to the force in a timely manner. USAACE recently introduced single and multi-ship terrain flight tactics designed to counter current and emerging threats in the LSCO environment. Aviators must address the threat, the kill-chain, and how the aircrew's actions affect mission outcomes. Key to this training is high fidelity simulation able to reinforce concepts, rehearse maneuvers, and develop SOPs. It is crucial for learning outcomes and risk mitigation as well.

Propulsion expertise

Rolls-Royce is excited to join Bell and Team Valor to provide exceptional operational capability and affordability over the product life cycle to the U.S. Army for the Future Long Range Assault Aircraft (FLRAA) program. Bell and Team Valor will deliver a refined Bell V-280 aircraft design, building on years of experience and flight test, with Rolls-Royce providing propulsion expertise developed across more than six decades of industry-leading, powered-lift experience.

Emergency Response Methodology (ERM)

Simulation is also exceptionally useful in training the new ERM Task 1070 (detailed in the ERM article in this issue). Across all airframes, simulation enhances the depth of training, permitting Emergency Procedure execution in a controlled environment. High fidelity simulation allows crews and instructors to focus on the Fly-Alert-Diagnose-Execute-Communicate-Fly (FADEC-F) steps, and dive into the details of each step to ensure a deep understanding of both the process and the nuances of the emergency. As we approach the release date of the Flight Reference Card (FRC) format to the aircrew checklists this October, simulation will again prove an invaluable tool to train and integrate the full Phase I (1070) and Phase II (FRCs) of ERM, fundamentally changing Emergency Procedure training in Army Aviation.

Aviator Training Next (ATN)

In a previous issue, I highlighted the Aviator Training Next experiment that sought to determine if low-cost, low-fidelity commercial-off-the-shelf virtual reality (VR) technologies could be used effectively to train pilots. To execute this, we put together a cross-functional team led by the Directorate of Simulation that includes the 110th Aviation Brigade, the Directorate of Training and Doctrine, the US Army Aeromedical Research Lab, the Aviation and Missile Center's Systems Simulation, Software and Integration Directorate in Huntsville and the Operational Research Center at the US Military Academy at West Point. This team collected data during the initial phase of flight training for several classes with 296 students using these VR devices. The initial report indicates that ATN is a valid training methodology and we look forward to continued research in the next phase of the experiment to see if this technology is adaptable in other areas of training.

Future Training Capabilities

USAACE is heavily engaged with the Synthetic Training Environment (STE) Cross Functional Team, which is rebuilding the Army's simulations training infrastructure from the ground up. The STE is designed to provide a collective, multi-echelon training and mission rehearsal capability for the operational, institutional and self-development training domains. It will provide training to ground, dismounted and aerial platforms and command posts (CP) at the points of need. It will also interact with and augment live training, which is the primary training approach for the Army. Critical to the Aviation Branch is the Reconfigurable Virtual Collective Trainer – Air (RVCT-A) which will replace the AVCATT. Given the complexities of our modern digital fleets, USAACE is leading a formal collaborative team from PEO-AV, PEO-STRI, STE CFT, CAC-T and DAMO-AV to ensure this new training capability fully meets our collective training needs and remains concurrent with our enduring fleet now and into the future as we begin fielding the FVL aircraft.

As a branch, we will continue to leverage every possible technology to insure the training of our Aviation Force. Our people are our most valuable asset, and we will continue to provide the best training capability to the Force. Winning Matters!

Above the Best!

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

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U.S. Army Training and Doctrine Command (TRADOC)

The New Normal

By GEN Paul E. Funk II

The coronavirus presents new challenges to the manner in which TRADOC generates combat power for the Army, and nowhere has this been felt more than at the Centers of Excellence.

The responsibility borne by the Aviation Center cannot be understated – as they are the sole provider of fixed and rotary wing aviators for the United States Army. The nature of their business mandates training in close proximity, which posed – and continues to pose – a difficult challenge to both trainees and instructor pilots. The confined nature of cockpit training presents a unique problem set not experienced at other training installations. Like other installations, however, the Aviation Center also grappled with being part of the generating force in an operational fight. But with these challenges arose opportunities – and the Aviation Center of Excellence capitalized on them.

Through this pandemic we continue to train and build combat power. To do so requires replacing the factory-like repetition of the generating force with operational plans and actions that account for an unfamiliar enemy in a dynamic environment. We use actions such as controlled monitoring, social distance enabled training, hand washing, mask usage, the employment of trace and clean teams, and testing to minimize the impact of the virus on our training and instructor populations. When we do experience infection, we aggressively contact trace, quarantine those potentially exposed, and then monitor those quarantined to provide the best care, as well as protect the force. We are reforming our 20th Century industrial command and control model, adopting an operational approach to how we function that brings us into the 21st Century. Decisive to this transformation is an information campaign that drives adjustment and adaptation through flat, agile organizations. The methods and protocols that we employ are not one-time actions to combat a fleeting enemy, but rather encompass a *New Normal* for operations within Training and Doctrine Command. It is incumbent upon us to adopt these mitigation measures as norms in our training installations, as force generation and training cannot stop.

U.S. ARMY PHOTO BY KELLY MORRIS, USAACE PUBLIC AFFAIRS

An AH-64 instructor and student wear masks as a COVID-19 precautionary measure as they prepare for a gunnery training flight at Fort Rucker, Alabama on Apr. 24, 2020.

Significant Emotional Experience and Repetition

I have often stated that people learn in two ways: significant emotional experience and repetition. The COVID-19 pandemic presents us with both circumstances. As the spread of the virus began to escalate in early March, it required us to adapt and learn from significant emotional experience. By necessity, we operationalized our headquarters across the enterprise at every echelon to exercise a level of command and control seldom seen in the generating force. We implemented force protection measures, increased HPCON, and stopped all movement of personnel – understanding that we had to quickly, but deliberately set conditions to resume movement and maintain momentum. We also embarked on a comprehensive information campaign to communicate within, and outside, of our organizations. These are transformational changes forced by the environment in which we are operating. The environment is forcing our hand and making us reform in the midst of the fight.

As often happens, we transitioned from environment-induced changes to efficiency-induced processes. As a learning organization, we adapted the best practices set in place by U.S. Forces Korea (USFK) – led by General Abrams – for use on our installations. From the Army Command level down to our platoons and squads, we are retaining the procedures that work and discarding those that do not. From my vantage point, the paradigm shift is evident – and awe-inspiring. The entire enterprise is operating with an efficiency initiated by the pandemic but refined by our People. We assumed a war footing within the organization. Our Soldiers, civilians and leaders did what they do so well – applied the basics of Army doctrine – our doctrine – to the operational environment and refined those processes through repetition. We created and maintained bubbles around our training bases and resumed shipping on carefully monitored sterile transportation with rigidly enforced protocols. Professional military education is continuing through the expanded use of distributed learning when possible, and social distance enabled instruction, when required. Commanders are taking tactical pauses when necessary to set conditions and pressing ahead when they see opportunities. With each day comes more repetitions, and with every repetition we improve as an organization. Through this pandemic, the training bases continue to function – and to function well – informed by the art of mission command and managed through the science of command and control. TRADOC is adapting and continuing to generate combat power for the Army.

The New Normal

As we reflect on this period, it is imperative that we not view this as merely an aberration in time. This is not a blip on a radar screen that disappears as quickly as it appears. The processes and procedures that we are instituting and refining are part of a new operating paradigm. I say this not because I fear for the discovery of a vaccine and believe we will be required to operate in a COVID environment in perpetuity, but because the policies and procedures we are implementing during this crisis are making us better and more capable of dealing with uncertainty and operating under suboptimal conditions. The operationalization of the TRADOC enterprise was long overdue and provides us the ability not only to see the environment, but also to see ourselves within that environment. This capability will serve us well, regardless of whether we operate in crisis action or steady state. The force protection measures and protocols that we are implementing and refining will continue to protect our Nation's most valuable resource, our People, for the duration of this pandemic and beyond – from the known and the unknown. Our enhanced distributed learning capability will allow us to gain efficiencies in the professional development of our Soldiers, civilians and leaders, optimizing both our instructional time and our resources. Most importantly, as leaders, we have been pushed outside of our comfort zones, forced to think critically, and required to exercise ingenuity to overcome the challenges opposing us and win.

As iron sharpens iron, so, too, do difficult times test the mettle of those who endure them – for those who emerge from the crucible are better and stronger because of it. While we have not yet defeated the current threat, we are better Soldiers, better organizations, and a better Army because of our penchant to persevere. The advances we are making in the face of a daunting enemy demonstrate to the world the power of our Army. We are reforming our processes while in contact. We provide comfort to the sick, represent hope to the Nation, and demonstrate resolve to the World. This is the *New Normal*.

Victory Starts Here!

GEN Paul E. Funk II is the 17th commanding general of U.S. Army Training and Doctrine Command headquartered at Joint Base Langley-Eustis, VA.

Leading Into The Future

By CW5 Jonathan Koziol

U.S. ARMY PHOTO BY MAJ ROBERT FELLINGHAM

CH-47 Chinook pilots CW4 Jason Andersen (near) and CW2 Nick Lee (far), assigned to Co. B, "Big Windy," 1-214th General Support Aviation Battalion, conduct pre-flight checks before an overwater training flight in the Republic of Cyprus on Jan. 15, 2020.

A year has passed since I have last addressed you regarding simulation and training updates. In staying with the same focus, I can assure you much has changed.

The global pandemic has affected our daily personal and professional lives. Some of those impacts have forced our enterprise to make some bold new changes as to how we train and protect the mission.

I am in awe of how we have adjusted and adapted to the restrictions to protect the mission. Within a matter of days, Fort Rucker quickly implemented changes to the programs of instruction (POIs) to allow virtual or distance learning. Believe me, it was a monumental effort by multiple agencies to transition to a virtual environment. Likewise, it was an adjustment for you in the field. We have just finished our first all virtual Aviation Warrant Officer Advanced Course (AWOAC). There were a few growing pains, but it was still a successful event.

As an enterprise, we have gained efficiencies, with some being long lasting. The balance we must determine is how much virtual/distance learning is too much? There are added benefits for a resident course that we can sometimes overlook. The first is there are limited distractions while in class and the student can concentrate on what he or she is learning. I am sure you all have experienced an online course whether professionally or personally. If you are taking it at home, there are distractions even if you try to mitigate them. Additionally, the immeasurable benefit of a resident course is the shared experiences between class members that help us all become better professionals. We will all have to keep that in mind as we continue to adapt to our new normal. If we continue to do virtual online training, we must ensure commanders cordon our Soldiers off to allow them to focus on the task-at-hand and not have to worry about the day-to-day work.

A key element the Aviation Branch has been working on is Knowledge, Skills and Behaviors (KSB) for our aviation Soldiers. We have broken out the warrant officer KSBs into two sets, with aviators having their own KSBs. These KSBs lay out benchmarks for what will be expected of our warrant officers as they progress throughout their careers. The KSBs will be a key guideline for leader development of our aviation warrant officers. In the coming weeks, we will be releasing a leader development strategy for aviation Soldiers. The intent is a basic strategy for you to teach, coach, and mentor your junior Soldiers and give leaders some guidelines to work with.

Leader development is not new and is sometimes misunderstood in some respects. Leaders are doing this in an unintentional manner, and if asked, will not realize it. What the strategy will do is give all leaders a better structured plan to follow. As we move towards the next fight, all the analysis is showing we will be in a dispersed environment and having to be on the move. Well-rounded Soldiers who have multiple experiences will be the best prepared to win the next fight. You can expect future warrant officer Primary Military Education (PME) and functional training to have a sharper focus on warfighting. It will be shaped to focus more heavily on our doctrine and tactical employment of our aviation assets. This is nothing new, but this sharper focus will better prepare us for multi-domain operations (MDO).

As we work on the big picture leader development plan, we are going to ask you to develop a robust Unit Trainer program. Again, this is nothing new. The unit training program has been around for a while and some units do it better than others. Your Branch is doing analysis on how to optimize our formations as we move towards the MDO 2028 concept. A good unit training program can help balance the workload for your unit by allowing your unit trainers to offload some of the work from key leaders and is another step in the leader development process.

Thank you all for the hard work you are doing every day. Because of you, our branch is stronger. Protect yourself and keep your family healthy. Protect the mission. Winning Matters!

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.

Branch Command Sergeant Major

Leader Development

By CSM Brian N. Hauke

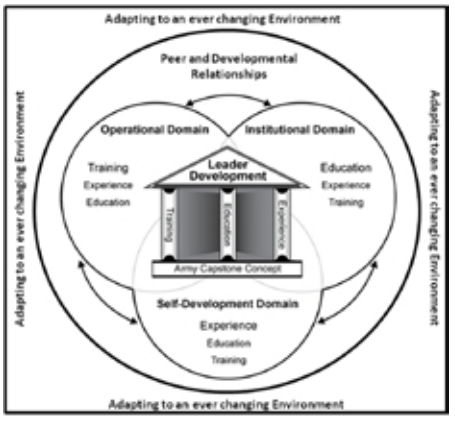
U.S. ARMY PHOTO BY CHARLES ROSEMOND

U.S. Soldiers assigned to Company A, 1st Battalion, 3rd Aviation Regiment (Attack Reconnaissance) conduct maintenance on an AH-64 Apache helicopter at Katterbach Army Airfield, Germany, June 16, 2020.

In light of everything COVID-19 related happening around the world, I hope you and your families, including extended families, are safe and doing well.

No matter where you and your loved ones live, please remain safe and healthy while the nation transitions back to some form of normalcy – if we are able to call it normal. Your health is of the utmost importance to your unit's, the branch's, and our Army's readiness.

For this issue, I want to discuss leader development. Leaders, we can never be "too busy" for leader development!



U.S. ARMY GRAPHIC

Leader development is a critical element of combat power; it is our advantage over our adversaries. We must prepare our leaders and develop their capability to outthink and outperform our enemies in order to defend the nation.

Aviation leaders (you) are the competitive advantage our Army possesses that technology cannot replace nor be substituted by advanced weaponry and platforms. As our Branch and Army move toward more and more complex weapon systems and platforms, out of necessity, to maintain overmatch against potential adversaries in the future, we cannot forget that people are what will win the day.

Commitment

Our Aviation Leaders must be committed to the development of others and themselves. I think we can all agree that leader development occurs in everything we do and at all levels. From Physical Readiness Training (PRT), first thing in the morning and throughout the entire day we have vast opportunities as leaders to provide leader development. As defined in the Army Leader Development strategy, leader development is, "A continuous, progressive process by which the synthesis of an individual's training, education, and experiences contribute to individual growth over the course of a career." Make no mistake about it, development of our people is an Army priority!

"Recognizing readiness as the Army's first priority, we understand that the most critical factor in delivering Army readiness is the development of leaders of character at every level." – General James McConville (HASC Subcommittee Statement, February 2018)

From our doctrine, the overarching tenets of Army leader development are these (FM 6-22):

- Strong commitment by the Army, superiors, and individuals to leader development.

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 2019 National winners were featured in the April/May AAAA Army Aviation State of the Union issue.

SGT Brandon J. Travers

Company A, 4th Battalion,
3rd Combat Aviation Brigade
Task Force Viper

Trainer of the Year Award, 2013

Sponsored by L-3 Technologies, Link Training & Simulation

AAPI FILE PHOTO

SGT Brandon Travers took a company barely capable of completing their assigned mission due to lack of qualified crew chiefs to man the nine UH-60L Black Hawk aircraft assigned to Company A, 4th Battalion, 3rd Combat Aviation Brigade, Task Force Viper, and created a team of trained and ready warriors ready to accomplish any mission. SGT Travers' duties as the primary trainer within the company were not limited to the progression of crew chiefs but also for the newly assigned door gunners, none of whom had prior aviation crew duty experience. During his nine month deployment to Forward Operating Base Wolverine in Regional Command-South, Afghanistan, he was able to progress 17 Soldiers and complete 11 Annual Proficiency and Readiness Tests to enhance the warfighting capability of the only assault helicopter company in the Zabul Province of Afghanistan. SGT Travers served as a primary trainer but also a mission critical crew member during more than 330 combat flight hours in support of mission sets including multi-aircraft special operations forces air assaults and logistics support operations.

- Clear purpose for what, when, and how to develop leaders.
- Supportive relationships and culture of learning.
- Three mutually supportive domains (institutional, operational, and self-development) that enable education, training and experience.
- Providing, accepting, and acting upon candid assessment and feedback.

You, the leaders, establish your "leader development climate" within your organizations. This climate happens at every level from the team, squad and platoon all the way up through divisions, corps and the Army. What exactly do I mean by leader development climate? Is the climate a zero-failure culture or failure is not an option culture? To quote a Jedi master we all know well, "The greatest teacher, failure is." (Yoda, Jedi Master) I am going to let everyone in on a little secret, I have failed more times than I can count and am quite sure if you asked most senior leaders across our branch they would tell you the same.

Critical Thinking

Ladies and gentlemen, ***failure is not the end.*** If a Soldier never fails, he or she has never tried. Unless they have tried, they won't succeed. Failing at something is not the end of the world. In fact, failing makes the individual better. A leader must get subordinates he or she is developing to think critically. Enabling them to think critically can result in possible failure. You must give them intent and turn them loose, but with some parameters to ensure there are left and right limits when it comes to the intent. However, we should allow our Soldiers an opportunity to fail (failure = growth)! This is an important part in any Soldiers' development, in fact, its important period.

In closing, I ask you these questions: What is the leader development culture in your organization, and does it allow for growth? If not, I ask you to work at this. Please do not mistake this for not accomplishing our mission and winning. As we are all aware, "WINNING MATTERS!"

Thanks again for all that each one of you do for our Branch and Army! Stay Healthy! 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.

Simulations and Safety

By COL Jason Miller

U.S. ARMY PHOTO BY JOSEPH MENDIOLA, CCDC AVIATION & MISSILE CENTER

Soldiers use the Future Open Rotorcraft Cockpit Environment, or FORCE, simulator during a demo day in Huntsville, AL, Feb. 28. FORCE is a reconfigurable, extensible and portable platform that provides readiness to the U.S. Army by enabling innovative technology evaluation through rapid integration timelines.

It is fortuitous that this month's theme in AAAA centers on simulations. The last few AAAA articles from the U.S. Army Combat Readiness Center have focused on an Aviation trend we dubbed the "fourth quarter spike."

While Army Aviation is in the safest five-year period overall in the branch's history, data clearly show the majority of Class A mishaps (21 of 53, or 40 percent) over the past five years occurred during the fourth quarter, with August being almost double any other month. As we talk about mitigation measures or tools to reverse the fourth quarter mishap trend, simulation devices provide another avenue to improve risk management, increase aircrew proficiency and enhance mission rehearsals to reduce Aviation mishaps.

Improve Risk Management

Army Aviation is a learning organization. Through the DOTMLPF-P process, Aviation continues to make dramatic strides in reducing human and materiel mishap causation factors through engineering solutions and improved risk management. Simulations are an integral tool to support improved decision-making through providing complex environments and scenarios requiring dynamic risk management by aircrews. With historically over 80 percent of mishaps caused by human error, simulators allow organizations to control materiel and environmental inputs and to safely isolate aircrew performance, judgment, coordination, and actions through increasingly challenging scenarios. Simulators provide an excellent risk management tool to reduce human error and get after training objectives and complex mission tasks in a constantly changing environment requiring dynamic risk assessment.

Increase Aircrew Proficiency During Emergency Situations

Through the beginning of June 2020, Army Aviation has experienced a total of six Class A mishaps, all the result of human error. When combined with the final mishap of FY19, three of the last seven Class A mishaps were the direct result of improper analysis and performance of emergency procedures, prompting the branch to institute the Emergency Response Methodology.

As our mission profile changes in support of LSCO, it is critical when implementing ERM that units maximize simulator use to build aircrew proficiency in identifying and responding to emergencies appropriately. Simulators assist aviators in moving from rote

memorization and transition to understanding and realistic application of knowledge during complex or critical situations. Emergencies don't usually happen during ideal conditions but, more often than not, they occur when least expected and during a high workload. Simulators enhance the ability to replicate simple or complex emergency conditions during critical phases of the mission to improve the quality of training and truly reinforce why ERM and "fly the aircraft" were instituted.

Enhance Mission Rehearsals

Just as on the ground side of operations, Aviation mishap investigations increasingly uncover the importance of pre-mission rehearsals. Studies show a direct correlation between aircrew performance in simulators and success in a mission environment. Simulators provide organizations the ability to rehearse and execute realistic mission scenarios and contingencies in a controlled environment. The actual operational mission environment where aircrews are preparing to operate may not exist at home station or during a particular time of year but can be replicated in the simulator. For example, environmental changes (heat, dust, weather) in the fourth quarter present a challenge to Aviation operations. Replicating the environment and mission profile in a simulator provides aircrews and trainers a prime opportunity to understand the hazards, implement controls, work on contingencies and drive mission risk down during operational missions.

Reverse the Fourth Quarter Spike

Aviation has an excellent training model: teach, simulate/rehearse, execute. While nothing will replace the essential learning from hands-on training, simulations provide units a tremendous opportunity to develop, rehearse and refine their skills while reducing risk to the force. As we transition into the fourth quarter, units must maximize the use of tools to mitigate risk, methodically build proficiency and enhance operations to reverse the trend that historical data has illuminated.

Readiness Through Safety!

COL Jason Miller is the deputy commander of the U.S. Army Combat Readiness Center, Fort Rucker, AL.

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

The new seat provides improved safety, endurance, and operational effectiveness for helicopter Crew-Chiefs/Gunners. Adjustment features for crew-member height, weight and head-rest differences enable optimized seat-position options. Improved vibration dampening and impact absorption technologies provide for maximum endurance and crew-member safety. Naval Air Warfare Center Aircraft Division (AIRWorks) enabled the production design in only six months, following the completion of prototype testing.

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U.S. ARMY PHOTO BY SGT ALEX MORGAN

Standardization in the Aviation Community

By SGT Alex Morgan

Within the Aviation community, standardization and safety play a vital role in ensuring the effectiveness and safety of training and operations. SGT Joshua Maldonado, the standardization instructor in Company C, 7th Battalion, 158th Aviation Regiment, 11th Expeditionary Combat Aviation Brigade, stresses the importance of standards and safety.

A Soldier in Company C/7-158, 11th Expeditionary Combat Aviation Brigade, descends from a UH-60 aircraft during hoist training at Fort Carson, CO on Nov. 2, 2019.

"It's one thing if a unit does things a certain way and it works for them, but what happens if a Soldier transfers to a different unit that does things differently? They might not have enough time to relearn that standard before it is time to execute a mission." Maldonado said. "If it's standardized the same everywhere, then it ensures that all the crews are training and learning the same way to avoid life-threatening mistakes."

Aviation allows little room for error for everyone involved. Pilots, flight medics, and crews are all responsible for not only their own safety but also the safety of others. With higher risk operations such as hoist training and high-altitude flights, it is critical that Aviation Soldiers properly implement standards to prevent injury or loss of life.

It is the standardization instructor's responsibility along with the standardization pilots, instructor pilots,

and flight instructors to evaluate the readiness of personnel. They teach and enforce the standards. Maldonado explained that, "if something is done unsafe and not to the standard, then the chances of something life-threatening happening goes up. The risk is greater in an Aviation unit compared to some other types of units because everything we do is inherently dangerous, so we stress risk mitigation and evaluate our Soldiers to figure out the safest way to train and perform our missions without unnecessary risk."

Standardization instructors not only enforce the standards but are also the primary trainers for unit personnel. The standardization instructor will give no-notice evaluations to Soldiers on a frequent basis. These evaluations occur at random times to select personnel to ensure that they are keeping up with their knowledge and training.

"These evaluations are very important because we might have a pilot or crewmember that has not flown in a while, and we need to make sure that they are keeping up with the proper standards that come with the training. Since it's completely on the spot, whoever gets evaluated has to be able to execute the given task or demonstrate their knowledge off the top of their head to prove they are capable of conducting the training safely."

"Once someone reaches Readiness Level 1, it's my job as a standardization instructor to make sure that they remain proficient and continue to train to the standard. It's imperative they are prepared for the mission regardless of the conditions or situations they may face," said Maldonado.

SGT Maldonado works closely with Chief Warrant Officer 3 Phillip Strickland, the safety officer in C/7-158. This relationship is vital since the standardization instructor ensures attainment of critical training objectives in a variety of conditions, while the safety officer analyzes the situation and determines whether the training will be unnecessarily dangerous. "Our mission does not stop because it's extremely hot or cold, but we have to make sure that the benefit of training outweighs the risk. No amount of training is worth someone losing their life or getting seriously injured in the process," explained Maldonado. "High winds are probably one of the most important things to consider in Aviation". Maldonado continued, "it's up to myself and the safety officer to determine if training should be called off if wind speeds are too high. This is an especially critical consideration when preparing a live hoist training scenario."

By maintaining standards throughout the Army and Aviation community, units are able to achieve a higher level of readiness across a multitude of environments and theaters while remaining as safe and effective as possible.

SGT Alex Morgan is the public affairs NCO for the 11th Expeditionary Combat Aviation Brigade, Fort Carson, CO.

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NCO Leadership

By 1SG Zachary J. Ogilby

128TH AVN. BDE. COURTESY PHOTO

NCOs from 128th AVN BDE administer the new Army Combat Fitness Test (ACFT) to AIT Soldiers.

You started here, your Soldiers started here, and for the foreseeable future, every next-generation rotary wing maintenance Soldier will start here, in the 128th Aviation Brigade.

This is not the Army Aviation Logistics School of yesterday and our organization has recently expanded its priorities. We've merged our fundamental mission of providing the world's best-trained maintainers to the force with the development of our cadre into proven leaders. The brigade's entire team has been solely charged with the data collection and validation of the Army Combat Fitness Test (ACFT) and Expert Soldier Badge (ESB). We have also aligned training priorities to meet 21st-century demands through the deliberate integration of a locally refined Mission Essential Task List (METL). Lastly, our instructors have designed and implemented a comprehensive instructor progression model intended to provide a clear vision for individual achievement. With these measures, our team is fully prepared to return to the operational force as conceptually lethal NCOs.

On 17 November 2019, while most Americans were sleeping, Instructors and Drill Sergeants from the 128th Aviation Brigade were helping administer the Army's First ESB course while simultaneously executing our 500th test of the new ACFT. This was the culmination of months of arduous planning after TRADOC selected our team of NCOs to develop the initial ESB grading and validation criteria. Likewise, the Center of Initial Military Training (CIMT) charged our unit with the data collection for calibrating the ACFT's point scale. All the NCOs in our formation contributed to the success of these two groundbreaking programs and are subject matter experts in ACFT implementation, with over 3,000 tests administered. Our developmental gains from these enterprise-wide impacts will be spread throughout the military as our NCOs return to the fighting force.

In a unit with very few commissioned officers, execution of the brigade commander's priorities through mission command is paramount. To accomplish command directives, our METL focuses heavily on developing our NCO's leadership competencies and advanced understanding of the operational environment required of senior Army leaders. Following our METs, Instructors receive and deliver in-depth leader professional development on topics ranging from incoming Soldier sponsorship to talent management strategies. We also exercise mission command and provide trained Soldiers to the force through the execution of multi-day FTXs, certifying over 4,000 Soldiers on 50+ Common Skills Tasks that include hand grenade deployment, Call for Fire requests, and obstacle course execution. Concurrent with each FTX iteration, instructors are evaluated on Troop Leading Procedures and the operation of a Command Post, all in a field environment involving hundreds of troops. Through the accomplishment of these METs, our NCOs have advanced the unit into the next level of organizational achievement.

Finally, we have identified a need for standardized individual achievement. A prime example of this is the Instructor Progression Model which frames expectations of progress during the instructor's three-year assignment. Within the first year of arrival, the NCO is expected to become certified as an instructor and earn the Basic Army Instructor Badge. As instructors move into their second and third years, they are given the option to run one of three tracks – akin to the aviator's maintenance, safety, and in-

structor paths. NCOs are given a choice to track master instructor, operations, or leadership. This simple career matrix has proven to be successful in the alignment of organizational and individual priorities, providing clear direction for goal achievement. Our organization's effort to enhance instructor development raised promotion rates to 42% of Instructor/Writer candidates selected for SFC.

In closing, there is a direct correlation between the prioritization of leader development and organizational success. By enabling our NCOs to lead the Army's ESB and ACFT implementation, aggressively accomplish our METL, and produce the instructor progression model, our cadre enabled the unit to surpass all expectations of any training unit. We're eager to release the next wave of war-fighter NCOs armed with advanced leadership abilities to your organizations as the 128th Aviation Brigade continues to cultivate NCOs who are genuinely above the best.

"Born Under Fire!"

1SG Zachary J. Ogilby is the first sergeant of Company B, 1st Battalion, 210th Aviation Regiment, 128th Aviation Brigade, Joint Base Langley-Eustis, VA.

Organic Sustainment Repair of the Shadow Air Vehicle

By Mr. Cody Wells and Mr. Kenneth Carel

Originally procured through the United States Army Intelligence and Security Command, the RQ-7B Shadow Unmanned Aerial System (UAS) had its initial fielding delivery in 2001.

CORPUS CHRISTI ARMY DEPOT COURTESY PHOTOS

Examples of structural composite repairs

This System was originally rapidly fielded with the Original Equipment Manufacturer (OEM) providing field repair, sustainment repair, logistics and engineering oversight after delivery through Contractor Logistics Support (CLS) contracts. Since this original fielding, this system has undergone several changes including: transition to the Program Executive Office (PEO) - Aviation , system capabilities increase, component cost increases, program retirement extension, and Federal Acquisitions Requirements compliance. Due to these changes, an updated Core Depot Assessment (CDA) and Core Logistics Analysis (CLA) evaluation determined that an Air Vehicle (AV) sustainment level repair and return program was required and the Corpus Christi Army Depot (CCAD) was selected to provide this capability.

To meet this sustainment level capabilities requirement, the Systems Readiness Directorate (SRD) was asked by the Tactical Unmanned Aircraft Systems (TUAS) Program Management (PM) office to complete work instructions, focusing on structural composite repairs. SRD developed the necessary repair procedures utilizing the AV Government Purpose Rights Technical Data Package and an Integrated Product Team made up of members from the Prototype Integration Facility Composite Center, Weapons Development and Integration Directorate, SRD Unmanned Aerial Systems, SRD Structures and Materials Engineering, and CCAD. These procedures were then promulgated in program Maintenance Engineering Order (MEO) format allowing SRD to control procedure utilization by only specific maintenance locations possessing the required equipment, facilities, and personnel. These procedures were drafted in standard work package format like those developed for the UH-60M Black Hawk Composite Stabilator and MQ-1C Gray Eagle AV. This allowed for materials and equipment commonality, and technician familiarity. Procedure verification was performed at CCAD's composite repair facility, which provided pre-development of work instructions, quality assurance and quality inspection input and planning, material and equipment requirements, workflow development and technician procedure familiarity.

From the CDA/CLA, it was determined CCAD would execute an AV major assemblies' repair and return program. These major assemblies include the Fuselage, Outer Wings, Center Wing and Tail Assembly. Presently, CCAD is completing a pilot program on all the major assemblies, excepting the Fuselage. Along with the pilot program, CCAD has been asked by the PM to develop and build DIT-MCO testing hardware and software to check the major assemblies' wiring harnesses. This effort will allow for an efficient and thorough check all of the AV wiring for any potential future issues or existing damage without complete removal of the wiring from the AV.

Although CCAD is familiar with composite repairs and performs overhaul of critical composite components such as Rotor Blades, it had to overcome several unique Shadow AV challenges. Challenges conquered: unique programmatic structure; rapid internal work instruction development; technician repair initiative and flexibility; Shadow UAS logistical software, Catalogue Ordering Logistics Tracking System, integration with the Army's Logistics Modernization Program; and lastly, transition from OEM-centric logistics to the standard Defense Logistics Agency model.

The Shadow UAS logistical support plan and requirements have changed greatly from its inception. Consequently, the PM has had to assess its requirements for sustainment level repair activities, including development of organic work instructions. CCAD and SRD, leveraging their expertise in overhaul of complex Army Rotorcraft, have been able to support these requirements with an initial Army sustainment capability. CCAD, SRD, and the PM are now developing additional repair procedures, e.g.: current and future Engine Assemblies, Alternators and Fuselage Assemblies to give Army Aviation more robust and deeper repair capability and future flexibility.

Mr. Cody Wells and Mr. Kenneth Carel are engineers on the Reconnaissance Team for the Maintenance Airworthiness Engineering Division of the U.S. Army Combat Capabilities Development Command Systems Readiness Directorate; they are located at NAS Corpus Christi, TX.

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Women's Health

By MAJ (Dr.) Laura S. Ball

Q: For female aviators, what are the flight approved contraceptive methods and are there any women's health requirements for flight physicals?

FS: In the US, approximately 45% of pregnancies are unintended. Within the military, the number of unplanned pregnancies is even higher. Having a reliable form of contraception is an important consideration for women in the military since there are some regulatory limitations that go along with pregnancy. For example, women who are pregnant cannot deploy and serve in a combat zone. When it comes to Aviation, initial applicants for flight school are considered disqualified until 6 weeks after delivery assuming they are fully recovered at that time. Rated aircrew members who become pregnant can be on flight status with approval from their OB/GYN physician. However, there are restrictions. For example, the Aeromedical Policy Letter (APL) states that during gestational weeks 12-25, flight is allowed but restricted to "multi-engine, non-ejection seat, fixed wing aircraft with dual-pilot status and a cabin altitude less than or equal to 10,000 feet". These restrictions limit female helicopter pilots to flight simulator duty only throughout the duration of their pregnancy and until fully recovered after delivery. If the pregnancy is uncomplicated, it is listed as information only on the flight physical (i.e. no waiver is needed).

Options

There are numerous options available for contraception: contraceptive pills and patches; intra-uterine devices (IUD) that are effective for up to 12 years; implantable devices that are effective for up to 5 years, injectable medication that works for approximately 3 months. There are also barrier methods such as condoms, diaphragms and sponges and surgical options such as tubal ligation for yourself and vasectomy for your male partner. There are also practices such as withdrawal, fertility awareness (aka Rhythm Method) and abstinence. All methods have different side effects including effects on fertility and menstrual bleeding as well as different levels of effectiveness in preventing pregnancy.

Some things to consider when deciding on the right method of contraception for you include future-plans for pregnancy, overall health status, effectiveness in preventing pregnancy, whether the method uses hormones and ease of use of the method. For example, women who plan to become pregnant within a year or two probably should not opt for an IUD. However, for women who do not plan to become pregnant and who want an easy to use method that requires little planning, an IUD might be a good option. Women who are deploying or frequently going to the field, may choose an option that stops or reduces menstrual bleeding not only for contraception, but for convenience and personal hygiene reasons as well. It is important to note that contraception can also have a role in the treatment of acne, premenstrual syndrome, menstrual migraines, and pelvic pain due to endometriosis as well as decreasing the risk of endometrial, ovarian and colorectal cancers. The decision regarding which method is best for you can be made with your primary care or OB/GYN provider. For women on flight status the use of contraceptives that contain hormones is acceptable and is documented as information only on the flight physical.

Screening

When it comes to well woman exams and pap smears that screen for cervical cancer, the APL does not make any specific recommendations. However, from a primary care perspective, within the Aeromedical community we follow guidelines put forth by the US Preventative Services Task Force (USPSTF). Screening is done by a pathologist through microscopic examination of cells obtained from the cervix during the well woman exam. This is usually reviewed as part of the flight physical. Currently, the USPSTF recommendation is that women ages 21-29 receive cervical cancer screening every 3 years and for women ages 30-65 it is done every 5 years along with co-testing for the Human Papilloma Virus (HPV). Human Papilloma Virus infections are very common. According to the Centers for Disease Control and Prevention, virtually everyone will get infected at least one time in their lives. A cervical infection with HPV is usually without symptoms and resolves without any medical intervention or complications. However, if the infection persists, it has the potential to cause cervical cancer. Almost all cases of cervical cancer can be attributed to HPV infection. If abnormalities are detected on cervical cancer screening, there may be follow up procedures or testing that is done depending on the type of abnormality. Abnormalities are classified as atypical squamous cells, low grade squamous cell intraepithelial lesion or high-grade squamous cell intraepithelial lesion. If there are abnormalities detected there may be a waiver required for the flight physical. This, like follow up care, depends on the type of abnormality. Remember, women's health is an important part of medical readiness and safety in flight!

Fly Safe!

Question for the Flight Surgeon?

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

The views and opinions offered are those of the author and researchers and should not be construed as an official Department of the Army position unless otherwise stated

MAJ Laura Ball, MD is a flight surgeon at the U.S. Army School of Aviation Medicine at Fort Rucker, Alabama

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Resources That Enable Large Scale Combat Operations (LSCO) Capability

By COL Stephen W. Owen and COL Jimmy L. Meacham, U.S. Army Retired

An AH-64 Apache from 1-3rd Attack Reconnaissance Battalion, 12th Combat Aviation Brigade fires its rockets downrange during aerial gunnery tables on Mar. 5, 2020.

Gone are the days when you found out doctrine had changed because you received boxes of new manuals via the unit mailroom. Just because the Army Publishing Directorate (APD) posts a new doctrinal manual on the internet or the USAACE Directorate of Training and Doctrine (DOTD) hangs a new training package on their homepage, nothing has essentially changed until units are aware of, knowledgeable on, and executing the new principles and training approaches defined within these new products. Modernization has enabled increased accessibility to information. However, awareness remains a challenge. For those of you who are on specific e-mail distribution lists, participate in Aviation Enterprise meetings, or regularly read Branch professional publications (e.g., Aviation Digest, newsletters), you may be up to date on the latest doctrinal and training products coming out of Fort Rucker and this article may appear to be redundant. That would be ideal. For everyone else, this article is another opportunity for us at DOTD to spread the word on the latest products available to the Aviation Warfighter that support building and sustaining Large Scale Combat Operations (LSCO) capability.

A teaser of Army Aviation's capstone doctrinal manual updates was provided in last year's July AAAA Magazine DOTD article. Field Manual (FM) 3-04, Army Aviation, and Army Techniques Publication (ATP) 3-04.1, Aviation Tactical Employment, were finally published in April and May of this year, respectively, after a lengthy development process that included numerous editing iterations and reviews. These aviation products were published in rapid succession since they are closely nested with each other

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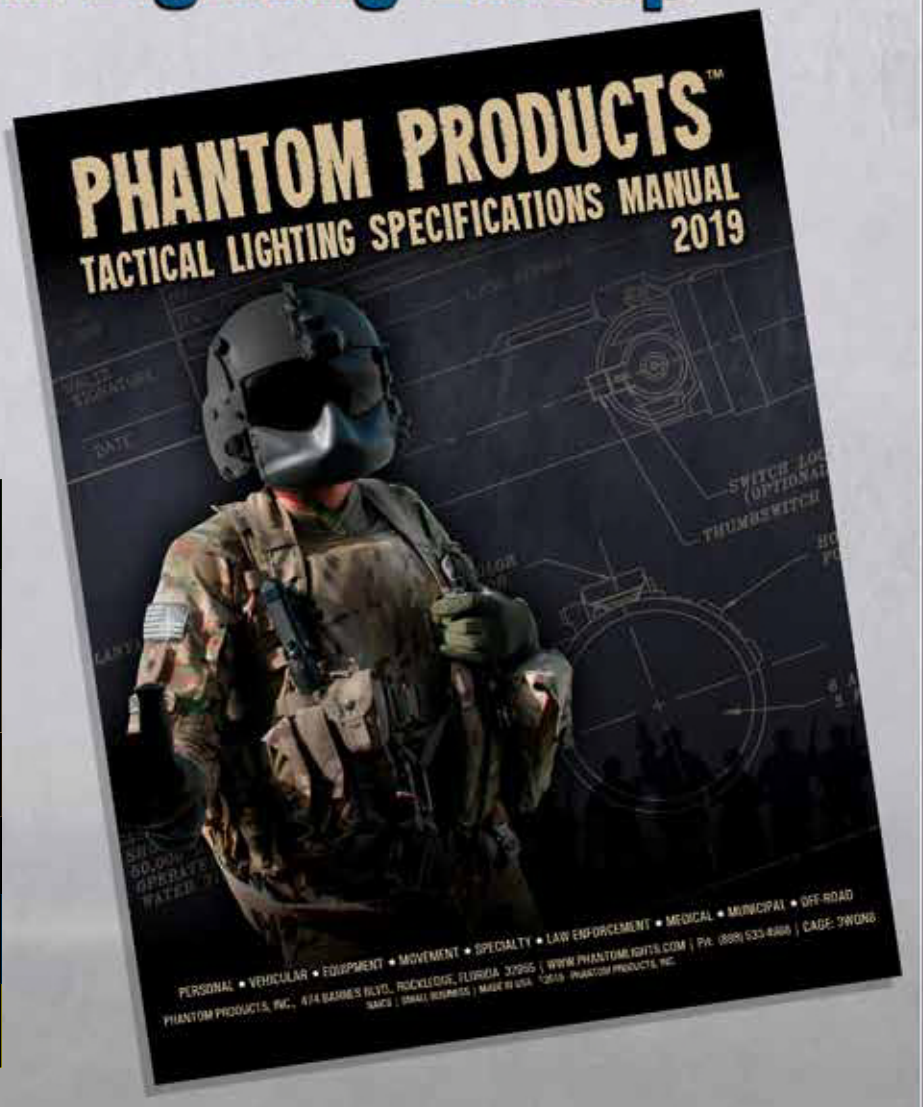

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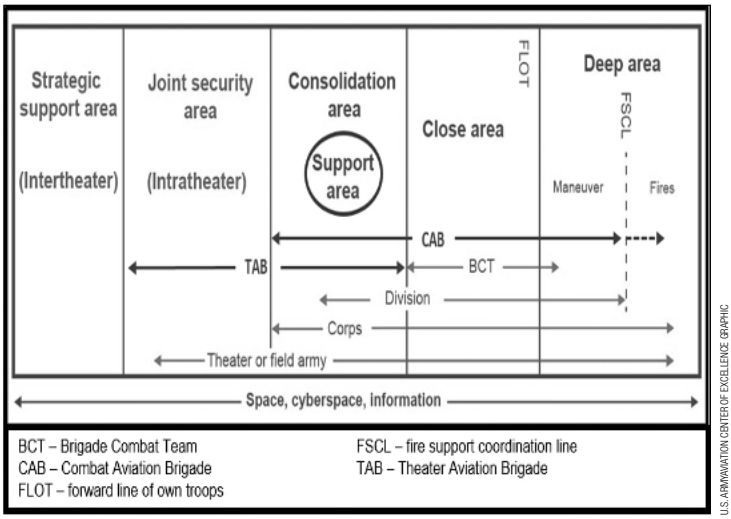
FM 3-04 Summary of Changes

- Aligns with FM 3-0 doctrinal terms, updated figures, and new operational framework.
- Acknowledges peer threat challenges
- Defines aviation expeditionary operations
- Discussion of peer threat vs. hybrid threat
- Discussion of environmental effects
- Operational Framework Graphic
- Organization, Capabilities, Mission Tasks by echelon & unit type
- Defines AWT & SWT based on parent BN/ SQN
- Command Posts & CP survivability
- Enhanced airspace planning discussion, link to JAGIC
- Discusses each of the 7 Core Aviation Competencies
- Discusses tactical tasks for Aviation
- Incorporates changes in ATP 3-04.1
- Adds aerial-delivered mine operations
- Adds counter-air considerations – contested areas
- Discusses maintenance
- BDAR & DART: GSABs & ASBs conduct deliberate aerial recovery
- Discusses key maintenance positions in the CAB
- Establishes BAMO (BDE) & AMO (BN)
- Increased discussion of FARP operations, survivability, and duration in large scale combat
- Updated for current airframes
- Simplified mission analysis data for each aircraft
- Removed specifics about UAS frequencies
- Updated & synchronized discussion of armament systems for AH-64 and MQ-1

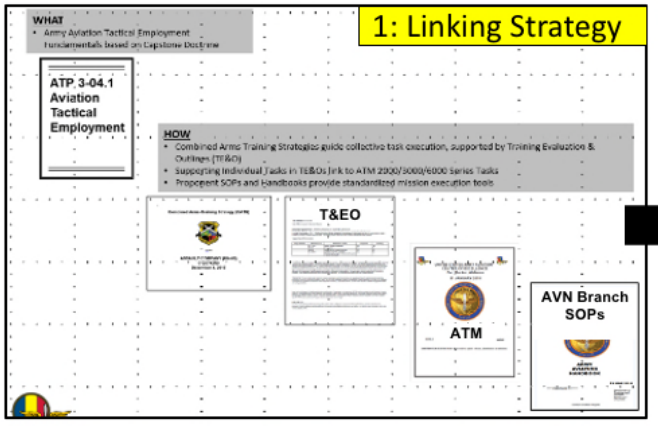


BCT – Brigade Combat Team
CAB – Combat Aviation Brigade
FLOT – forward line of own troops
FSCL – fire support coordination line
TAB – Theater Aviation Brigade

U.S. ARMY AVIATION CENTER OF EXCELLENCE GRAPHIC

ARMY AVIATION
DECISIVE IN LAND WARFARE

ATP 3-04.1 Aviation Tactical Employment



PART 1: Common Considerations
- Planning, Preparation, Execution

Part 2: Attack, Reconnaissance, and Security Tasks
- Movement to Contact, Attack, Reconnaissance, Security

PART 3: Assault and General Support Aviation Tasks
- Air Assault, Air Movement, Deliberate PR, MEDEVAC, CASEVAC

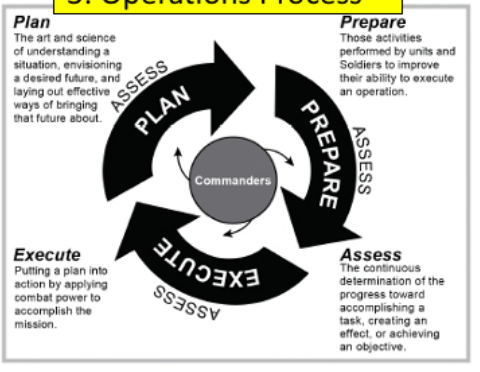
PART 3: Expeditionary Considerations
- Unit Deployment, Theater Entry, Tactical Convoys, TAA Ops

Appendices
- Task Organization, Staff Considerations, Battle Drills, Checklists, Survivability, LNO Considerations

2: Mission Essential Tasks

Standardized
Mission Essential Task Lists
by Type Organization
and Echelon

3: Operations Process



U.S. ARMY AVIATION CENTER OF EXCELLENCE GRAPHIC

and required changes to conform to the latest version of our Army's FM 3-0, Operations, which introduced new doctrinal terms, updated figures, and a new operational framework.

FM 3-04 provides an "up and out" discussion of Army Aviation appropriate for brigade level commanders and staffs. It provides the context and overall concept for training, employing, and integrating aviation in Army and joint, interagency, intergovernmental, and multinational operations. It is synched with higher level doctrine updates for LSCO and provides additional guidance on operations in contested airspace, information on expeditionary aviation operations, and updated references to Army, Multi-Service, and Joint doctrine. (See Page 32 - Graphic #1)

ATP 3-04.1 was designed for the primary audience of junior leaders at the brigade level and below, though it is applicable to other members and leaders of the profession of arms as well as trainers and educators throughout the Aviation Branch. It was developed to serve as the primary reference and teaching document for all company-level aviation tactical task planning, preparation, and execution. It was deliberately organized to identify and then expand on descriptions of the performance steps listed in company-level Training and Evaluation Outlines (T&EO) and utilizes a troop leading procedure framework to assist leaders in progressing through mission planning and preparation. (See page 32 -Graphic #2)

Unit Nomenclature Change

A very significant change in both the FM 3-04 and the ATP 3-04.1 is the change in nomenclature of our two types of AH-64 Apache formations. To minimize the potential for confusion and provide greater distinction between the primary mission focus of the two formations, the previous Attack Reconnaissance Battalion (ARB) and its subordinate units are now the Attack Battalion (AB), Attack Company (AC), and Attack Platoon. The former Attack Reconnaissance Squadron (ARS), including the Heavy Attack Reconnaissance Squadron (HARS) nomenclature used during the Aviation Restructure Initiative (ARI), and its subordinate units are now the Air Cavalry Squadron (ACS), Air Cavalry Troop (ACT), and Air Cavalry Platoon. The name changes on the Table of Organization and Equipment (TOE) documents supporting these organizations are being processed and will follow in short order.

Updates to ***ATP3-04.7***, Army Aviation Maintenance, and Training Circular (TC) 3-04.71, Aviation Maintenance Training Program, are in progress. Changes will include: LSCO considerations as they pertain to the principles of sustainment, aviation countermeasure systems, and sustainment information system vulnerabilities; synchronization with recently published ***FM 3-0***, Operations, ***FM 4-0***, Sustainment Operations, and FM 3-04; and improved nesting between the two documents. These documents should be available by the end of the calendar year.

Ensuring our aviation warfighters are receiving and embracing the latest changes in aviation doctrine is difficult. Overcoming this challenge is vital to empower our aviators with the awareness, depth of knowledge, and confidence to make on the spot corrections when they witness our brothers in arms and leaders using incorrect terms or improper planning procedures with reference to aviation doctrine. No professional wants to get caught short on his/her doctrinal knowledge. But most importantly, no professional wants to use words incorrectly when needed to achieve common understanding during the planning, preparation, and execution of operations. Know your doctrine and share your knowledge at every opportunity to spread the word.

Training

One method used by the Branch to support commanders' training needs is the development of a Training Support Package (TSP). TSPs contain the learning objectives, training sequence, presentation material, and list of required training support items needed to effectively train the topic in the operational domain. Factors including personnel operational tempo (temporary duty to a training location vice home station), complexity of material, length of time required to execute the training, availability of training resources, and focus of training (individual or collective) are considered when making the decision to develop a TSP for unit implementation.

TSP topics are determined based on command feedback, observed trends, and anticipated requirements resulting from the fielding of new systems, capabilities, or procedures. Several of the more recently published products include:

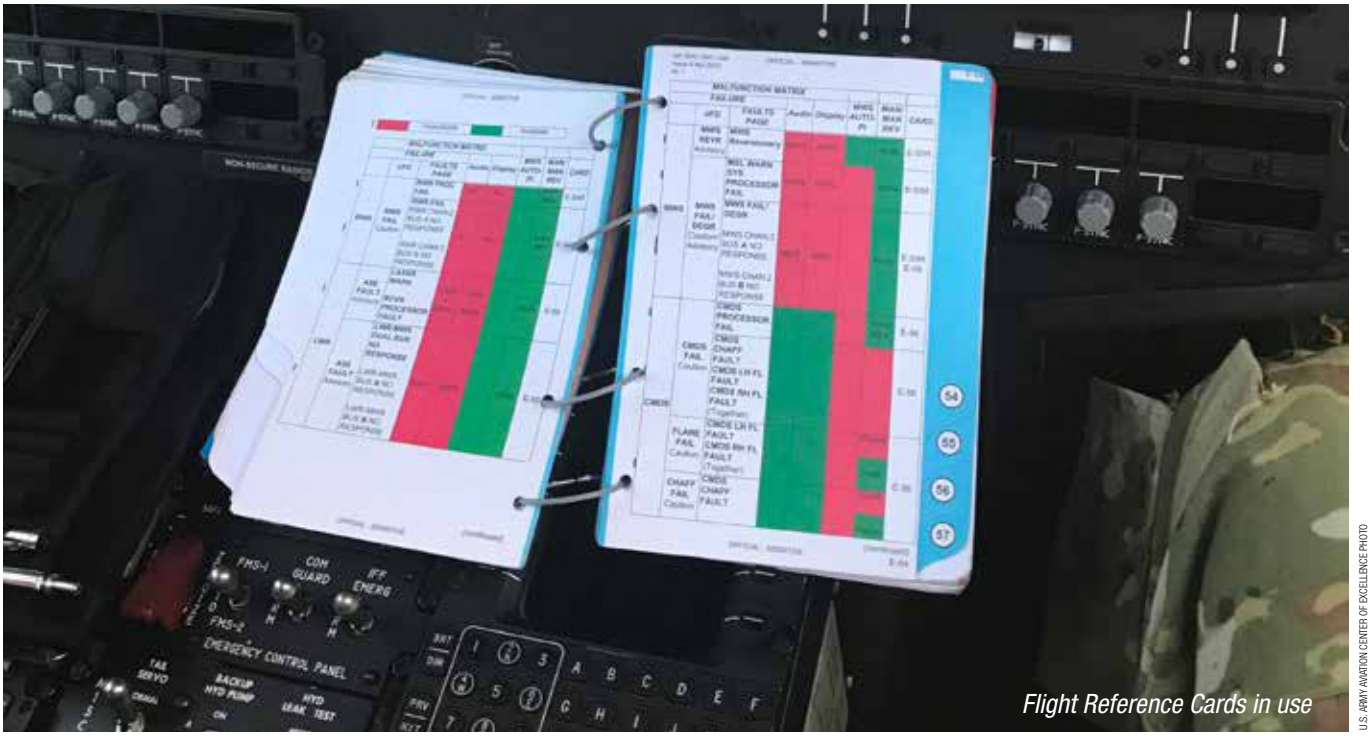
- Emergency Response Method (ERM) (May 20)
- Advanced Precision Kill Weapon System (APKWS) (Jan 20)
- CH-47, UH-60, & UH-72 Rescue Hoist (Oct 19)
- AH-64 E to D Maintenance Test Pilot (MTP) (Feb 19)
- Initial Maintenance Test Pilot Evaluator (ME) (Feb 19)
- Terrain Flight Operations (Nov 18)
- UH-60 M to L Maintenance Text Pilot (MTP) (Jul 18)
- Volcano (Jan 18)
- Radio Frequency (RF) Threat Maneuver (Jan 18)

For ease of access, all Aviation Branch TSPs can be reached from the DOTD Flight Training Branch homepage at: *https://www.us.army.mil/content/armyako/en/mycommunities/Home/groups/TRADOC/Groups/CAC/Groups/USAACE/Groups/USAACEStaff/Groups/Directorates/Groups/DOTD/Divisions/TrainingDivision/Branches/DOTDflighttrainingbranch/files.asset.html/content/usergenerated/asi/mongo/content/armyako/en/mycommunities/Home/groups/TRADOC/Groups/CAC/Groups/USAACE/Groups/USAACEStaff/Groups/Directorates/Groups/DOTD/Divisions/TrainingDivision/Branches/DOTDflighttrainingbranch/files/jcr:content/content/primary/library/tsps-Fqsc.html.*

Summary

Our doctrine describes how we fight, and our training is designed to achieve proficiency in executing the doctrine. Both our doctrine and our training must continuously evolve to ensure we maintain an advantage over our enemies. It is our responsibility as professionals to ensure we are knowledgeable on current products and to recommend changes where necessary to continuously improve our ability to win the next fight.

COL Stephen W. Owen was the director at the time of this writing 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.



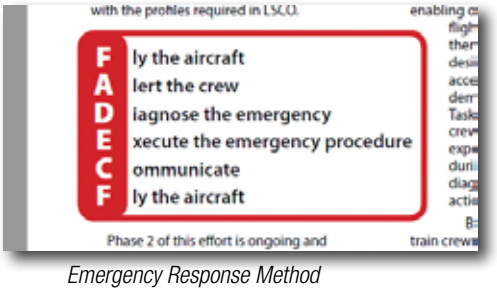
Flight Reference Cards in use

U.S. ARMY AVIATION CENTER OF EXCELLENCE PHOTO

Army Aviation Emergency Response Methodology

By LTC Jamie LaValley

For over fifty years, the Aviation branch has embraced a method of responding to aircraft emergencies where crews must rapidly recall and perform immediate action steps from memory without referring to a checklist. This approach was essential during Army Aviation's formative years, when Army aircraft were almost exclusively single engine, had limited redundancies, and were sometimes even flown by a single pilot. As our branch matured the emphasis on rote memorization of emergency steps persisted; this remains one of the foundational ways Army Aviators are trained and evaluated today. However, our technology has evolved: nearly all aircraft now include redundant systems that, in many cases, permit crews time to assess and react to emergencies with measured action.



Emergency Response Method

Whenever Army forces enter a new operational environment, the rate of Class A Aviation mishaps spikes noticeably. The Army Combat Readiness Center attributes this spike to several factors, including poor crew coordination, lack of discipline, and failure to execute tasks to standard. Based on this trend, and as we continue preparing for future Large-Scale Combat Operations (LSCO), Aviation senior leaders deemed a repeat of the historical spike to be unacceptable. Not only will LSCO place exceptional demands on flight crews to complete their missions, losses of personnel and aircraft from improper emergency responses could have potentially strategic-level implications for our nation.

Phase 1: Task 1070

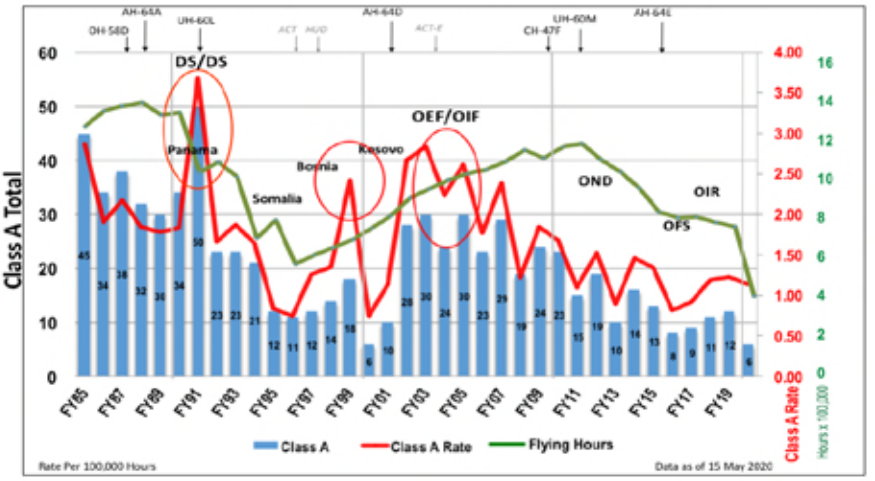
In 2019, The United States Army Aviation Center of Excellence (USAACE) began researching and developing an emergency response approach optimized for modern aircraft and crews to improve training for aircraft emergencies and also minimize future spikes in mishaps upon entry into new environments. Senior Aviators throughout USAACE analyzed best practices across the U.S. Joint services and allied nations, identifying how they teach, execute, and evaluate aircraft emergency procedures. Many other Aviation forces employ a standardized method for responding to any emergency, which enables flight crews to function as a team instead of as a series of individuals. It quickly became clear that a similar overarching approach was needed for Army crewmembers.

As a result of the research, USAACE implemented a two-phased approach to modernize Army Aviation's approach to training for aircraft emergencies. In Phase 1, completed in April 2020, USAACE published updated versions of shared rotary wing Task 1070 (Respond to Emergencies) in all helicopter aircrew training manuals. Task 1070 now defines the Army's standard method for crews to respond to any aircraft emergency.

The Emergency Response Method (*FADEC-F*) in Task 1070 reinforces the most basic survival requirements for any Aviation crewmember. Crews must fly

their aircraft first and foremost - then establish a shared understanding of the situation; conduct malfunction analysis; execute emergency steps; and communicate a plan of action - all while maintaining control of the aircraft throughout the situation. For many experienced pilots, the task is similar to something they have developed over time such as, 'aviate – navigate – communicate;' 'alert – identify – react;' 'maintain aircraft control – analyze the situation – take proper action.' This approach also follows warning messages printed throughout all aircraft operator's manuals: the single most important consideration in any emergency is aircraft control.

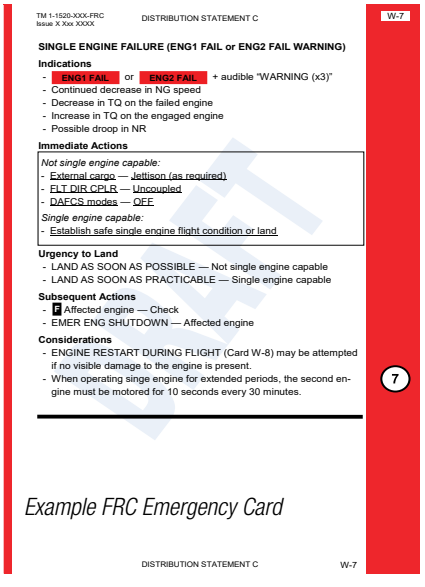
Manned Aviation 35-year Class A Mishaps and Rate



Phase 2: Flight Reference Cards (FRCs)

The phrase 'by the checklist' is commonly used to acknowledge that individuals perform specific technical tasks more correctly by referring to a checklist than when executing them purely from memory. However, all Army aircrew members are taught throughout initial Aviation instruction, with reinforcement through unit-level training and evaluations, that they must know all underlined emergency procedure steps verbatim. Thus, in real-world emergencies many crews will attempt to recall these steps from memory even when they have time to refer to the checklist. As a result, crews do not routinely leverage all information available to them and sometimes make cognitive errors when attempting to recall critical information during an emergency. These mistakes have recently caused flight crews to place otherwise flyable aircraft into unrecoverable situations – with tragic results.

Phase 2 of this effort will therefore provide redeveloped aircrew checklists in a Flight Reference Card format. The FRCs, currently being developed for publication by the Army Aviation and Missile Command, complement the Emergency Response Method by providing streamlined emergency diagnosis and action steps, along with amplifying information and pertinent warnings or cautions. The FRCs feature intuitive features such as tabs and color coding to facilitate rapid access to specific pages so crews are not forced to recall critical information from memory during most emergencies. The FRCs promote the physical use of the checklist throughout all phases of flight, and especially during diagnosis and response to most aircraft emergencies. The FRC format will change the "rote memorization" culture present throughout Army Aviation today.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DISTRIBUTION STATEMENT C

W-7

SINGLE ENGINE FAILURE (ENG1 FAIL or ENG2 FAIL WARNING)

Indications
- ENG1 FAIL or ENG2 FAIL + audible "WARNING (x3)"
- Continued decrease in NG speed
- Decrease in TQ on the failed engine
- Increase in TQ on the engaged engine
- Possible droop in NR

Immediate Actions

Not single engine capable:
- External cargo — Jettison (as required)
- FLT DIR CPLR — Uncoupled
- DAFCS modes — OFF

Single engine capable:
- Establish safe single engine flight condition or land

Urgency to Land
- LAND AS SOON AS POSSIBLE — Not single engine capable
- LAND AS SOON AS PRACTICABLE — Single engine capable

Subsequent Actions
- F Affected engine — Check
- EMER ENG SHUTDOWN — Affected engine

Considerations
- ENGINE RESTART DURING FLIGHT (Card W-8) may be attempted if no visible damage to the engine is present.
- When operating singe engine for extended periods, the second engine must be motored for 10 seconds every 30 minutes.

7

DRAFT

DISTRIBUTION STATEMENT C

W-7

Example FRC Emergency Card

Summary

Products from both Phase 1 and Phase 2 include standardized training packages and implementation guidance to help units develop a foundational understanding of the Emergency Response Method and FRCs across all formations. Task 1070 will be phased into all USAACE flight training, with emphasis first on instructor pilot courses so new graduates are empowered to continue this culture shift throughout the force. Initial Entry Rotary Wing training at Fort Rucker will also quickly implement the updated Task 1070, thereby establishing primacy in the next generation of Army aircrew members.

Through this change, Army Aviation will build thinking crews who analyze emergencies in context with the situation and take measured action. This is a fundamental change to the way Army aircrews approach emergency procedure training and the way that instructors evaluate them. The overarching emergency handling logic in *FADEC-F* teaches aircrews to respond to emergencies in context with the situation and as a team. In all situations, and especially when operating in complex, high-threat environments associated with LSCO, crews must be able place to their aircraft in the most survivable position - whether that means autorotating at best glide speed to the safest landing area or reconfiguring aircraft systems to continue mission. *FADEC-F* enhances the survivability of flight crews by prioritizing crewmember response to the most vital elements first. Additionally, our modernized aircraft only have a few emergency steps that must be performed immediately from memory. Outside of those critical emergencies, pilots will now be able to quickly access specific fault diagnosis and emergency information appropriate for each situation. The FRCs will be more functional and intuitive than the current checklist but a change in culture to embrace the information in the cards is equally important.

Army Aviation has provided over 50 years of unmatched support to the ground force commander around the world in every imaginable Operational Environment. The Emergency Response Methodology - Task 1070 (*FADEC-F*) and Flight Reference Cards - will enhance survivability of Army Aviation for the missions of today and the future in LSCO and beyond. In doing so, Army Aviation will continue to provide the very best support to U.S. and Allied ground forces wherever it is called.

LTC Jamie LaValley is the director of the Directorate of Evaluation and Standardization, at the United States Aviation Center of Excellence, Fort Rucker, AL.

Training Army Aviation for Large Scale Combat Operations

By LTC Tim Jaeger, MAJ Tito Carrion, and MAJ Brian Haas

NTC EAGLE TEAM COURTESY PHOTOS

AH-64s conduct re-arm and refuel operations in preparation for a deliberate attack in the National Training Center.

Aviators prepare their UH-60 for an early morning mission at the National Training Center.

During the last year at the National Training Center (NTC), the Eagle team has continued to focus aviation training for Large Scale Combat Operations (LSCO) in a Decisive Action Training Environment (DATE). Eagle team has continued to build upon successful rotations from each aviation task force and will employ (and share) lessons learned to build a tough and realistic scenario to challenge a combat aviation brigade headquarters along with several of its subordinate battalions in an upcoming rotation.

Large Scale Combat Operations for Aviation

The NTC has committed to facilitate a rotation for a division headquarters and a number of its units, to include an aviation brigade, to shape the deep fight and set the battlefield for its brigade combat teams as they enter the battlespace. The Aviation enterprise continues to evolve and reassess training, operations and Soldier tasks needed to be successful to fight and win our nation's potential next war.

With a complete revamp of the rotational design, the Eagle team has been working hard to develop a scenario that presents the opportunity for the aviation brigade to conduct multiple operations simultaneously with each mission design series (MDS) aircraft, and in turn, present multiple dilemmas to the world-class opposing force at Ft. Irwin, CA.

Communicating with the Force and Outreach

Along with evolving rotational design and integrating aviation in each operation at echelon, the Eagle team continues to be open for requests for information, common lessons learned and best observed tactics, techniques and procedures (TTPs). We have hosted several professional development events via teleconferencing and are always available to schedule a leader professional development event for your organization. Each of our team primaries that lines up with a Warfighting Function (WfF) has produced monthly lessons learned published through the Center for Army Lessons Learned, as well as monthly outreach papers which are shared by Operations Group with each brigade and division level commander in the Army.

In addition to papers, emails and phone calls, we also strive to pull the resident knowledge on the team together for video teleconferencing (something we have all grown exponentially better at over the last two months) with units as they prepare for upcoming rotations and deployments. While we focus these LPDs to the unit's request, we use our own observations and insights from past rotations to link recently updated aviation doctrine to a unit's training plan.

Continuing to Train at Home-station

The most often asked question of Eagle Team is "What do we do at home-station to prepare for a rotation?" We continue to be committed to helping the Aviation community to prepare for their upcoming rotations and deployments. In conjunction with Operations Group, the team produced a portion of a Preparing for LSCO handbook that was sent to Army

leaders and will be published in an upcoming Center for Army Lessons Learned (CALL) handbook. This document describes a way for aviation battalions to build a tiered approach to their home-station training plans. The plan should build on individual training opportunities, integrate aircraft sections and platoons into adjacent unit live fires and culminate in a field training exercise. This stresses and incorporates as much of the unit as possible and gives the staff multiple operations to command and control in an austere environment. An excerpt of the article is highlighted in the box, and if you would like more information, please reach out.

Future Changes

To remain relevant to the force, the Eagle team is in constant contact with Aviation commanders and leaders throughout the Army. We strive to make scenarios relevant to Aviation training through "division directed" missions during the rotation as well as coaching close aviation headquarters integration with the adjacent brigade combat team in the rotation. This allows aviation units to train both developing the BCT's deep fight with attack aviation while enabling close maneuver through integrated attack aviation. Also paramount to this effort is aviation's contribution to the sustainment war fighting function. Well established resupply and constant support through on-call MEDEVAC assets enable the ground commander's operations by quickly moving critical parts and personnel throughout the operational environment.

Also, in the coming rotations, the Army has adjusted how aviation units will deploy to the National Training Center. Directing an attack aviation task force deploys to the NTC and support their organic division BCTs. This decision will allow for better integrated home-station training as well as allow commanders at echelon to train adjacent to units they will be expected to fight with when they arrive at the NTC.

CH-47 crew-chief loads equipment in support of a resupply mission for an armored brigade combat team at the National Training Center.

Excerpt from CALL Upcoming Article

This article is written as a series of 'a-ways' from the perspective of the National Training Center's Eagle Team, using a long-range training plan approach to highlight focus areas and spur ideas and thought within your organization. In the broadest terms, every Aviation leader should ask themselves:

- What training does our immediate organization need to accomplish in a gated training strategy?
- Have I, our organization's leader, provided input to the battalion S3 to include that training in the unit's overall training strategy?

Commanders must additionally ask:

- What does the team of teams need to do in order to be successful?
- Have I been involved to make the right decisions at the correct time? Have I driven training for the organization?
- Have I focused our training to meet our higher commander's intent?

Additionally, incoming rotational units will now conduct an expeditionary Reception Staging Onward movement and Integration. Operating and living out of their tactical assembly area; requiring the unit to plan to go directly into operations, sustainment and security.

Along with the changes to the rotational design for the incoming units, the Eagle Team is going through our own changes. By the end of the calendar year, we plan to be operating our new fleet of Lakotas out of Bike Lake. We have been sending our own pilots to transition courses and, along with the NTC headquarters, planning for the divesture of our OH-58s – some of which have served us well for 14,000+ hours!

As always, the Eagle Team is excited to continue to coach and train our force in the upcoming year. We stand ready to help in any way we can as you prepare for your missions, so please feel free to reach out for anything you may need.

Above the Best in the Desert!

LTC Tim Jaeger is the senior aviation trainer at the National Training Center at Fort Irwin, CA, and the former commander of 4th Bn., 4th CAB at Ft. Carson, CO; MAJ Tito Carrion is the deputy aviation trainer / XO mentor at NTC; and MAJ Brian Haas is the senior aviation operations trainer at the NTC.

An LUH-72 Lakota on the ramp in the Alps.

U.S. ARMY JMRC FALCON TF AMC COURTESY PHOTO

A Year of Firsts: Division Deep Operations Training at the Joint Multinational Readiness Center

By LTC(P) Phil Lamb and LTC Troy Gillett

Over the past year, and in conjunction with multiple enterprise teammates, the Joint Multinational Readiness Center's (JMRC) Falcon Team continues to develop innovative training opportunities in an effort to increase quality, combined arms focused, training repetitions for rotational units. While current combat training centers focus remains on the brigade combat team as the primary training audience, the Falcons have refined exercise design. They carve out a dedicated portion of the rotational construct to now focus purely on Aviation training objectives in the division's deep fight. This includes the addition of combat aviation brigades (CABs) to the training audience from both regionally aligned forces CABs and U.S. Army Europe assigned Aviation units.

This effort more accurately replicates a concept plan informed, near-peer fight, executing large scale ground combat operations. Leveraging the current integrated training environment along with replication of peer and near-pear threats, JMRC's current division deep-fight scenario generates tactical and operational readiness while providing a realistic and challenging opportunities for Aviation formations at multiple echelons.

Long before the brigade combat team uncoils from the tactical assembly area, JMRC leverages the Aviation assets in concert with other enablers above brigade during division shaping operations. The desired end state is to enable success in the brigade combat team fight (a task formerly conducted by DIVCAV force structure). This is accomplished by identifying, reporting, and destroying threats in the division battlespace.

The Process

The targeting process guides the execution of the deep fight along with combat battlefield injects from the Falcon team. Rotational units agree upon specific training objectives aligned with assigned mission essential tasks which could include movement to contact, attacks out of contact, reconnaissance, special operations infiltration, joint forcible entry, and/or air assault operations. The agreement of training objectives formed at the planning conference enables a tailored deep fight scenario built around the Aviation unit's level of training readiness and the commander's focus areas for the rotation.

Each deep fight scenario utilizes the integrated training environment providing a realistic large-scale ground combat operations scenario in the live, virtual, and constructive worlds. Synchronization of these fights is key to the scenario and must not disrupt the tactical scenario especially as the rotation transitions to the normal brigade combat team fights traditionally executed at combat training centers. This meticulously synchronized effort affords the Falcon team the ability to execute live, virtual, and constructive worlds simultaneity and not sequentially. Furthermore, this enhances flexibility to execute purely constructive or virtually if real-world weather or aircraft maintenance constrains training. Although not the preferred method to train aircrews due to integrated training environment constraints of replicat-

ing realistic large scale ground combat operations in *Virtual Battlespace 3* and multiple unified simulation environments, the available integrated training environment systems still provide a great training repetition for command posts operations at echelon.

The JMRC deep-fight scenario in the live, virtual and constructive world enables an actual live unit to attrite enemy forces versus the traditional notional attrition of the enemy in the corps' and division's area of operations. Each scenario is carefully scripted to include JMRC's distinct joint and multinational operating environment. An example mission usually executed during the deep-fight is the execution of Aviation operations in conjunction with Strike Coordination and Reconnaissance (SCAR) as recently conducted with the 1st Infantry Division's Joint Air-Ground Integration Cell. The challenges of interoperability become apparent as Aviation units participating in a division level SCAR coordinate with a multinational division headquarters synchronizing Special Operations Forces reconnaissance efforts, fires, rotary-wing and fixed-wing assets all provided by allies and partner nations. Each rotation provides JMRC with unique and informative interoperability challenges due to changes in task organization and participation of varying multinational partners.

Task Organization/Participation

Task organizations and participation during the deep fight scenario varied throughout the past year due to JMRC's uniqueness of not being a rinse and repeat combat training center. JMRC hosts all three types of brigade combat teams (Infantry, Armored, and Stryker) as well as multinational brigades. U.S. Aviation assets typically come from the 12th CAB or from the regionally aligned forces CAB. Division staff, whether U.S. or multinational, enables the deep fight and provides the staff to staff interaction for the participating Aviation units. CABs can choose to provide a command and control node of varying degrees during the execution of the scenario.

For example, last summer during Saber Junction 19, the 1st Infantry Division provided a main command post operating from Fort Riley and a division tactical command post along with a CAB main command post, both operating out of the Hohenfels Training Area. Additionally, 1st CAB brought not only 2-1 General Support Aviation Battalion as the live Aviation task force, but utilized the training opportunity for 1st Squadron, 6th Cavalry and 3-1 Assault Helicopter Battalion in the virtual and constructive fights as well. The higher-level command commitment during Saber Junction 19 from 1ID enabled the deep-fight and provided a fully functional joint air-ground integration center for the Aviation brigade to interact with for planning and execution of shaping operations.

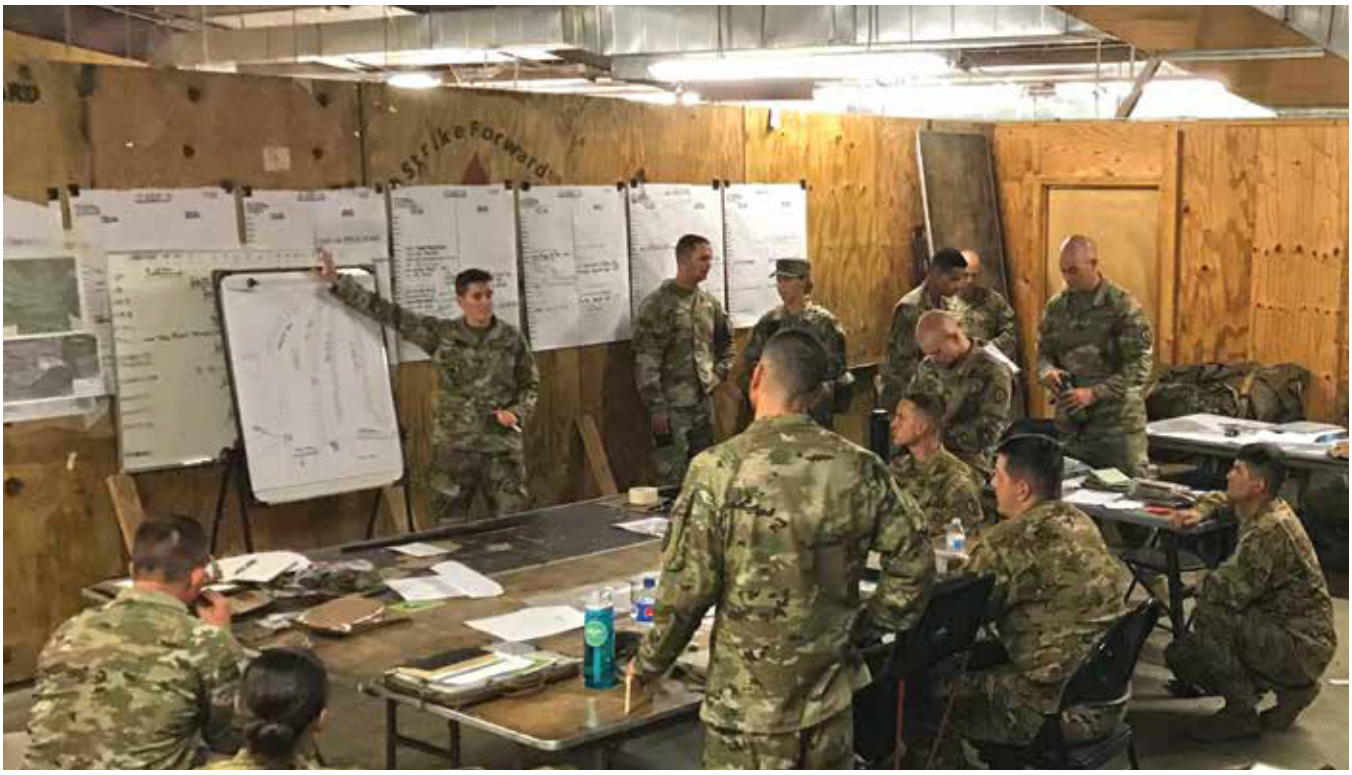
It was also the first time JMRC operated and executed the live, virtual, and constructive fights with a higher command both stateside and at Hohenfels Training Area. Saber Junction 19 rotation provided seven days solely dedicated to 1ID and 1 CAB training objectives through the execution of division shaping operations utilizing the integrated training environment at JMRC. Saber Junction 19 provided the framework for the deep-fight scenario and allowed the Falcon team to scale and mold each exercise to best support the rotational unit based on Aviation assets and higher command participation.

Future Training

The two deep-fight scenario interactions executed this past year afforded the Falcon team the necessary analysis on how to increase the rheostat on rigorous Aviation training operations at JMRC. Guiding the hand over the rheostat is the current Aviation commanding generals training focus areas for both brigades and battalions in preparation for either mission command exercises or combat training center rotations. Whether you're a CAB headquarters or battalion task force, JMRC offers up the ability to tailor rotations focused on air-ground operations and ensuring integration into the combined arms team to include in a multinational environment. Future deploying regionally aligned forces and USAREUR based units are always welcomed to contact the Falcon team as we remain dedicated to increasing lethality at echelon, and across the combined arms teams, through rigorous repetitions at the JMRC.

Multi-divisional strike coordination and reconnaissance (SCAR) exercise with the 1st Infantry Division's Joint Air-Ground Integration Cell.

LTC (P) Lamb is the senior Aviation trainer and LTC Gillett is the deputy at the Joint Multinational Readiness Center (JMRC); both assigned to the Falcon Team in Hohenfels, Germany.



U.S. ARMY JRTC COURTESY PHOTO

Aviation at JRTC – 2020 and Beyond

By LTC John A. Morris III

3rd General Support Aviation Battalion, 25th CAB planning their initial jump, 20 September 2020.

The year 2020 is shaping up as the "year of change" here at the Joint Readiness Training Center (JRTC). Years of hard work are culminating in a modernized way to train and prepare Army Aviation for the challenges of tomorrow. From expanding the complexity of the Aviation Scenario, to fielding new aircraft, and finding ways to maintain readiness in a socially distanced environment, JRTC is trail blazing new processes and procedures to train for America's next fight.

This past year completed the transition from the single engine OH-58C to the LUH-72 Lakota. This process began with the integration of the LUH as an opposing force (OPFOR) aircraft a few years ago and has recently culminated in the transfer of our last LUH into the fleet. 1st Battalion, 5th Aviation Regiment currently flies and maintains 12 LUHs, with Operations Group (OPS GRP) and 1-5 AV pilots working together to support rotational requirements. With the introduction of this new aircraft, JRTC is exploring several infrastructure upgrade options that will increase capabilities and modernize Aviation support.

COVID-19 has forced us to reconsider our training methodology and afforded us time to develop new and inventive ways to continue improving our formations. While training in the current environment is more difficult, it provides us with unlimited opportunities to innovate. The commander of OPS GRP (COG) initiated the "Virtual JRTC" program, providing experienced observer controller trainer (OCT) support to the Army in an "as needed" basis. This program allows individuals and units a direct line to the JRTC knowledge base. So far, well over 100 individuals and units have taken advantage of this opportunity and conducted training with various members of OPS GP. This program will remain in effect after the lifting of COVID-19 restrictions and provide additional training opportunities in the future.

Expansion

In 2008, Fort Polk started a 10-year period of expansion, growing the installation by approximately 42,000 acres and marking the largest land acquisition by the US Army since World War II. This past year JRTC conducted the first rotation that fully utilized this newly acquired land as a training area for both ground and air maneuver units. As aviators, this opens a new menu of rotational options. We now have the

ability to increase the distance between Aviation tactical assembly areas (TAAs) and the supported brigade combat team (BCT) by 20-40 km. This forces the Aviation Task Force to employ their digital systems to communicate and synchronize planning with the supported headquarters at a distance, replicating the conditions in a dynamic and fluid combat environment. Distance-based challenges also make liaison officer (LNO) selection/training and full communication system rehearsals critical to success. The added acreage provides the Aviation Task Force with more options for TAA and forward area refueling point (FARP) selection and occupation throughout the scenario, making every rotation more unique.

Trends

As an OCT, I cannot pass up the opportunity to touch on the topic of trends. While there are many tasks that units continue to struggle with during rotations, Battalion-level planning continues to plague every unit's ability to operate in a complex and dynamic environment. I have been impressed at the level of planning competency at the company level given the experience level of the officers and NCOs at that echelon. However, after every rotation, my peers and I agree that battalion-level staff planning does not reach the minimum level of detail and synchronization required to succeed at JRTC. There appears to be a substantial difference in the amount of organizational energy we spend training our company level planners vs our battalion level planners. Some of this correlates to the time we are able to stabilize planners at echelon.

Personnel turnover at the staff level prevents building a stable planning team, and JRTC OCTs routinely see inexperienced task force planners attempting to plan and synchronize battalion-level missions for the first time. The experienced field grades help but are unable to compensate in a time-constrained, complex, and uncomfortable environment. Repetition matters, but units' home station training iterations usually lack sufficient quality.

Outliers to this observation are units with Air Cavalry Leaders Course graduates. These individuals demonstrate a greater capacity to synchronize actions and produce more cohesive battalion-level products. We observe that officers who graduate this course (and the Cavalry Leaders Course at Fort Benning) are well ahead of their peers in their ability to lead planning teams and produce cohesive, well structured, executable plans. The Air Cavalry Leaders Course is the best planning course Army Aviation has access to, and it is underutilized. Any battalion could solve a large portion of the problems they experience at JRTC by investing in this course to prepare its junior officers to excel in complex planning scenarios.

Over the course of my time here at the Joint Readiness Training Center, I have witnessed substantial evolution in training scenario design. The Combined Training Centers have pushed the boundaries of what is possible and caused us to reevaluate old methods to validate their continued relevance. From talking to our Brigade and Battalion Commanders across the Aviation enterprise, I'm extremely excited about where we are heading and the course the branch has charted. Even with our current set of distractions and restrictions, units and individuals are pioneering new avenues of training and continue to discover better ways to improve the force.

All The Way!

LTC John A. Morris III is the senior aviation trainer (A06) at the Joint Readiness Training Center (JRTC) at Fort Polk, LA.

Enhancing Leader Development with Simulation

By COL John M. Ferrell and Mr. Wade B. Becnel

We know a thing or two, because we've seen a thing or two!

– Farmers Insurance commercial

As the outgoing leadership team at the Directorate of Simulation at Fort Rucker, AL with a combined experience of over 68 years of service that include 35 years of training with simulations, we wanted to provide some parting thoughts on how to best leverage the tools of the trade to get the best outcome for leader development training at home station. For the most part, members of the Aviation Branch are very aware of how to utilize high fidelity individual aircraft simulators to execute our pilot/crew training programs as prescribed in numerous regulations and manuals. Cognizant of the significant training challenges associated with large scale combat operations, we need to adopt similar standards of excellence for leader development opportunities within collective training events that could be enhanced by using synthetic enablers. The intent of this article to provide some ideas on training philosophy as it relates to leader development by highlighting how simulation applied to collective training scenarios can help develop those traits we want to develop in our aviation leaders.

U.S. ARMY PHOTO BY CPT. JANE CAREY

Students of the Air Cavalry Leaders Course conduct mission analysis and wargaming in preparation for their upcoming fight in the collective training simulators within the Aviation Warfighting Simulation Center.

The Commander's Role in Hitting the Training Target

ADP 6-0, Mission Command – Command and Control of Army Forces, and FM 7-0, Train to Win in a Complex World, collectively provide the basic framework of doctrinal guidance that commanders should follow when planning and executing operations; specifically training in this case. Both documents highlight the criticality of the Army Operations Process and the core functions of the commander to understand, visualize, describe, and direct (see figure 1).

Appendix A and B of the January 2020 version of the Army Aviation Training Strategy (AATS) provide an in-depth review of synthetic enablers that are available to enhance unit training efforts. If we are going to replicate the operational and mission variables of large scale combat operations (LSCO) at home station, then we must expand our vision of training beyond standalone live training efforts and incorporate appropriate synthetic tools to expand training fidelity. Enhancing training will require junior leaders who are comfortable with such tools and how to incorporate such tools into training design and management. Unfortunately, over the past 18+ years, the aggressive operational tempo required to meet our Country's expectations has inadvertently created an environment where training was structured by higher headquarters to optimize production of units for their next deployment. While this appeared to be the best decision at that time to support our deployment requirements, we have unintentionally minimized one of the best leader development opportunities possible: developing and conducting training.

To hit the envisioned training readiness target, you must plan and set conditions for success. Commanders need to articulate the training challenge, visualize what the unit needs to accomplish in terms of readiness, describe the readi-

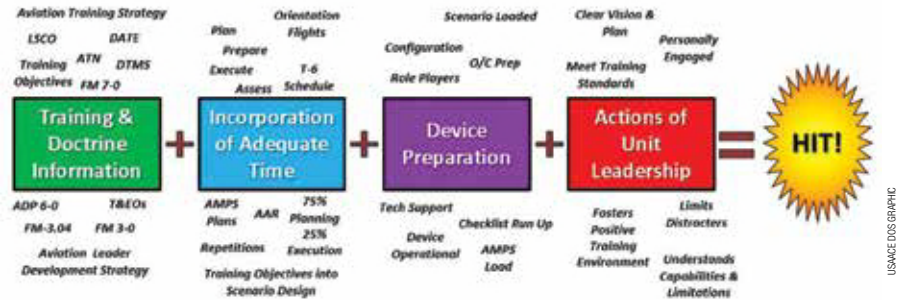


Figure 1. The commander's role in the operational process.

ness end state, direct the unit towards that goal and foster an innovative unit training culture. The simple mental model shown here (figure 2) lays out the linkage between the Commander's role in the operational process tied to the key factors to ensure training is properly planned and executed.

Coaching your junior leaders to use this mental model is a tremendous leader development opportunity for Commanders to exploit. As part of the operational process, Commanders can explain their understanding of the training environment, visualize readiness objectives, describe the desired end state, and direct unit activities towards achieving the training readiness goals. When coached by their senior leaders, junior leaders can incorporate their Commander's guidance and use the model shown to guide training plan development and execution efforts. Ensuring that leader development is integrated into these training events can help shape the experiential learning outcomes to develop intuitive, dynamic and adaptive leaders we need to compete on the modern battlefield.

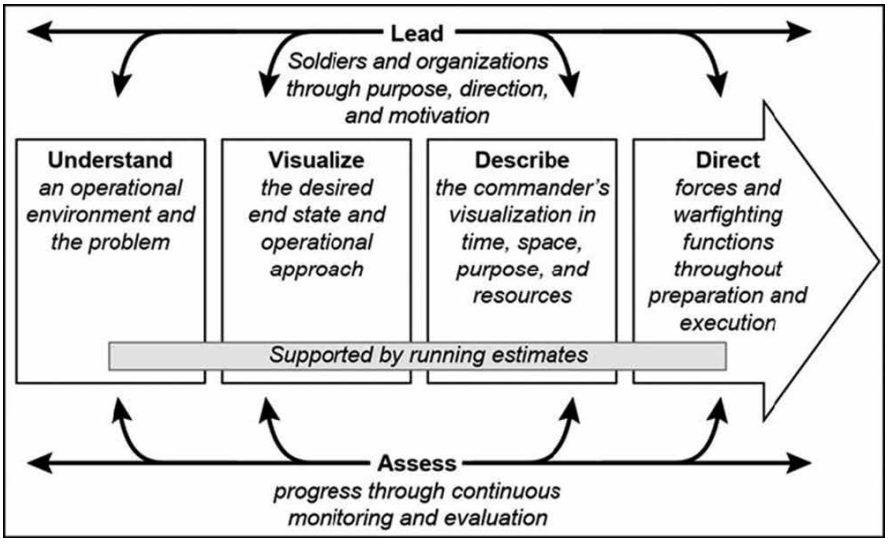


Figure 2. Aviator Training Next Experimental Approach.

Planning to Fail

Good judgment comes from experience, and experience comes from bad judgment.

– Rita Mae Brown

A collective training scenario should incorporate mission command guidance that must be assessed by the training unit's leadership. As the tactical scenario unfolds, the unit's leadership makes tactical decisions that are executed through the leader's tactical synchronization of subordinate crews and weapon platforms to achieve a mission objective. Unlike immediate action battle drills associated with crew level training efforts, collective training will have elements of tactical uncertainty which will stress leaders to execute effective mission command and crews to execute their crew tasks within the leadership's intent and Combined Arms Training Strategy (CATS) standards. The introduction of more capable weapon platforms linked by digital means increases the challenge of achieving collective proficiency. The incorporation and synchronization of multiple digital capabilities, ranging from sensor to weapons, within a tactical environment will place a heavy cognitive load on and between air crews and their leaders.

Success on the modern battlefield, particularly given the more complex operating environment, will require leaders that can expertly visualize the entire battlespace, rapidly adapt to changes and lead formations through the complexity, making order out of chaos. Emphasizing complex exercises that challenge the battle staff through the planning process must be the norm. We must involve leaders at all levels in these events, challenge them with tough scenarios, enhanced with appropriate synthetic enablers, which require depth of thought and decisive leadership to execute.

Because training objectives are so important, our exercises need to be complex and mentally challenging; drive many staff processes simultaneously, and present significant operational challenges. We must avoid the tempting opportunities to "dial it down", referring to the complexity of the scenario or enemy aggressiveness, and embrace volatility, uncertainty, complexity, and ambiguity. We should give the enemy a vote on the synthetic battlefield, thus forcing the training audience to think and adapt. If our current doctrine calls for our forces to provide enemy commanders with multiple dilemmas, we need put our own leaders through the paces to deal with that same problem.

Like pushing our muscles in physical exercise to expand our strength and stamina, e we must also push our mental faculties where units might fail in our simulation training events. As most seasoned leaders will tell you, failure can be a powerful teacher, and it may be better to push units and leaders to fail in a synthetic environment, rather than overwhelm their cognitive capacity during live training or worse yet, in combat. We need to design scenarios that push staffs and leaders to failure, then AAR and repeat. Conduct as many repetitions as necessary until they get it right consistently. Commanders should be allowed to forego some of the training objectives on the fly (e.g., routine battle drill), to ensure that quality training takes place on the tougher scenarios that will mean success or failure in the real fight.

Conclusion

As we rapidly move towards a future of networked weapons, cloud computing, and artificial intelligence, we must continue to place leader development at the front of the line in terms of preparing for the next fight. Developing the right set of leaders to lead our lethal formations will require challenging collective training efforts. The Army has expended considerable resources and will continue to do so with the Army's Synthetic Training Environment (STE), in capable synthetic enablers. It is our job to coach, teach, and mentor junior leaders to be comfortable with synthetic enablers. Knowing how to exploit those tools to expand the breadth and depth of leader experience is necessary to fight and win on the next battlefield.

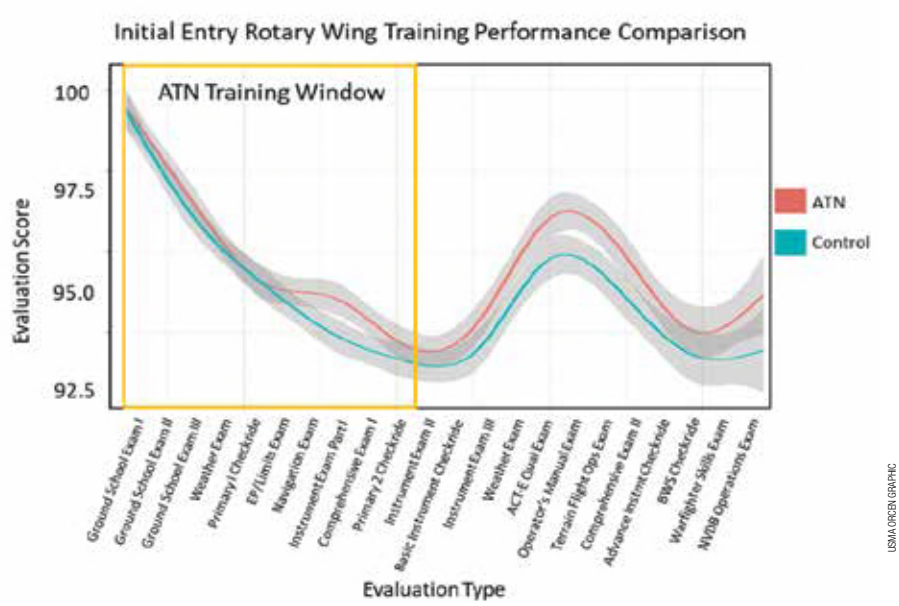
COL John M. Ferrell is the director and Mr. Wade B. Becnel the deputy director of the U.S. Army Aviation Center of Excellence Directorate of Simulation at Fort Rucker, AL.

Aviator Training Next – An Experiment in Virtual Reality

By MAJ Chris McFarland

The U.S. Army Aviation Center of Excellence (USAACE) continually assesses opportunities to enhance current, and future, aviation-training efforts with cutting-edge simulation capabilities. Considering emerging lessons learned from the Air Forces' Pilot Training Next (PTN) fixed-wing training initiative, USAACE began a series of test programs at Fort Rucker, starting back in August 2019, to assess the effectiveness of virtual reality (VR) technology to supplement and enhance Initial Entry Rotary Wing (IERW) training capabilities. Initial feedback from this ongoing study indicates that commercial off the shelf technology (COTS) VR can support valid pilot training for initial entry students.

The overarching goal of the USAACE program, called Aviator Training Next (ATN), seeks to produce more proficient initial entry students by reinforcing basic flight maneuver tasks. ATN design incorporated the basic concept of a flight-training program that increased frequency and repetition using a low-cost COTS virtual trainer, commercial flight training software, and cognitive measurement assessments.



USMA ORCEN GRAPHIC

A comparison between ATN VR students and control group non-VR students' performance.

The Team and Plan

Planning and executing the ATN program required the clear identification of responsibilities across a multifunctional team to facilitate proactive collaboration. The USAACE Directorate of Simulation (DOS) assumed responsibilities as the project management lead and worked directly with Aviation and Missile Center (AvMC) and the contractor Science Applications International Corporation (SAIC) to establish the ATN technical capability. 110th Aviation Brigade (110th AB) and the Directorate of Training and Doctrine (DOTD) led the experimental training design and integration effort. The United States Military Academy (USMA) Operations Research Center (ORCEN) and U.S. Army Aeromedical Research Laboratory (USAARL), working with 110th AB and DOTD, defined appropriate data collection and assessment metrics to enable a comparison between students enrolled in VR training and those in traditional flight training. Using the established metrics, the research team developed an extensive Design of Experiment (DOE) that intended to answer the most important question: Can the ATN device replicate the training tasks, conditions, and standards in accordance with the Aircrew Training Manual (ATM)?

As designed and implemented, ATN incorporated the most current generation of COTS VR capabilities, along with advances in learning science, into the Basic Army Aviator Course (BAAC) portion of the overall IERW program. ATN focused on the performance of students culminating with their second major performance check ride (P2) after approximately day 45 of training. Each ATN flight class had a control group and two VR groups ranging from 10-12 students in size. These two VR groups executed slightly different Course Management Plans (CMPs) in order to determine the most effective mix of VR simulation flight periods with lesser amounts of live flight training to assess proficiency in base tasks against the control group that flew the current BAAC CMP.

Training Phases

For the first phase of BAAC training, ATN classes had to fly the same five tasks to standard that the control group executed: (1) Hovering flight, (2) Visual Meteorological Conditions (VMC) maneuvers, (3) VMC takeoff, (4) VMC landing, and (5) traffic pattern flight. During the second phase of BAAC training, additional flight tasks were introduced but not formally graded due to ongoing technical improvements in the simulator's flight model: (1) Autorotation, (2) Run on landing, and (3) Slope landing. Students also practiced in free flight mode to gain additional skill and comfort in each maneuver as well as learn control input correlation.

The ATN VR training environment captured flight profile expectations and tracked an array of performance data while students flew maneuvers in training. The data collected on student performance, as well as cognitive/physiological measurement and subjective assessments through student surveys, was provided back to the instructor pilots to help inform their overall assessments of VR student progress in terms of proficiency, comprehension, and overall progress of

flight skill development. The research investigated seven Course Management Plans (CMPs) with 296 students (154 non-VR and 142 VR) across six cohorts.

USAARL, co-located at Ft. Rucker, provided government and academic researchers in cognitive science and human factors to collect and analyze data from the program, while ORCEN, serving as the research lead, provided independent research on metrics, design, and assessment of the impact of VR simulations on pilot cognition and overall performance. The intent is to publish a series of formal research reports in peer-reviewed publications.

The initial data collection window culminated May 31st allowing the research team to provide a detailed analysis report to USAACE leadership. This report provides findings and recommendations on the future of ATN. This program will continue to collect data and remain postured to analyze student performance in the future. The research lead, MAJ Clay Woody of ORCEN, provided a preliminary research brief stating, "The findings support the conclusion that the ATN program is a viable training delivery method." Some key findings include that P2 check ride performance between VR classes is not statistically different and that check ride scores for both P1 and P2 showed no statistical difference between VR and non-VR students.

The Outcome

What does this mean? Statistically there is no difference on how ATN students and flight school students using traditional flight school CMPs perform; however, data shows that ATN students continually out-perform their peers in the aircraft check rides as well as in academics beyond the ATN training window. The current data demonstrates promising future training capability using ATN and other VR technologies. With the initial research complete and showing promising results, researchers from United States Military Academy (USMA) Operations Research Center (ORCEN) and US Army Aeromedical Research Laboratory (USAARL) are continuing to examine vast amounts of data to help USAACE leadership shape the next round of experiments.

Continued after action reviews and lessons learned allow for recommendations on how to improve the program. Primary recommendations include a deeper assessment into how many iterations it takes a student to become proficient in each maneuver and looking at further implementation of VR into additional phases of IERW, i.e. instruments. Focused observation and evaluation of performance in the ATN device and live aircraft using a simple metric of training efficiency ratio (TER) will allow USAACE to accomplish the first recommendation. Future research plans and the feasibility of implementing ATN and/or VR into additional phases of IERW to provide additional research data are being refined.

With the Army modernizing capabilities to support warfighting, USAACE will continue to learn, adjust, and innovate better ways to train Aviators. Aviator Training Next has proven itself as a very capable training approach. Continued research will help determine exactly how and where in training it provides the best value.

Above the Best!

MAJ Christopher A. McFarland is the operations officer of the U.S. Army Aviation Center of Excellence Directorate of Simulation at Fort Rucker, AL.

Establishing Data As A Strategic Asset

By LTC Clinton Underwood and MSG Dylan LeMasters

160TH SOAR (ABN) COURTESY PHOTO

LTC Clint Underwood (right) and MSG Dylan LeMasters.

Our failures remain our most powerful agent of change.

The 160th Special Operations Aviation Regiment (Airborne) is intent on creating reliable, accurate and redundant data sources that enable leaders to see the operational environment clearly, no matter what aspects are changed by enemy, influenced by maintenance or the environment.

Since Desert One, the inferno of our birth has taught the 160th SOAR that a visionary modernization mindset must be ingrained in a Night Stalker's DNA. To a Night Stalker, the only way forward is through the mire and sweat that is modernization. Not only is change driven by organizational leadership, but it is driven at the core of organizations – through training Soldiers. The continued success of the Regiment is rooted in the versatility of its Soldiers and their willingness to embrace failure and find solutions that better support ground force objectives. Our simulations are at the cutting edge of that change.

Modernization Efforts

Over the past 12 months, Army Special Operations Aviation Command (ARSOAC) has intentionally empowered key leadership within ARSOAC and subject matter experts from the 160th SOAR to partner with Vanderbilt research labs to ensure the application of new technology is not only properly targeting full spectrum dominance, but is also completely integrated within the NexGen Special Operations Aviation Simulations and Training Systems (NexGen SOAS2). These developments are intended to empower the use of data as a strategic asset (DoD Modernization Strategy, 2019).

Advancements in simulations capabilities have placed a unique combination of systems within the 160th SOAR Mission Rehearsal and Exercise Training system (MRETs) complex. These systems allow intelligence and electronic warfare officers to create full-mission rehearsals for Advance Tactics Trainees (ATT) conducting high fidelity flight training in the 160th SOAR Combat Mission Simulators (CMS). Software such as Modern Air Combat Environment (MACE) is enabling the 160th SOAR staff to fully integrate Advance Tactics Training (ATT) environments and orchestrate electronic warfare training ranges capable of being controlled by organic 160th SOAR electronic warfare experts.

COL Wilkinson, the 160th SOAR commander at the time of this writing, maintains that "it's not enough to own the night anymore. We must own the whole spectrum" in order to be successful against Global Power Competitors (GPC). To that end, the Regiment focused NexGen SOAS2 priorities by bringing training and development solutions directly to tactical application. "The next step is to take ATT training solutions from the simulator to the flight line." (MAJ Sean Merritt, 160th SOAR Operations Officer)

The evolutionary steps in 160th SOAR Simulations will be to place uncompromising standards, advanced tactical contingencies, data collection, NexGen simulation systems, joint full mission rehearsal, lessons learned (by 160th), academic rigor (by Vanderbilt University) and constant testing and evaluation (by SIMO) at the center of our relationships with industry partners to provide open source architecture solutions. Within the controlled environment of the 160th SOAR/SIMO simulations laboratory, a perpetual cycle of ATT allows us to safely fail and evolve at the speed of data collection and adaptive risk practices.

Under LTC Michael Roder's leadership, the ARSOAC's Systems Integration and Management Office (SIMO), the 160th SOAR modernization strategy for data collection and training development continues to be carefully aligned with the Army Future Vertical Lift mission and further refined through academic rigor applied by the Vanderbilt Institute for Software Integrated Systems. This intentional alignment ensures that program research and development goals are achievable and immediately applicable.

Artificial Intelligence/Machine Learning at the Joint Operational Level

The Regiment further looks to cement the unit's advanced operational knowledge of joint contingency execution into the foundation of every pilot's training by focusing on the resourcing and development of the 160th SOAR's Air Mission Commander AI/ML training device. This system will rely on Bayesian theorem AI/ML to create customizable operational scenarios that control the complexity/difficulty and speed of training based on an individual's aptitude to learn the complex decision matrixes that drive the execution of contingencies. Hence, when junior pilots are submerged in the rapid planning and execution of real world, in extremis contingencies, it's not the first time they have been exposed to various joint enablers or the application of Joint/Special Mission Unit capabilities.

Developing Risk Adaptive Procedures and Principals – Data Empowered (RAP-Data)

The 160th SOAR's future simulation plans align NexGen SOAS2 training devices with the Defense Modernization Strategy and resource management guidance, and seek to leverage several aspects of artificial intelligence, machine learning, virtual reality, tactical mission networking and cutting-edge simulation analytics software. Throughout planning, mission execution and follow-on sustainment priorities, the collection and application of RAP-Data is fully intended to empower Rapid Risk Adaptive Practices and Procedures that empower decisions at every level of command and incorporate aircraft performance, tactical survivability and the staff's evaluation of enemy/situational threat data. The 160th Regimental Simulations Office (RSO) will build these training capabilities at local facilities with the goal of integrating mature solutions at the operational level as soon as applicable. In the future, the focused collection of data will empower mission commanders to assess overall risk.

When data collection and visualization is fully matured and staff inputs are able to offer real-time operational relevance into risk adaptive practices, a 'current risk level' will follow the training/operation throughout each phase of the execution. Risk values will then change at the speed at which the data is updated by each staff section. In turn, real-time risk visualization will enable more timely and accurate execution of Joint SOF contingencies based on large scale data from multiple sources.

Secure Networking Systems-Integrated with Simulations

Our 160th SOAR crews are required to orchestrate Joint Special Operations contingencies with unprecedented accuracy and dependability. The current development of tactical mission networking allows crews to share real-time situational awareness of critical mission information. 'Basic' battlefield information is no longer the standard expected to build rapidly developing situational awareness. Our systems are intentionally designed to empower ground force commander decisions and risk mitigation throughout every aspect of the operation.

The RSO will integrate this network structure into their simulators this year, and the devices used during operations will immediately be accessible to pilots and critical staff functions, such as the intelligence and electronic warfare officers, to assist in creating a full spectrum training environment. This level of training fidelity has led special mission units to conduct pre-deployment rehearsals with the 160th SOAR prior to rapid deployments. The combined force conducts situational training exercises within the MRETs complex prior to executing dynamic, in-extremis missions OCONUS. These are rehearsed with current snap shots of actual down range intelligence.

It is clear that enemy systems are evolving, and new regional threats will require the full profile of our expertise. New Night Stalkers are born every day as we remain fully engaged in war. With each training day and mission flown we pledge our hard work and determination to a legacy that reminds us- hard training and selfless service is where the fire forges a Warrior's Ethos. 160th SOAR NexGen SOAS2 simulations and training are designed to provide the birthplace and fire where we forge Night Stalkers capable of perpetual Full Spectrum dominance +/- 30 secs anywhere in the world.

The views presented are those of the authors, and do not necessarily represent the views of DoD or its Components.

LTC Clinton Underwood is the Regimental Simulations Office officer in charge and MSG Dylan LeMasters, the RSO NCOIC for the 160th Special Operations Aviation Regiment (Airborne) located at Ft. Campbell, KY.

CCAD: Safety and Technology in the Time of COVID-19

By Ms. Della Adame

From the eradication of toxic substances in the workplace to the latest digital twin virtual technology, the Corpus Christi Army Depot continues to lead Army Aviation efforts for constructive changes in order to maintain readiness. We are doing this all while protecting our most important resource, our CCAD artisans, and continuing to produce while the Army and the Nation are seeking to eliminate COVID-19 in 2020.

From its inception in 1961, the 15-acre facility previously known as the Army Aeronautical Depot Maintenance Center had one mission: perform helicopter repair and maintenance. A critical asset to the Army's organic industrial base, the now 158-acre Corpus Christi Army Depot (CCAD) is the premier rotary wing repair facility in the world. The Depot has a unique set of capabilities for helicopter and component support that is essential for all Department of Defense branches and foreign militaries.

U.S. ARMY PHOTO BY ERNEY J. MARTINEZ

CCAD aircraft electricians Mike Lee (left) and Jonathan Lopez (right) work on installing the electrical wiring harness on a UH-60V.

CCAD Leads Effort to Reduce Heavy-Metal Exposure

Military aircraft operate in corrosive environments that necessitate aggressive maintenance methods and highly specific products to prevent deterioration. Three primary tasks associated with corrosion control of our aircraft are abrasive blasting, sanding, and primer paint application.

Unfortunately, paints and primers contain heavy metal toxins that require our artisans to use specialized protective equipment to apply and remove paints from aircraft and parts. This year (2020) brought about a significant change at the Depot. For the first time, we applied a new special primer to a Black Hawk helicopter going through our maintenance process. The new "Class N" primer made this helicopter the first one free of the harmful hexavalent chromium (Cr6) substance.

"The effort to transition to a safer maintenance environment is of utmost importance. We assembled a team to lead the Army in eliminating heavy metal toxins from our Depot processes. This effort will take years to complete, but it is important to ensure the safety of our artisans here and for the Soldiers in the field." – Colonel Joseph H. Parker, Commander, CCAD.

Thus far, the Depot successfully removed and reduced Cr6 "Class C" primer from all paint shops and six work centers. Within five months, we removed Cr6 from 174 Army technical publications. The process changed the face of rotary wing aviation coatings in the Army's UH-60 Black Hawks, AH-64 Apaches and CH-47 Chinooks. Airframes, components and a countless number of parts will receive the new primer. Engines and blades can have the new primer, as will the containers or "cans" that house them.

As an added benefit, the effort will result in a cost savings and throughput increase for each aircraft requiring paint operations. Most importantly, the positive impact to the health of CCAD artisans by these changes is immeasurable, now and far into the future.

Digital Twin Virtual Technology

A second major effort here at CCAD is a partnership with academia to develop a digital twin of a UH60. This journey began at CCAD when we sent a Black Hawk helicopter on an 800-mile voyage to Wichita, Kansas. Although the coordination began before COVID-19, the movement and digitalization have all occurred under COVID-restricted movement and operations.

Once in Kansas, researchers at the National Institute of Aviation Research are using digital twin technology, through a partnership with Wichita State University, to create a virtual model of the UH-60L Black Hawk helicopter. Researchers are currently completely disassembling one of the CCAD airframes to capture 3-D scans of all structural parts. Once complete, the team will create a virtual model of the aircraft, aka, its digital twin. This digital twin will help resolve issues in the 40+ year old technology present in the enduring fleet of Black Hawk helicopters and help the Depot manufacture the updated UH60V. The ability to visualize, analyze and predict performance will be an advantage to maintenance crews. The results of this study will positively affect the future of Black Hawk maintenance and sustainment and help the warfighter at the tip of the spear.

"With the acceleration of innovation in technology comes an opportunity for CCAD to leverage those improvements to increases efficiency, precision and quality." He added, "These attributes enable superior performance and reliability of our production, which directly supports our War Fighters and allied partners." – Rod Benson, CCAD Chief Operations Officer.

Mixing Water With Electricity

A third related effort uses new methods to complete standard maintenance better and safer. Hand in hand with the eradication of toxic substances at the Depot, using mechanical tools in the workplace also poses a level of exposure. One tedious task is removing the skin from the aircraft in our disassembly area. Our artisans must remove thousands of rivet fasteners that hold an aircraft together. We do this by hand, one fastener at a time.

Each time we remove a fastener, the process disturbs the paint surrounding the head and stem. This sends microparticles of Cr6 into the air and onto all nearby surfaces.

The introduction of the eDrill, produced by the Perfect Point Corporation of Huntington Beach, California, drastically changed the game for us. Using an electric charge and a grounded water line, this specialized tool removes the pin of the fastener from the head with an arc circuit jolt of electricity. The stem falls away and with a quick tap of a mallet, the rivet head falls off, too, reducing foreign object debris and micro-particles in the work area.

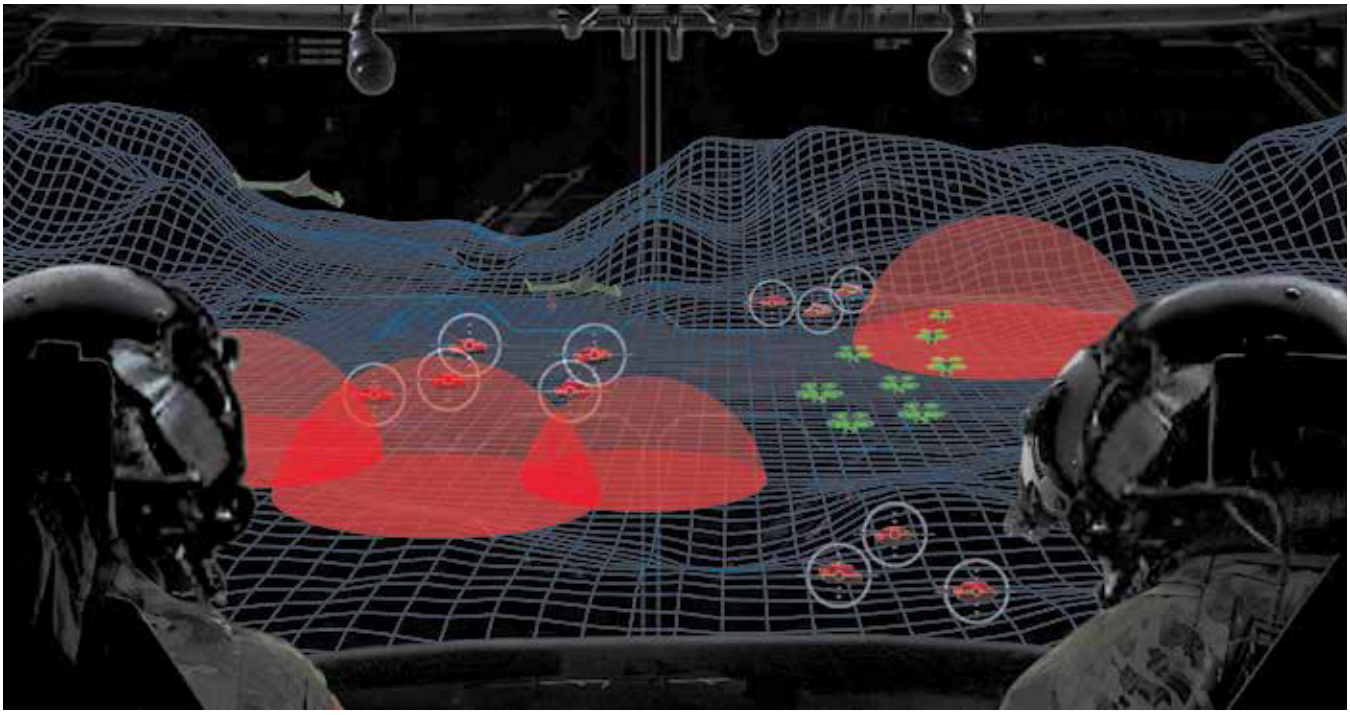
These are but three efforts that highlight the way that the Depot remains agile and adaptive in its effort to support the Army and protect our people. From the workforce to the Warfighter, the ultimate mission is to underwrite the readiness of Army Aviation. CCAD supports this mission by focusing on our number one asset – our people.

Our commitment to our people and the mission matches our commitment to the customer. We support service members and every American by enabling Army Aviation readiness in times of peace, war and pandemics like COVID-19. While COVID-19 influences what is now our "new normal," it does not detract from CCAD's determination to meet mission and support the warfighter. CCAD has and always will, underwrite the Army's aviation maintenance readiness.

Ms. Della Adame is a public affairs specialist at Corpus Christi Army Depot, Corpus Christi, TX.

A Critical Force Multiplier in Complex Operational Environments – The Future Long Range Assault Aircraft

By MAJ Jacqueline Stilwell



U.S. ARMY FVL CFT GRAPHIC

We cannot expect success fighting tomorrow's conflicts with yesterday's weapons or equipment.

Secretary of Defense James N. Mattis, excerpt from the 2018 National Defense Strategy

As our military forces prepare to fight in increasingly complex operational environments, we must provide commanders the fidelity to engage with and destroy near peer adversaries. The nation's superiority in every domain is being contested. "Paramount to our success is the requirement for increased reach combined with improved agility for Army Aviation," said BG Walter T. Rugen, director of the Army's Future Vertical Lift Cross-Functional Team (FVL CFT).

Committed to maintaining vertical lift dominance in Army Aviation, the FVL CFT, U.S. Army Program Executive Office-Aviation, U.S. Army Aviation Center of Excellence, and the broader stakeholder community are developing the Future Long Range Assault Aircraft (FLRAA) for fielding to the Army by 2030.

FLRAA Operational Impact

FLRAA is the next generation lift, assault, and aeromedical evacuation (MEDEVAC) aircraft. Its capabilities include increased reach (speed, range, endurance, and endurance at range), improved sustainability (reliability, availability, and maintainability), and enhanced maneuverability, agility, and survivability.

FLRAA will rapidly exploit windows of opportunity on the battlefield and enable ground forces to effectively execute air assaults, air movements, and MEDEVAC prior to and during the penetration and exploitation of enemy Integrated Air Defense Systems (IADS). Combined with Next Generation Combat Vehicle and Long-Range Precision Fires capabilities, FLRAA will execute deep operational maneuver to neutralize mid-range threats, enabling tactical effects at strategic and operational distances.

A critical force multiplier in complex operational environments, FLRAA expands the 1-hour MEDEVAC coverage. The MEDEVAC interior will feature a modular and reconfigurable design, enabling simultaneous critical en route medical care to multiple patients. FLRAA's reach facilitates direct delivery to a Role 3 medical treatment facility in relative sanctuary, significantly increasing patient survivability.

Advanced sensor systems will expand the operating environment to include degraded visual environments and high threat areas where we will encounter an increased risk of cyber, denial of a portion of the electromagnetic spectrum, directed energy, and chemical, biological, radiological, and nuclear threats.

Multiple levels of supervised autonomy provide the ability to optionally crew aircraft based on mission complexity and tactical risk factors.

Tired of waiting for software upgrades? The Modular Open Systems Approach (MOSA) and resilient architecture will upgrade at the speed of technology, enabling future growth and rapid insertion of technology to address emerging threats.

In their 2019 and 2020 reports, the Congressional Budget Office and Center for Strategic and International Studies (CSIS) highlighted FVL affordability. Through the application of composite materials for lighter, yet stronger airframes, and advanced manufacturing techniques, FLRAA will have increased system efficiency, reliability, and sustainability with a reduction in production time and life cycle cost. Predictive maintenance and data analytics will further facilitate a reduced sustainment footprint while conducting sustained operations in austere environments.

Synchronized with all of the Army Futures Command CFT signature modernization efforts, FLRAA will interoperate across all platforms and networks. FLRAA will provide leap-ahead situational awareness to the air assault force through the use of their Integrated Visual Augmentation System onboard.

FLRAA will have Air Launched Effects (ALE) capability, enhancing survivability and lethality of both aviation and ground forces. ALE will provide situational awareness, timely updates on enemy positions and assets, and conduct lethal and non-lethal penetration and neutralization of long-range threats and IADS.

FVL rotorcraft will be survivable primarily through our revolutionary rotorcraft advanced configurations, use of unmanned systems within the kill chain, and advanced aircraft survivability to the point where the enemy cannot continue to turn inside of us with superior technology and capability.

The FLRAA team continues to gain solid feedback from aviation and infantry Soldier touchpoints and analysis from the U.S. Army Aeromedical Research Laboratory on human performance optimization and system integration to ensure our effectiveness in future operational environments.

Deepening Interoperability

FLRAA will be fielded across all Army components as it was designated as an Army-led program with multi-service interest. Interest in the FVL program has grown across the joint community, not only with U.S. Special Operations Command and United States Marine Corps, but also recent interest from the United States Coast Guard.

Multiple international partners are expressing interest in participation and potential partnering in the FVL program to modernize their fleets. Collaboration will not only deepen interoperability, but will foster shared research and development, emerging technologies, operating concepts, and capabilities.

Similar to the Black Hawk program, FLRAA will be adoptable by other services and U.S. Government agencies, as well as interoperable and exportable to foreign partners. Strengthening interoperability across the joint forces and international partners is crucial to continuing our asymmetric strategic advantage on the battlefield.

Why Now?

We are at an inflection point with a healthy current fleet and must modernize now to preserve the future. We, quite literally, cannot afford not to. The Secretary of the Army, Honorable Ryan D. McCarthy states that our adversaries "are investing billions to rapidly modernize their armies, increasing their weapon systems' lethality and thus eroding US overmatch. Either you have a sense of urgency today, or a sense of regret tomorrow." FLRAA and other FVL signature efforts bring back that advantage for the Aviation Enterprise.

As the 2018 National Defense Strategy (NDS) describes, we must be able to operate from relative sanctuary in a dispersed manner and deliver tactical effects from strategic and operational distances. We must have the agility and reach to rapidly aggregate forces, penetrate, and dis-integrate the enemy at the time of our choosing to create chaos in the enemy's decision cycle.

Assessing the emerging capabilities of our peer and near-peer threats, especially in the multi-domain environment, it is evident that capability gaps exist and will continue to exist in Army Aviation without the addition of FVL signature efforts.

Army Aviation's beloved current fleet has performed tremendously over the last four-plus decades, keeping up with constant deployment demands while flying in support of homeland defense and training requirements. Designed and built over 50 years ago, the current fleet will continue to be in high demand for the coming decades, but falls short of executing operations in line with the NDS. "Given their operational limitations in high-threat environments, the current fleets are approaching their technological limits" reports CSIS, and will need to integrate with FVL aircraft to win in the multi-domain environment.

Over the Aviation Branch's history, the fleet was incrementally upgraded with advancing technologies, but has become slower and heavier. The H-60Ms, bought in the 2000s, are due for recapitalization in the 2030s and the nation cannot afford to spend approximately $1 billion annually on the same outdated technology. We must modernize with new aircraft and invest in leap-ahead and advancing technology.

In concert with other FVL signature efforts, the FLRAA clean sheet design will break us out of this costly incremental upgrade cycle.

Way Forward

The FLRAA team proudly continues collaboration efforts across the stakeholder community and industry to inform and refine FLRAA requirements that will lead to the FY21 Request for Proposal for the FLRAA Program of Record.

The time for FLRAA has come. Our Army needs Army Aviation to provide a winning edge on the future battlefield through air maneuver. FLRAA will not only provide that maneuver capability, but will mitigate current fleet capability gaps, serve as an integral and crucial component of the combined arms team, and be fully integrated within the joint operational framework to find, fix, and finish our pacing threats. Because…"Winning Matters!" – GEN James C. McConville, Chief of Staff of the Army.

"Forge the Future!"

MAJ Jacqueline Stilwell is the Future Long Range Assault Aircraft Integration Lead for the Future Vertical Lift Cross-Functional Team at Redstone Arsenal, AL.

Pennsylvania National Guard Introduces
The Military Family Education Program Act of 2019

By CW4 Teresa R. Watkins

Pennsylvania National Guard (PANG) will pay for your family's college education!

PENNSYLVANIA NATIONAL GUARD GRAPHICS

The Pennsylvania National Guard is proud to announce, the first-in-the-nation, Military Family Education Program (MFEP). The spouses and children make many sacrifices in support of their loved ones in uniform. Be it lengthy deployment, drill weekend, or a last minute call to support a natural disaster or emergency; our servicemen and women need the support of their family, so they can focus on protecting the homeland. The MFEP is a small token of appreciation from the PANG to say **thank you** to our military families for their personal sacrifice. Pennsylvania's Governor, Adjutant General and the General Assembly partnered to recognize and support the families of Pennsylvania National Guard service members and increase retention. On 1 July 2019, Pennsylvania's Governor signed into law, House Bill 1324, authorizing the MFEP and expanded our current Education Assistance Program.

What is Military Family Education Program (MFEP)?

The MFEP provides an education assistance grant for dependents, earned by airmen and Soldiers for their commitment and service to the Pennsylvania National Guard. This grant may be used for a degree granting curriculum, certificate program or programs required for entrance into a specific career. It must be used at Pennsylvania institutions of higher learning, approved by Pennsylvania Higher Education Assistance Agency. This benefit provides for 120 semester hours which is approximately 5 years of schooling. The service member may assign the entire benefit to one dependent or a portion to more than one dependent.

What are the eligibility requirements for MFEP?

MFEP is earned when the PANG member commits to serve for an additional six years beyond their first service obligation in the PANG. Enlisted airmen and Soldiers will reenlist for this program; for officers/warrant officers it is a service obligation. Pennsylvania Guard members may extend their current service obligation to reenlist for MFEP after completion of their initial service obligation. The M-Day, Technician and AGR T-32/T-10 officers, warrant officers and enlisted may enroll 1 July 2020 and the grant will be available for use by family members beginning the 2020/2021 Academic Year.

Who are considered eligible dependents?

Dependents who meet the criteria IAW Defense Enrollment Eligibility Reporting System. (DEERS).

Can a PA Guard member enroll, extend or reenlist for MFEP without having dependents at this time?

Yes, the PA Guard member may earn the MFEP benefit for their future dependents. If a PA Guard member completes both their initial and subsequent six-year service obligation to the PA Guard, and is later separated under honorable conditions, the member will be issued a certificate of eligibility for use within the guidelines of the program. A PA Guard member can change dependent(s) assigned to receive the MFEP benefit while serving as a PA Guard member, as well as after separation.

How long are dependents eligible to use MFEP?

A spouse may use this assigned MFEP benefit up to six years after the member's separation, children must use the assigned MFEP benefit before reaching 26 years of age. If both parents are PA Guard members that enrolled in MFEP and they both assigned their benefits to the same dependent, that dependent's MFEP benefit is not capped at five years, that dependent may receive 10 years of benefits. Through this grant, military spouses and/or their children have a path forward for their education. With this one-of-a-kind program, we will secure an educational future for families; this is one way to show our appreciation to those who serve and sacrifice while giving them another good reason to re-enlist.

Again, let Pennsylvania National Guard pay for your family's college education!

CW4 Teresa R. Watkins is the assistant secretary of the general staff for the Pennsylvania Army National Guard.

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The Korean War – Part I: Gridlock

By Mark Albertson

"Police action? It was a G… d… war!
And the shooting stopped with a ceasefire, not a peace treaty.
So technically we are still at war.
My war is America's longest running war, not Afghanistan."

U.S. Army infantryman, Peter Berillo

Editor's Note: This is the first in a series of three articles commemorating the 70th anniversary of the Korean War.

Unfortunately, the Korean War is lightly regarded by a great many Americans… except, perhaps, by those who had fought there.

June 25, 2020 marked the 70th anniversary of this clash of arms between East and West; Communism versus Capitalism; and, the rise of Revolutionary Nationalism[1] attempting to fill the void left by the receding White, Christian colonial powers of Europe; collapse of the Greater East Asia Co-Prosperity Sphere[2] and defeat of the Axis Powers; all in the face of the emerging global competition between the two victors of 1945, the United States and the Soviet Union.

Korea, for the first half of the 20th century, was an oppressed country. During the 1904-1905 Russo-Japanese War, the upstart Japanese evicted Czarist Russian forces from the contested peninsula and in 1910 absorbed same into the Japanese Empire. One of the major selling points of Tokyo's program of "liberation" was that of ridding Asia of the White Christian colonial powers – Asia for Asians. Of course, Japan's neighbors, in the end, would be trading one overseer for another.[3]

WIKIPEDIA COMMONS PHOTO

Syngman Rhee (right), President of South Korea, with General Douglas MacArthur.

After September 2, 1945, Korea emerged from the defeat of the Japanese Empire. But since the peninsula points like a knife blade at the heart of Japan, its strategic significance was not lost upon the United States and the Soviet Union.[4] Syngman Rhee, an authoritarian anti-Communist along the lines of a Chiang Kai-shek, established his regime in Seoul. A Soviet satrap was set up in Pyongyang with Kim Il Sung, an ardent nationalist and Communist. And so tragically for the Koreans, their country would be occupied and divided at the 38th parallel by the United States and the Soviet Union.

Both Washington and Moscow reined in their clients, whose ambitions were for the unification of the peninsula under one or the other's banner. The Truman Administration under armed the South Korean armed forces, correctly distrusting Rhee, as it was not willing to risk a general war in Asia. Stalin, on the other hand, liberally supplied Pyongyang. The North Korean People's Army enjoyed, compared to its South Korean counterpart, much combat experience. Thousands of the 150,000-man NKPA had fought in China in World War II against the Japanese and in the Chinese Civil War with Mao's Eighth Route Army in the defeat of the American-backed Nationalist forces of Chiang Kai-shek.[5]

The Korean civil war opened spectacularly on June 25, 1950. In Blitzkrieg-like fashion, over 90,000 troops of the North Korean People's Army, backed by upwards of 150 Soviet tanks, crashed over the 38th parallel. However, strongman Kim Il Sung's bid to unify the peninsula failed. In one of the decisive actions of the war, Kim's army failed to liquidate the Pusan abscess in the south; which, together with General Douglas MacArthur's

WIKIPEDIA COMMONS PHOTO

North Korean leader Kim Il-Sung (center), 1946 party meeting.

Addendum: There is the larger perspective to the Korean War.

November 25-26, 1950 is one of the most decisive days in the post-1945 era of American history. For the massive Chinese intervention irrevocably altered the strategic and tactical approach of the U.S. armed forces.

In World War II, the basic premise of U.S. military strategy was to destroy the Axis armies in field to achieve an unconditional surrender. The strategy of total victory was pursued in 1950 in Korea. For following the amphibious bold stroke at Inchon on September 15, 1950, tilted the momentum in favor of the Republic of Korea and its UN allies.

As has happened many times in history, an internecine conflict or civil war, attracts outside powers with strategic agendas that range beyond the parochial limitations of the original conflict. UN forces, including Republic of Korea troops crossed the 38th parallel heading north. With the North Korean People's Army reeling, now was the time to unite the Korean peninsula under Syngman Rhee's banner and bring the Korean civil war to a successful conclusion. But as the advance drew nearer the Chinese border, the course of the conflict was suddenly changed in the most profound way.

On November 25-26, 1950, hordes of "volunteers" from the Democratic People's Republic of China slammed into the United Nation's forces closing on the frozen Yalu River. UN forces were thrown back, retreating pell-mell over ground recently occupied. Seoul once again fell to the Communists. A UN counterattack checked the advance of the Chinese steamroller and promptly threw it into reverse.

Seoul changed hands for the fourth and final time before the seesaw phase of the conflict gave way to trench warfare. Both sides became locked in a bitterly contested stalemate, reminiscent of the Western Front in World War I; a costly morass characterized by Communist flesh and blood battering itself senseless against superior equipment and technology of the UN forces. This new war, bereft of movement, provided that habitat for that instrument of mobility that would showcase its promise for the future… the helicopter.

WIKIPEDIA COMMONS / HISTORY DEPARTMENT, U.S. MILITARY ACADEMY

WIKIPEDIA COMMONS PHOTO

Panmunjom, where the ceasefire talks were conducted. Located at Kaesong, North Hwang Province, North Korea.

operations at Inchon, the policy was to end the Korean civil war and unite the peninsula under Rhee.

The Chinese intervention altered the objective of total victory, to that of maintaining the prewar status quo, North Korea and South Korea. In turn, Vietnam got to be a repeat. The perceived threat of Chinese intervention helped to persuade Washington to decide on a limited war (minus nukes) to keep China and/or the Soviet Union out of Vietnam. The policy of limited victory was seen again in 1990-1991 with the Persian Gulf War and again in Afghanistan.

Endnotes

1 - Examples are the Pan-Arab Movement in the Middle East; the Vietminh in North Vietnam; nationalist movements on the African continent.

2 - For the uninitiated, the Greater East Asia Co-Prosperity Sphere was that propagandistic moniker peddled by Tokyo to paper over the reality, the Japanese Empire.

3 - "Between 1905-1910, uprisings and rebellions erupted frequently throughout Korea. Japan crushed them with efficient savagery. The Koreans had few weapons, and Japan was a powerful and merciless nation. According to Japanese statistics, 14,566 Korean 'rebels' were killed between July 1907 and December 1908. By 1910, when Japan formally annexed Korea, little open resistance remained in the land…" See page 4, Chapter 1, "Korea, Case History of a Pawn," United States Army in the Korean War: Policy and Direction: The First Year, by James F. Schnabel.

4 - Unlike the four-nation occupation of prostrate Germany, Washington made sure that the United States would be the sole occupier of Japan. This, of course, would ensure American dominance of the Home Islands and therefore, dictate the agenda. Or as Stalin observed, "…whoever occupies a territory also imposes on it his own social system. Everyone imposes his own social system as far as his army can reach… It cannot be otherwise." See page 114, Part II, "Doubts," Conversations With Stalin, by Milovan Djilas.

5 - Bruce Cumings noted, "Large numbers of battle-tested troops filtered back into Korea in August-September 1949, however, and again in early 1950, as the Chinese fighting ended, about 50,000 in toto (Zhang Shu-guang puts the number of Koreans fighting with the Chinese Communists against the Japanese in northwest China at 90,000, and the number that 5returned to Korea at 28,000 before September 1949—and tens of thousands more returned in early 1950). The crack 6th Division, which acquitted itself very well in the early Korean War fighting, was wholly made up of China veterans and led by Gen. Pang Ho-san, who had gotten his original military training at the famed Whampoa Institute in the 1920s." See pages 143 and 144, Chapter Five, "38 degrees of Separation: A Forgotten Occupation," The Korean War, by Bruce Cumings.

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

Thank You to Our Scholarship Fund Donors

AAAA recognizes the generosity of the following individuals, chapters and organizations that have donated to the Scholarship Foundation, Inc. from July 2019 through June 2020. The list includes donations received for all scholarships, as well as the General Fund which provides funding to enable the chapter, corporate, heritage and individual matching fund programs as well as national grants. Every penny donated to the Scholarship Foundation goes directly towards scholarships as a result of the Army Aviation Association of America subsidizing all administrative costs (minus investment brokerage fees).

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IHO – In Honor Of

AAAA Chapter Affairs

By LTC (Ret.) Jan Drabczuk

I greatly appreciate the support from COL (Ret.) David Brostrom, the Aloha Chapter President and to MAJ Mathew Perry, Chapter Secretary, for sharing this information with our readers.

The Aloha Chapter

The Aloha Chapter represents the Hawaiian Islands and includes all AAAA members and units of U.S. Army Hawaii (USARHAW) as well as retired Hawaiian residents and their families.

U.S. ARMY PHOTO BY CPT KEITH KRAKER

U.S. Army AH-64 Apache attack helicopter assigned to 2-6 Cavalry Regiment, 25th Combat Aviation Brigade sits on the flight line while a shooting star falls in the sky on FARP 17, Pōhakuloa Training Area, Island of Hawaii, Hawaii, April 13, 2019.

Additionally, all Hawaiian Army National Guard and Army Reserves members within the state fall under the Aloha Chapter. Though our members primarily support operations across the Pacific, members also deploy Aviation support worldwide. The Chapter stays focused providing support to members and building on the heritage of Army Aviation in Hawaii.

Pacific Pathways: The Chapter's reach in the Pacific is tied directly to the USARHAW Pacific Pathways mission. The 25th Combat Aviation Brigade's operations extend through the entire Pacific Rim. This year, Chapter members conducted Joint and Combined Operations Cobra Gold and Hanuman Guardian with forces across the U.S. Military and the Royal Thai Army.

Leadership Change: The Aloha Chapter said farewell to Senior Vice President COL David Zimmerman as he transitioned to take command of 65th Medical Brigade in South Korea. COL R.J. Garcia, 25th Combat Aviation Brigade Commander, assumed the Senior VP position and they look forward to continuing the tradition of excellence in their Chapter Leadership.

Awards: Throughout the year, they had the honor of recognizing the actions of Soldiers, spouses, and units within the Aloha community. They awarded one OSM Silver, seventeen OSM Bronze, seven OSM Knights, and seven Lady of Loreto awards. E Company/2-25 Assault Helicopter Battalion was recognized as AAAA Logistics Support Unit of the Year. E Company (Roadrunners) supported operations during Pacific Pathways, deployed to the Joint Readiness Training Center, and supported operations on both the Big Island of Hawaii and Oahu, all while improving operational readiness to well above DA standard.

Scholarships: They raised $4,000 for matching scholarships and awarded a $1,000 Top Chapter Scholarship. Mary A. Turpin, Daughter of MAJ Michael Turpin of Wahiawa, HI, received $2,000 for one year at Trevecca Nazarene University. Bryan D. Lee, former commander of A Company/2-25 Assault Helicopter Battalion, received $2,000 for one year at Harvard Business School. The AAAA Top Chapter Scholarship was awarded to Emily Atkinson, daughter of CW5 Shayne Atkinson, to attend LeMoyne College.

Membership: They saw a high mark of 234 members and remain steady as a Master Chapter. Soldiers deployed to Pacific Pathways received the opportunity to access free membership and look forward to a return to monthly meetings on Oahu. The Third Thirsty Thursday members meetings held at the Hangar Bowling Alley on Wheeler Army Airfield bring new members, connect Soldiers with one another and opportunities provided by their Chapter and AAAA.

Activities: The semiannual Golf Scramble was held at beautiful Turtle Bay Resort on June 28th, 2019. The tournament raised $1,500 for scholarships with an incredible turn out from their members and local community support. Members and families across U.S. Army Hawaii including the 25th Infantry Division Commander and other distinguished guests had the opportunity to run on the air strip during a beautiful Hawaii morning for the Turkey Trot 5K, before chowing down on Thanksgiving meals. The event raised $1,600 for Chapter scholarships and continues to be the highlight of the year showcasing Army Aviation in Hawaii.

Dedication: The Aloha Chapter has been recognized back to back in both 2018 and 2019 as the AAAA Senior Chapter of the Year. With their member-

AAAA NEWS - ORDER OF ST. MICHAEL and OUR LADY OF LORETO INDUCTEES

Air Assault Chapter

CHAPTER COURTESY PHOTO

COL Matthew R. Weinshel, outgoing commander of 101st Combat Aviation Brigade, is inducted into the Silver Honorable Order of St. Michael just prior to his change of command by Air Assault Chapter president, COL (Ret.) Hawk Ruth, and 101st Airborne Division (Air Assault) commanding general, MG Brian Winski, at the Division Parade Field, Ft. Campbell, KY May 29, 2020.

CHAPTER COURTESY PHOTO

COL Scott Wilkinson (right), outgoing commander of 160th Special Operations Aviation Regiment (Airborne), the Night Stalkers, is inducted into the Silver Honorable Order of St. Michael by BG Allan Pepin, commanding general of U.S. Army Special Operations Aviation Command, during a ceremony on June 12, 2020. Wilkinson will next serve as the chief of staff for U.S. Army Special Operations Command at Ft. Bragg, NC.

CHAPTER COURTESY PHOTO

CW5 Matthew L. Brown, command chief warrant officer of the 160th Special Operations Aviation Regiment (Airborne), is inducted into the Silver Honorable Order of St. Michael by regiment commanding officer COL Scott Wilkinson during a June 10, 2020 ceremony at Ft. Campbell, KY. Brown was recognized for more than 30 years of dedicated service to Army Aviation.

Griffin Chapter

COL John Broam, commander of 12th Combat Aviation Brigade and Griffin Chapter president, inducted 6 Soldiers assigned to the Brigade Headquarters and Headquarters Company into the Bronze Honorable Order of St. Michael during an award ceremony at Katterbach Kaserne Airfield, Germany, June 12, 2020. Each was recognized for his dedication, hard work and excellence within the Army Aviation community.

ALL U.S. ARMY PHOTOS BY SGT ALLEEA OLIVER

MAJ Jonathan Romanesk

CW4 Jesse Martin

CW3 Daniel Reinhardt

CW3 Christopher Thorn

SFC Sherman Hill

SFC James Young

Iron Mike Chapter

CHAPTER PHOTO BY 1LT AUSTIN LACHANCE

On June 12, 2020, **MG John B. Richardson IV,** outgoing U.S. Army Forces Command G3, was inducted as a Knight of the Honorable Order of St. Michael by COL Mark Johnson, FORSCOM Director of Aviation, for his contributions to Army Aviation during his tenure as the FORSCOM G3.

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ship growth they are now designated as a Master AAAA Chapter. Their long list of accomplishments makes them one of our best AAAA Chapters. We expect great things from them in the years to come.

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 can be reached at *jan.drabczuk@quad-a.org*.

LTC (Ret.) Jan S. Drabczuk
AAAA VP for Chapter Affairs

Want to change your AAAA Chapter Affiliation ?
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AAAA Membership Update

By CW4 Becki Chambers

The Membership Corner

Allow me to introduce SSG (Ret.) David Goodhue. He is the Mount Rainer Chapter VP of Enlisted Affairs and producer of their Quarterly Newsletter.

SSG Goodhue

PERSONAL PHOTO

David first joined the Army in 1993. Going back as far as the General Custer days the men on the Goodhue side had all served, two Army and two Navy until he broke the tie by joining the Army. With all that history growing up, he never considered joining the military. It wasn't until an Army recruiter called and asked if he would like to have a job in Aviation that made him think about joining. The lure of Aviation, being able to pay for college on his own, and the possibility of seeing other parts of the world had him signing up mid-way through his senior year of high school.

David had an amazing military career, serving a total of 24 years of combined service on Active Duty and in the Washington National Guard. His long list of accomplishments is quite impressive. When I asked for some of the highlights of his career, he responded with: CALFEX 95-1 Ft Sill OK; Multiple Beirut Air Bridge rotations; Crewed for- SEC State Madeleine Albright, SEC Def's Cohen and Jim Mattis; III Corps CG Laporte's Crew chief; IFOR/SFOR Bosnia; Katrina; BN SI Minnesota, Washington, and Hawaii Iraq 2007-2008; BN SI Kuwait Washington NG 2011-2012; Med Det Squad Leader Afghanistan 2013-2014; Seahawks and Mariners flyovers; Established hoist program for UH-60 WAARNG; multiple wildfire response deployments; Being able to instruct and advise Thai Army CE's on flight techniques and crew coordination; Held title of Standardization Instructor for 10 years and genuinely loved teaching and giving the best head start I possibly could to those crew members I had the fortune of instructing.

After his retirement, he took a couple of months off before he was hired by Boeing. He was hired for test and evaluation on the KC-46, but before getting his tanker clearance he started working for the chase airplane section. He is currently one of two crew chiefs on Boeing's T-33 Shooting Stars. Their mission sets include photo chase, experimental electronic pod flights, and other proprietary missions. Also, in the hanger are two T38's, two Cessna Grand Caravans, one Cessna 206, and a Pilatus PC-12. He is also the Boeing Veterans Engagement Team leader for North Boeing Field. David really loves talking to the other veterans at Boeing and learning their journeys.

David has two "awesome kiddos." One is dealing with graduating high school in this year of COVID, and the other will be attending Central Washington University this fall.

He said he has too many mentors to thank individually, but they do all have one commonality, they were "people first" leaders. "They all got it that if you take care of your people, if you take the time to know them, you fight for them, you recognize them for the good and address the bad, that they will have the internal motivation to accomplish any mission set forth in front of them."

When asked about the importance of joining a professional organization like Quad A, he replied: "Organizations like Quad A provide a literal link across our community, that tie not only Aviation between say Ft Lewis and Ft Bragg but also Regular Army, Special Operations, Reserves, Guard and civilian. We are always stronger when experiences and ideas can freely flow between every member of our Aviation family. Without being a part of an organization like Quad A not only would I be missing out on the latest in my community but I wouldn't have the outlet to continue to share the experiences I have attained over the years!"

CW4 Becki Chambers
AAAA Vice President for Membership

New AAAA Lifetime Members

Aviation Center Chapter
WO1 Bradley Jaillet

New AAAA Members

Air Assault Chapter
PV2 Chucho Leo Conner
CPT Tyler Meadows
CW2 Jason Williams
Aloha Chapter
CPT Chance Yost
Aviation Center Chapter
Deborah Duggan
WO1 Bradley Jaillet
Badger Chapter
Dave Andrich
PV2 Riley Alexander Combs
Black Knights Chapter
2LT William D. Addy
CDT Kelly N. Azinge
CDT Seth T. Barbrow
CDT Sylvan G. Blankenship
CDT Ansley M. Davenport
CDT Dorothy Dennis
CDT Christian B. Flege
CDT Ryan H. French
CDT Adam C. Hug
CDT Jacob S. Kelley
CDT Robert S. Moore
CDT Jacob Murdock
CDT Donia M. Nichols
CDT Josiah B. Park
CDT Drew M. Polczynski
CDT Joshua Rhee
CDT Brody D. Rocque
CDT Georgia E. Simon
CDT Matthew W. Ward
CDT Haley M. Watson
CDT Timothy Widner
CDT Thomas D. Williams
CDT Paul T. Williamson
Bluegrass Chapter
1LT Gary Eicke
PFC Brandon Lopesilvero
Central Florida Chapter
Tony Attalas
Taylor Brooke
Rob Caldwell
PV2 Anthony Shea Merrill
LCDR Brian Miller
Robert Ramirez
PFC Connor John Smith
Paul Thierry
John Ulrich
Colonial Virginia Chapter
SSG Jacob Grove
SSG Jason Mainor
1SG Zachary Ogilby
Delaware Valley Chapter
PV2 Kiannah Laoto
Desert Oasis Chapter
SFC Nicholas Woods
Flint Hills Chapter
CW2 Andrew Carrier
CPT Albien Eres
CW3 Jared Espenschied
Gold Standard Chapter
PV2 Seth Jason Dewboys
PVT Jamie Salinas-Conchas
Greater Atlanta Chapter
PV2 Jose Alberto Pineda Chavez
Griffin Chapter
CW2 Matthew Marshall
Grizzly Chapter
PFC Lacie Thompson
Idaho Snake River Chapter
Miss Hannah Hartway
Iron Mike Chapter
SSG Reginald Bohannon
1SG Roger Green
CPT Kellen LeMasters
PFC Eric Melgarejo-Hurtado
PV2 Jacob Marshall Pruitt
Jack H. Dibrell/Alamo Chapter
CW2 Mehdi Javanmardi
Ed Lopez
Jimmy Doolittle Chapter
CW2 William Carlson
SGT Katie Enos
SGT Jonathan Harling
PV2 Gavin Herr
Keystone Chapter
CW5 Robert Hall
Land of Lincoln Chapter
PV2 Paul Kingsbury
Lindbergh Chapter
Matthew Johnston
Lonestar Chapter
PFC Paxton Wells
Magnolia Chapter
PFC Justin Drew Burton
PFC Justin Vaughn
Mid-Atlantic Chapter
PV2 Justin Matthew Dillon
Minuteman Chapter
Robert Galligani
Nicole Riley
1LT Nicholas Wilde
Morning Calm Chapter
MAJ Andrew Wilson
Mount Rainier Chapter
CW5 Tristen R. Kopah
SSG Austin E. Leach
SPC Nicole L. Ridley
PFC Dawson Sigler
CW5 Norman L. Westerfeld
North Country Chapter
CW2 Lamont James
PFC Spencer Lewis Koester
CW3 Barry Reed
SGT Ismael Schelmetty Torres
North Star Chapter
PVT Nicholas Lalum
PFC Daniel Gordon Peters
Northern Lights Chapter
A1C Kyle Eugene Anderson
Oregon Trail Chapter
SPC Eric Carter
Cindy Jacobson
MAJ Benjamin Jay Groen
Chuck Hurdleston
Rob Ruck
Phantom Corps Chapter
1LT Travis J. Danning
CPT Ian O'Neill
Pikes Peak Chapter
Tim Adam
Jeff Flewelling
CW5 William Kearns
1LT Wendy Martin
PV2 Bryce Hayden Mosburg
Hondo Scott
PFC Caelon Joseph Tautz
SPC Emmanuel Vidales Pasos
Ragin' Cajun Chapter
SGT Greg Devon
SPC Emanuel Secundino
Rio Grande Chapter
CW2 Daniel Joseph Ketchmark
SPC John Page
Savannah Chapter
MAJ Henry A. Vasquez
Stonewall Jackson Chapter
PV2 Cayne Allen Chartrand
Tarheel Chapter
SGT Teresa A. Barbee
Tennessee Valley Chapter
Amber Bunyea
PV2 Nathan Thomas Campbell
PV2 Morgan Samuel Courrege
Cliff Crivello
PFC Joshua Michael Dempsey
Jeff Drader
Noel Goldstein
LtCol Mark Hutnan
Garrick Kelly
Frank Mottolla,
Megan Mularz
Jason 'Nic' Nicholas
Ms. Angela Pounders
Michael Slaton
Wesley Sparks
David Worthy
Thunderbird Chapter
PFC Connor Cahoun
PV2 Brannon Tyler Kirkpatrick
Washington-Potomac Chapter
COL Michael Bentley
Timothy Durham
Winged Warriors Chapter
CPT Erica M. Asencio
1LT Tyler J. Belin
CW2 Elias J. Comstock
COL Kathleen M. Flocke
CW3 Wesley Holt
1LT Colby M. Hyde
CW2 Robert S. Jeffery
SPC Jose D. Melgartorres
SPC Jeremyjason P. Mickelonis
SGT Joshua M. Nelson
SGT Joshua M. Price
SSG Michael R. Primavera
SFC Andrew L. Ramos
SGT Joseph W. Reddin
SSG Philip S. Richards
WO1 Thomas E. Richards
CPT Stephen P. Schmidt
CW2 Darryl W. Stickler
SSG Alberto Toy
SGT Michael H. Westley
Wright Brothers Chapter
PV2 Jacob Willie Smith
Yellowhammer Chapter
Carol Dupree
Chris Spivey
No Chapter Affiliation
1LT Brian Arevalo Ramos
SFC Shaun Juman
PVT Andrew Matthew Santos

Lost Members

Help AAAA locate a lost member from this list and receive a free one month extension to your AAAA membership.
CPT Robert S. Boham
Walter D. Bowden
Harold V. Bowie, Jr.
COL Fred E. Brown, Ret.
LTC Jeffery D. Brown
Rickey J. Brown
MAJ James E. Bruckart
SPC Brett Christopher Butler
E. W. Cavanaugh
LTC Richard G. Cercone Jr.
LTC Tzu-Shan Chang
COL James A. Coar, Ret.
SPC Derrell L. Coats
MAJ Harry L. Connors Jr. Ret.
Bruno Cussigh
SGT Travis Bonham Darnell
2LT Arthur W. Galloway
William H. Gillispie
Michael F. Glass
MAJ Gregory W. Glover
LTC William T. Goforth
Mary H. Gorman
COL Gerhard Granz, Ret.
Trevor Harker
COL Jose L. Hinojosa, Ret.
SFC Carroll Elmo Hinson, V
Barb Hively
CW4 Delbert Jackson, Ret.
LTC Randy K. Jackson
CW3 Jeffrey J. Jelonek
MAJ Gregory R. Jenkins
MAJ David A. Jobe
LTC Peter D. Kowal
Beth N. Kramer
CW3 Vladimir Kultschizky
WO1 Jacob Larch
CW3 Timothy J. Larz
MSG David W. Little, Ret.
CSM Vernie Nance, Ret.
MAJ Darrel B. Nerove
Fred A. Newcomb
SFC Henry R. Rathbone, Ret.
Brendon A. Roan
Tony Sanchez
LTC Martin Scheld
Thomas R. Schiltz
LTC Jerry D. Scott
Jeremy Smith
MAJ James F. Speelman
LTC Friedrich Stern
Jean K. Tinsley
WO1 Armando B. Torres
MAJ L.D. Walker
Rose Weast
Nadia O. Whatley

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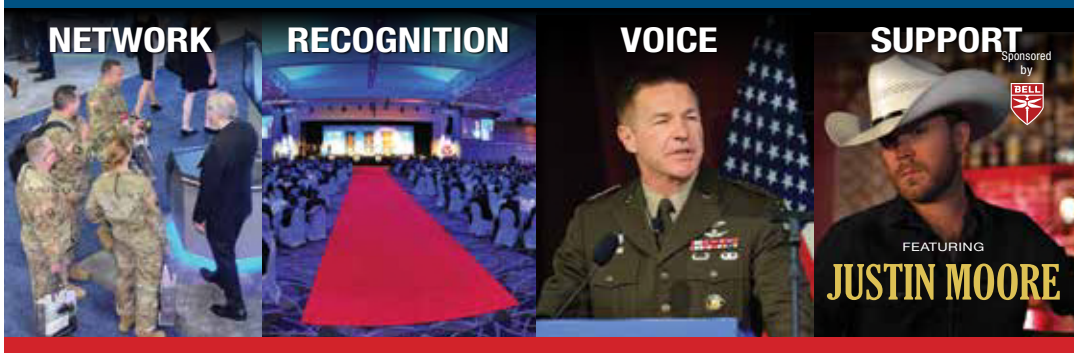


2021 ★ SUMMIT
ARMY AVIATION MISSION SOLUTIONS SUMMIT

Gaylord Opryland Hotel & Convention Center - #21SUMMIT - Sponsored by AAAA

AAAA **Family Forum** By Judy Konitzer

COVID-19 Reflections & Resources

While the COVID virus is pandemic and no one is immune, our members have adjusted and realigned their priorities, and I thank them for sharing with us.

Robbie and COL Shane Kimbrough, NASA, Houston, Texas: Our feelings about this unprecedented time are mixed. We wake up every day thankful for our family's health. We are glad because our parents are all doing well. In daily life, we have gone from being "empty nesters" to having a full house of 3 "twenty somethings". We are up for the challenge and love having big family meals together again. What we didn't expect is the sadness and stress from the kids. Their whole worlds have changed and been turned upside down. Their community was gone or instantly only online, but eventually, everyone settled down into their routine of online classes and working from home. The week of our twin daughters' graduations was bittersweet. The good news is we expect to have the opportunity to celebrate them in August with postponed ceremonies at both universities. Both girls will start graduate school soon, so we hope their class schedules permit attending their graduations. One thing we have learned through so many years in the military and with NASA, is that life goes on. Life is ever changing and unpredictable. You just do your best to adjust and keep moving forward.

From our daughter Kaitlyn: My senior year looked extremely different than I could have ever imagined. With multiple events like graduation, senior week, and special Baylor traditions canceled, there were many opportunities to be disappointed, but the slower pace during quarantine has helped me appreciate my wonderful Baylor professors and my community. I also realize the importance of not taking anything for granted. I hope this season of life causes me to cherish every moment from here on and make the most of every stage of life.

MAJ Adam Keller, 12th Combat Aviation Brigade, Katterbach, Germany: After several months of contending with the pandemic in Europe, the Soldiers and Civilians of 12th CAB have doubled down on training and have found innovative ways to build unit cohesion, maintain morale, and strengthen families and their ties within the local community. 1-3 Attack Reconnaissance Battalion recently conducted a battalion attack mission, launching 18 Apaches to attack a simulated radar site in the local flying area. The planning and briefings were conducted using existing telework solutions to mitigate the risk of COVID transmission. 1-214 GSAB has

GRAPHIC BY THE AUTHOR'S GRANDDAUGHTER, MEGHAN HUTTO

remained busy transporting medical supplies and personnel across Europe to assist our partners and Allies. Recognizing how many folks are in need outside the gates of our local kasernes, our Soldiers and Families recently organized a "Gifts from the Griffins" donation drive for a German home for special needs children. Our units have also worked hard to maintain Soldier morale, even at the height of social distancing measures. 1-3 ARB conducted a virtual "Viper's Got Talent" talent show over Zoom, while 1-214th held a "Virtual Quarantine Race." Participants (open to Families and Soldiers alike) needed to complete 21.4 miles in one week's time, and finishers earned the "coveted" Quarantine Race Medal.

COL Ernesto Cortez, Commander, 116th Military Intelligence Brigade, Augusta, GA: Soldiers of the Brigade are spread across Battalions in Fort Bliss, Fort Hood, Fort Gordon, and Savannah, Georgia. Shelter-in-place orders immediately challenged our ability to continue executing our mission flying and processing aerial intelligence 24/7 across the world, however our Soldiers and families have been incredibly innovative and resilient in meeting all our requirements even while day cares, schools, and important services have been shuttered. Microsoft Teams and Zoom virtual meetings have helped us all stay in contact with each other to get work done to continue to take care of our great Soldiers and Families! While the great state of Georgia is leading the nation in early re-opening, most Soldiers are still restricted from taking part in those re-opened activities. Everyone is excited to get back to the "new-normal" here in Georgia once we see fourteen straight days of decline in new virus cases.

AAAA **Awards**

Order of St. Michael Inductees

GOLD

CW5 (R) Michael R. Gwinn

Silver

CSM Lloyd S. Ankrum
COL Gail E. Atkins
CW5 Bill Barfknecht
COL (R) Erskine R. Bentley II
CSM Jay M. Blessing
CW5 Matthew L. Brown
SGM Jerry M. Cowart
COL John P. Davis
CW5 Michael W. Hardy
COL Kenneth A. Hawley
COL Robert R. Keeter
CW5 Eric Knieriemen
CW5 Noel C. Larson
COL Richard A. Martin
CW5 Bobette T. McGettigan
LTCJames T. Naylor
CW5 Bradley J. Nelson
Kevin Scott Rees
CW5 Frank J. Reis
CW5 Walter E. Sanchez
LTC Stephen T. Smith
CW5 Frank A. Turinksy III
CW5 Robin M. Vozar
COL Matthew R. Weinshel
CSM David Wick-Perez
COL Scott D. Wilkinson
COL Charles D. Zimmerman

Bronze

1SG Christian Ryan
SFC Daniel M. Addison
SFC Travis R. Baldwin
1SG Phil Banzhof
CW4 Gregory K. Bates
1SG Nicholas R. Bessent
SFC Daniel C. Bittmann
LTC William Brooks
SFC Anthony S. Carro
COL Clifford B. Chick
Richard D. Compton
CW4 Andrew M. Condon
CW4 Michael P. Cooper
1SG Ronney E. Copes
SFC Christopher L. Crowley
LTC Jay De La Vega
CW4 Chris Dellamura
CW3 Keith D. Dolliver
CW4 Darryl Farr
SSG Joshua A. Frasher
SGT Benjamin M. Freda
CW3 Christopher P. Garcia
CPT Ryan J. Gardner
CW4 Jason Y. Gerbert
SSG Andrew C. Gordley
CW5 Hardy Hay
SFC Sherman L. Hill
David Hosum
SFC David P. Howard
SSG Thomas J. Kealy
CW3 Jeffrey M. Keiper
CW4 Scott Kimmie
Raymond J. Koshinski
CW4 David J. Kruse
MSG Larry L. Landrum
Frederick D. Langhorn
SFC Alexander Legarreta
SFC Timothy Loveless
LTC Dylan W. Malcomb
CW3 Mark Maziarz-Morales
CW3 Thomas W. McNamara
MAJ Joshua O. Newbrough
1SG Christopher M. Owen
SFC Glen T. Perryman II
Patty S. Robertson
CW4 Jefferey Robitaille
Daniel W. Rodebaugh
1SG Jean Rodriquez
LTC Philip Root
1SG Desmond A. Schultz
SFC Sylvester M. Simmons
MAJ Matthew R. Simpson
SFC Thomas A. Smith
SFC Phillip B. Smith
CPT Masaki R. Sudo
CW4 Herbert Theisen
CW3 Christopher O. Thorn
MSG Cavell C. Trought
MAJ Kyle P. Vandingstee
CPT Kevin E. Weber
CW3 Wade R. Whidden

Knight Inductees

COL Kenneth C. Bradford
SFC RichardJason R. Valino

Our Lady of Loreto Inductees

Ellen Adamowicz
Janelle Bradford
Rachel Kahle
Denise L. Keeter
Kerrie Lee
Bethany Moreshead
Stephanie Peck
Kerrie M. Sheppard
Pamela Vannoy
Erin M. Whitfield

TAPS Shares Lessons Learned for All During Covid-19

I think most military families are familiar with TAPS (Tragedy Assistance Program for Survivors), founded in 1994 by Bonnie Carroll, whose husband BG Tom Carroll died in an Army C-12 crash in Alaska in 1992. Bonnie realized that military families understood isolation, fear, and loss, but survivors working together could empower others. Today, TAPS offer over 200 annual programs and supports thousands of participants. Briefings, seminars, camps, and retreats on grief, trauma, and suicide are offered to military commands, corporations, and professionals, and their 24/7 national peer support network at 202-588-8277, provides advice from experts and other resources discovered over nearly 3 decades. TAPS' motto "You Are Not Alone. We Are All in This Together" has expanded to provide tools of surviving to health care workers, first responders, and fellow citizens from all walks of life and all ages, and not just those in the military. Many have been affected by isolation, fear, and other losses associated with the Coronavirus, and lessons learned over the years for help, hope, and healing are being offered to them thru the TAPS website *www.taps.org/covid/together*

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

AAAA Awards Excellence!

AAAA Functional Awards

Suspense: September 1

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

Send in Your Nominations Today!

Nomination forms for all of the AAAA Awards are available on our website: quad-a.org.
Any questions?
Call 203 268-2450.

AAAA **Legislative** Report

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

SASC First to Complete FY21 Mark-up

The Senate Armed Services Committee (SASC) was the first of the four defense committees to complete their annual mark-up of the two pieces of annual legislation that fund the Department of Defense. On June 11th, the SASC completed their version of the National Defense Authorization Act (NDAA) that provides authorizations and policy provisions for national defense.

The Republican held Senate passed the bill through the committee in a bi-partisan manner under the leadership of Chairman James Inhofe (R-OK) and Ranking Member Jack Reed (D-RI). Funding authorizations totaled $740.5B ($636.4B base budget, $25.9M Department of Energy national defense programs, $69B for overseas contingency funds, and $8.15B for military construction).

Army Aviation seems to have garnered great support from the Senate committee noting an authorization of $183B for the Army's future long-range assault aircraft (FLRAA). Although Sikorsky and Boeing continue to build new Black Hawks and Apaches, support for this program that will replace those platforms continues to build in Congress.

Other Committees Trailing Behind

Typically, the House Armed Services Committee (HASC) is the first to complete its mark-up of the defense authorization legislation, but they are lagging behind and the Senate forged ahead with their process. The HASC, controlled by the Democratically held House of Representatives will commence their NDAA markup process in early July. For the political wonks within our reader base, keep your eye out for

PHOTO FROM WIKIPEDIA COMMONS

Edmund Winchester Rucker

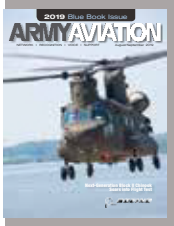
authorization levels and policy provisions to be released by the committee in late July when you receive this article. These days, the political agendas in the House are different than those in the Senate so it is likely each the HASC and SASC will propose quite different budget numbers and policy provisions which will ultimately be worked out later this year when they enter their conference period and look to resolve differences. Additionally, the DoD will have to wait a bit longer to find out actual budget amounts for next year because at the time of this writing neither of the two defense committees that appropriate funding, the Senate and House subcommittees on defense appropriations, had published timelines for the markup of their respective versions of the defense appropriations bill.

Racial Divide, Equality, Political Correctness, & Military Bases

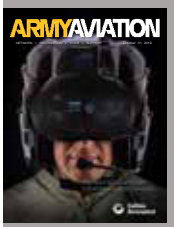
Over the last month protests demanding racial equality have spread throughout the country and there are many second and third order effects that emanate from this. One such debate involves 10 military bases that were named after Confederate soldiers. Senator Elizabeth Warren (D-MA) has presented an amendment that requires the renaming of these bases within 3 years of the FY21 NDAA becoming law. The Senate defense committee included this amendment in its version of the NDAA, but it still must be debated and passed by the full Senate.

Why is this interesting to Army Aviation? Colonel Edmund Winchester Rucker (pictured) is why. Colonel Rucker, a native of Tennessee, served in the Confederate Army and then became a wealthy industrialist in Birmingham, AL. The home of Army Aviation, originally Camp Rucker and now Fort Rucker, is named for him.

ARMYAVIATION
Upcoming Special Focus



August
September
Army Aviation Blue Book
AAAA Scholarship Foundation Grant Winners



October
Aviation Survivability
Aviation Sustainment
Aviation Support
Aviation Soldier Support

Bob Lachowski or
Erika Burgess
AAAAindustry@quad-a.org
203. 268.2450
ARMYAVIATIONmagazine.com

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.

Almost All Defense Companies Back In Operation

DEPARTMENT OF DEFENSE PHOTO BY U.S. AIR FORCE SSGT. JACK SANDERS

As many parts of the country begin to loosen restrictions caused by the COVID-19 pandemic, the companies of the defense industrial base have for the most part reopened for business, according to Ellen M. Lord, undersecretary of defense for acquisition and sustainment at a June 22, 2020 Pentagon briefing.

According to Lord only 33 total companies in the industrial base, largely smaller services providers tracked by the Defense Logistics Agency, remain closed for business. "Out of 10,509 companies DCMA tracks: we are down to two closed, and 267 companies having closed and reopened," she said. "Out of 11,413 companies DLA tracks: 31 are closed with 661 having closed and reopened."

"We see an enormous amount of recovery in the defense industrial base. It depends on location and what type of work is being performed, but there is enormous progress coming back," she said. "Obviously, for manufacturing, we need people on the line. So, we're doing things differently in terms of following CDC guidelines and so forth."

Lord said that aviation and shipbuilding supply chains would continue to see stabilization efforts and that advanced progress payments to companies has hit over $2 billion, with all of the prime contractors having "confirmed their detailed plans to work with their supply chains to accelerate payments to identify distressed companies, and small businesses."

DoD is tracking a roughly three-month period of delays that could have repercussions on some major defense programs, Lord said, but did not give any specific examples. "DoD continues to partner with our industry partners to do everything possible to keep programs on schedule and to minimize the cost and schedule impacts," Lord said. "This is obviously a dynamic situation, and the overall impacts will not be completely known for a while as we work through how we operate over the next few months."

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

General Atomics Aeronautical Systems Inc., Poway, CA, was awarded a $9,943,746 modification to contract W58RGZ-19-C-0027 for continuation effort for the Gray Eagle Unmanned Aircraft System; work will be performed in Poway, with an estimated completion date of April 23, 2021.

Honeywell International, doing business as Honeywell Aerospace-Tucson, Tucson, AZ, has been awarded a maximum $27,243,370 firm-fixed-price, indefinite-delivery/indefinite-quantity contract for aircraft generator auxiliary power units in support of the Black Hawk helicopter; work will be performed in Arizona, with a June 15, 2025, ordering period end date.

L-3 Technologies Inc., Insight Division-Subsidiary of L3 Harris, Tempe, AZ, has been awarded a maximum $7,000,000 firm-fixed-price, indefinite-delivery/indefinite-quantity contract for the production of the MX-12389 image intensifier tubes in support of field level maintenance of the AN/AVS-6 night vision imaging system; this is a five-year base contract with no option periods; location of performance is New Hampshire, with a March 30, 2025, completion date.

Sherwood Aviation,* Opa Locka, FL, was awarded an $18,636,740 firm-fixed-price contract for overhaul/repair of CH-47 gas turbine engines; work locations and funding will be determined with each order, with an estimated completion date of April 23, 2025.

Sierra Nevada Corp., Sparks, NV, was awarded an $88,000,000 modification on an indefinite-delivery/indefinite-quantity, firm-fixed-price, cost-plus-fixed-fee, and cost reimbursable contract (H92241-19-D-0009) in support of U.S. Special Operations Command (USSOCOM) for the Degraded Visual Environment Pilotage System; this modification raises the contract ceiling to $110,000,000; the majority of the work will be performed in Sparks.

The Boeing Co., Mesa, AZ, was awarded a $114,046,847 modification to contract W58RGZ-19-C-0024 for logistics, components and services for helicopters; work will be performed in Mesa with an estimated completion date of April 30, 2021.

Advertisers Index

People On The Move

Aviation General Officer Promotions/Assignments

SECARMY Promotes Gill

U.S. ARMY PHOTO BY SPC. JOHN SIMPSON, 40TH PUBLIC AFFAIRS DET.

The Honorable Ryan D. McCarthy, Secretary of the United States Army, promoted BG Clair A. Gill to his current rank during a ceremony held at the 101st Airborne Division (Air Assault) headquarters, Ft. Campbell, KY on June 11, 2020. Gill, who serves as the deputy commanding general, support, had his new rank pinned on by his father, MG Clair F. Gill, U.S. Army Retired, and son, Joshua, with his wife, Fran, and mother observing.

MONTANA NATIONAL GUARD PHOTO

Wilkins Pins On

BG James "Jamie" C. Wilkins was promoted to his current rank in a small ceremony June 13, 2020 at the Montana Joint Forces Headquarters by Montana Adjutant General, Major General Matthew Quinn. His wife, Katie, helped to replace his new rank shoulder boards. Wilkins, who is the AAAA Big Sky Chapter president, will take the helm as the Director of the Joint Staff, Montana National Guard.

Changes of Command/ Responsibility

Wings of Destiny Welcomes Habhab

U.S. ARMY PHOTO BY SPC BEVERLY ROCHE

Incoming commander, COL Travis Habhab receives the 101st Combat Aviation Brigade colors from 101st Airborne Division Commanding General, MG Brian Winski, as outgoing commander, COL Matthew Weinshel (right), and CSM Eric Arant (center) look on during a May 29, 2020, change of command ceremony at the Division Parade Field, Ft. Campbell, KY. Weinshel will move to Ft. Bragg, NC as the deputy commander of U.S. Army Special Operations Aviation Command.

Graham Takes Over the Night Stalkers

U.S. ARMY COURTESY PHOTO

COL Andrew R. Graham, incoming commander of the 160th Special Operations Aviation Regiment (Airborne), receives the regiment colors from BG Allan M. Pepin, commanding general of the U.S. Army Special Operations Aviation Command, during a change of command ceremony on June 12, 2020 at the General B. Doug Brown Compound, Ft. Campbell, KY. Graham assumed command from COL Scott D. Wilkinson (right) who had been in command since June 2018 and is headed to Ft. Bragg, NC to serve as the U.S. Army Special Operations Command chief of staff. Also pictured is regiment CSM Mark Baker (center).

Awards

Watson is AAAA USMA Top Cadet

COURTESY PHOTO

On June 9, COL Rich Melnyk and CPT Jonathan Lunde presented 2LT Haley Watson with a plaque and coin from AAAA to recognize her as the top cadet who branched Aviation from West Point. 2LT Watson was first recognized in April during a virtual sendoff event held with her classmates, staff and faculty from West Point, and guest speaker BG Mac McCurry. 2LT Watson was an American Politics major and captain of the women's track team during her time as a cadet. She excelled in the academic, leadership, and physical aspects of cadet life. After a graduation ceremony at West Point on 13 June, 2LT Watson will attend graduate school on a Rotary scholarship at the King's College in the United Kingdom before attending flight school at Fort Rucker, AL.

People On The Move

Non-Rated Warrant Officer Graduates

U.S. ARMY PHOTO

AAAA congratulates the following officers graduating from the Aviation Maintenance Warrant Officer Basic course at the U.S. Army Aviation Logistics School, Joint Base Langley-Eustis, VA.

10 Officers June 8, 2020

WO1 Joshua Miller
WO1 Steven Snyder

WO1 Christian Grimm
WO1 Mark Row

WO1 Matthew Cox
WO1 Luke Herdman

WO1 Suchat Junpram
WO1 Jeffery Mills

WO1 John Smith
WO1 Scott Walker

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 015-20
PV2 Paul Kingsbury * - DG
PV2 Yates Harlan
PVT Joshua Hornbeck
SPC Justin Kristl
PVT Matthew Loukota
SPC Jonathan Mason
PVT Lane McDonald
PVT Tyler Moore
PV2 Philip Pendleton
PVT William Powers
PV2 Prince Pujitha
Class 016-20
PFC Justin Vaughn * - DG
PVT Bawi Mang
PVT Tybias Anderson
PVT Jacob Farrar
PVT Michael Gill
PV2 Grant Hutchison
PVT Garrett Platt
PVT Kevin Rodriguez
SPC Omar Sewell
PFC Corbin Switzer
PFC Mitchell Ware
Class 017-20
PFC Eric Melgarejo-Hurtado * - DG
PVT Diego Camarillo
PV2 Garrett Cassady
PVT Dominic Horton
Wo1 Saud Husain
PVT Jason Ober
PV2 Sean Pendrys
SPC Mark Rickey
PVT Louis Wagner
PV2 John Whited III
Class 018-20
PVT Nicholas Lalum * - DG
SPC Juan Alvarez
PV2 Gabriel Davis
PV2 Kevin Ellis
PVT Adrian Gallardo
PV2 Balee Gomez
PVT Ulysses Grant II
PVT Christian Guerramarinero
SGT Timothy Healey
SPC Christopher Leyva
PVT Chase Maciejewski
SGT William Roberts
PVT Jackson Herber
SGT Saulo Knudsen
SPC Bracken McKinlay
PVT Isai Reyes-Quiroz
PVT Lancejoshua Sambaoa

CH-47 Medium Helicopter Repairer (15U)
Class 011-20
PV2 Chucho L. Conner * – DG
PVT Emily McKenzie Bolisinger
PV2 Kolton River Brauch
PV2 Emauel Burgos Colon
SPC John Newman Cole
PFC Tan Quang Dang
PV2 Justin Alan Engle
PV2 Thomas Edward Finley
PV2 Rhiannon Laine Moon
SPC Shawn Tyler Murphy
PV2 Bayley Jean Reynolds
SPC Raul Ercides Torres II
Class 012-20
PFC Spencer L. Koester * – DG
SPC Lance A. Burnworth
PFC Gavin Blayne Fullwood
PV2 Hunter Andrew Heslep
SPC Taylor Ash Humphrey
SPC Aleksei Yuryevich Kosarev
PV2 Richard Joseph Melendez
PV2 Tyler Dare Moerder
SGT Michael Allen Moore
SGT Michael Victor Ryan
SPC Brandon M. Smith
SPC Tyler James Townsen
Class 013-20
PV2 Jacob Willie Smith * - DG
PVT Max William Hardy
PFC Derrick Logan Monastere
PFC Wyatt Robert Mosher
PV2 Sherry Lee Neumann
PFC Jordan Nicholas Phillips
PV2 Jonathan G. Rodriguez
PV2 Reese Logan Smith
PFC Conner Lewis Tattersall
PFC Branden Anthony Tobar
SPC Edward Wafula Wambwa

UH-60 Helicopter Repairer (15T)
Class 027-20
PFC Daniel G. Peters * - DG
SPC Samuel Adam Ard
PV2 Corel Anyssa Bagby
PFC Daltyn Hunter Besancon
SPC Lane Michael Bowman
PV2 Patrick Michael Bray
PV2 Mary Josephine Grivas
SPC Jaquante L. Harden
SPC Corey Charles Hill
PV2 Colby James Morgan
Class 028-20
PFC Connor J. Smith * - DG
PFC Hunter D. Beachpennock
PV2 Kierden Methe Blessing
PV2 Diego Clemente Cazares
PV2 Hayden John Collins
PFC Stephen Howard Erickson
PFC Christopher C. Gatewood
PV2 Cameron Nathan Hasson
PV2 Brian Filmore Smith, Jr
PV2 Nathan Evan Yeakel
Class 029-20
PV2 Anthony S. Merrill * - DG
SGT Matthew S. Gigliotti
PV2 Emily Marie Hare
PFC Khaki D. Hurley
PV2 Austin Allan Jahn
SPC Jonathan J. Johnson
PV2 Lillian Marie Keough
SPC Ryan James Krummel
PFC Corey Michael Mena
SGT Nicholas Andrew Meyer
SGT Samuel Isaac Petters
SPC Ty Bryant Zofchak
Class 030-20
PFC Justin Drew Burton * - DG
PFC Mitchell Scott Ades
PV2 Spencer M. Blanchard
PFC Dustin Evan Butzler
PFC Austin Lee Cooper
PFC George Ibragin De Haro
PFC Elijah Thomas Dick
PV2 Caleb Mitchell Douglas
PV2 Daniel Dewey Gainey
PFC Keneth Nayiel G.Morales
PFC Juan Carlos Gonzalez III
PFC Darren Edward Grant
Class 202-20
PV2 Bryce H. Mosburg * - DG
SPC Kymarni O Hunt
PV2 Justin Michael Kuhn
PFC Corban Seth Lamb
PV2 David Christopher Larsen
PV2 Bryan Omar Lopezsoto
PV2 Shawn Riley Monfette
PFC Abdul R Muhammed
PFC Dean E. Poppenga III
SPC Maurice Orville Sawyers
PFC Zachary David Vial
PV2 Brandon Mitchell Whitley
Class 031-20
A1C Kyle E. Anderson * - DG
A1C Brett Jackson Alred
A1C Juan Pablo Angel
A1C Justin Michael Bailey
A1C Hunter Louis Edrington
A1C Jacob Anthony Ellis
A1C Jason Mackan Jones
A1C Kyler Duane West
Class 032-20
PFC Caelon J. Tautz * - DG
SPC Nicholas A. Amodio
PV2 Damon Shane Bedford
SPC Michael Cody Cutcher
SPC Jerad Michael Hoyt
SPC John McKinley Meade, Jr
PV1 Elliot Woodrow Morigeau
PV2 Chandler J. Nicholson
PFC John Frederick Olivo
PFC Jeremy Dean Sauder
PV2 Ivan Toru Takada
Class 033-20
PV2 Kiannah Ann Laoto * - DG
SPC Savannah L Bertschinger
SPC Jeremy Alexander Corn
PV2 Justin David Demmer
PV2 Gabriela R Guardino
PVT Caleb Josef Hatch
PFC Andrew Bradley Jensen
PFC Jacob Kelly Mabry
PV2 Jon Kinne MacCallum
SPC Luke Joseph Stevens
SPC Xianyi Wang
Class 034-20
PFC Brandon A. Lopesilvero * - DG
PFC Raul Alanis
PFC Alexander Scott Gagne
PV2 John Riley Lee
PV2 Chet Claremont Rabon
PFC Logan Tyler Rosenbarger
PV2 Julian J. Simental
PV2 William Patrick Slape
PV2 Cameron Winter Smith
PV2 Cody H. Spencer
PFC James Nathaniel Wheeler

AIT Graduations continued on page 68

People On The Move

AIT Graduations
Continued

Class 203-20
PFC Connor M. Calhoun - DG
SPC Peter Charles Anderson
PV2 Devin Reeve Bordelon
PFC Jaden Lee Cridlebaugh
PFC Axel D. Echevarriasanchez
PV2 Ronald Joseph Ernest
SPC Aleksandr Igorevic Fedin
PV2 Joshua Gerald Kaiser
PV2 Jason Zachary King
PV2 Trevor James Lockhart
PV2 Kameron Taylor West
PV2 Christopher Eric Williams

Aircraft Powerplant Repairer (15B)
Class 007-20
PV2 Morgan S. Courrege * - DG
PFC Gerinnerd Amparo Perez
PV2 Andrew Luis Avila
PFC Nicholas C.Cline
PV2 Christian James Gibson
PV2 Nijule Lee Hayes
PV2 D'andre Jamal Kelly
PFC Joseph-Martin Martinez
PV2 Andy Lester Mitchell
PV2 Richard Ramirez
PV2 Matthew Luigi Sperandio
PV2 Jose Ivan Vazquez Rolon
PFC Jomalier V. Hidalgo
Class 008-20
PV2 Justin M. Dillon * - DG
SGT Matthew Delynn Liveoak
PFC Andrew Joesph Tinner

Aircraft Powertrain Repairer (15D)
Class 003-20
PV2JaimeSalinas-Conchas*-DG
CPT Omar Said A. Abdelaty
PFC Malik Marcus Brown
PV2 Kyle William Davis
PV2 Daniel Christopher Eagle
PV2 Ashley A.Echeagaray
PV2 Kaleb Dale Gatlin
PV2 James Darrell Hannah Jr.
PVT Nickolas Anthony Jones
PFC Yasir Azeez Kadhim
PV2 Madison Leigh Lewis
SPC Knight Lawrence Licos
PV2 Justin Heath Matthews
PV2 Manuel Jose M.Nunez
PV2 Benjamin Robert Parker
PFC Jon Luke Walter

Aircraft Electrician (15F)
Class 007-20
PV2 Nathan T. Campbell * - DG
PV2 Benjamin Beau N. Alley
PV2 Cody Michael Arthur
CPL Rodolfo Tayong Astudillo
PV2 Clayton Scott Gale
SPC Hugo Morales Flores
PV2 Monica Elizabeth Wenten
Class 008-20
PV2 Riley A. Combs * - DG
SGT Charles Thomas Banks Jr
PV2 Mark Anthony Contreras
PV2 Ryan William Cooper
PV2 Nickolas Kirk Hannivig
PV2 Andrew Anthony Longmore
PV2 Bailey Michael Otto
PV2 Hector Oswaldo Saavedra

Aircraft Pnedraulics Repairer (15H)
Class 007-20
PV2BrannonT.Kirkpatrick*-DG
PV2 Roberto Kaiu Caballero
MSG Omer Dogu Dincer
PV2 Dawson Patrick Fischer
SFC Serkan Ozkan

Aircraft Structural Repairer (15G)
Class 003-20
PV2 Seth J. Dewboys * - DG
PV2 Garyon Austin Brumley
PV2 Cody Isaac Bynum
PV2 Jacob Steven Cvetnic
PV2 Carson Dean Dunsbergen
PV2 Bryan Gallegos
PV2 Joseph A. Gallucio IV
PV2 Joseph C. Garza II
SPC Angela Jauleyn Graciani
PV2 Shawn Ray Grandstaff
PV2 Thomas Anthony Hagen
PV2 Christian Jacob Handy
PFC Alando D Johnson
2LT Elias Rahme
SPC William Robert Vanwye
Class 004-20
PV2 Jose Alberto P. Chavez - DG
PV2 Jacob Anthony Aragon
PV2 Kyle Dale Bean
PFC Jonathan Latimer Bjork Jr
PV2 Jordan Wayne Blanchard
SPC Lorenzo Diaz Restrepo
PFC Guessim M. Kafando
PV2 James Joseph Novak
PV2 Dakota Ray Pitrucha
PV2 James Raymond Rocca
PV2 Jakob Nathan Saks
PV2 Oliver Ray Sullivan III
PV2 Cole Dame Wilson
PFC Carlos J. Zamorano-Frias

Avionic Repairer (15N)
Class 001-20
PV2 Cayne A.Chartrand * - DG
PV2 Joshua Alex Cafer
PV2 Luke Wayland Childress
PFC Precious Khimaje King
SGT Rokas Kisielius
PVT Jovante Demetrius Sims
CPL Christopher Lee Thomas
Class 002-20
PFC Joshua M. Dempsey * - DG
PV2 Steven Dejesus Rivera
PV2 Matthew Dodd Devaney
SPC Sebastian G. Betancourt
PV2 Jack Nghia Ho
PV2 Malik Jamal Jamison
SPC Jason Saizen Johnson
PV2 Kevin Matthew Lozano
Class 003-20
PV2 Jacob M. Pruitt * - DG
PFC Noah Micheal McGowan
PFC Collin Jarrett Palmatier
SPC Sisomsay Phabmysay
PV2 Dustin Scott Tekirdaglis
PFC Franky Emanuel V. Torres
PFC Charles Maxwell Vincent

AH-64 Armament/ Electrical/Avionic Systems Repairer (15Y)
Class 001-20
PFC Lacie Thompson * - DG
PFC Nicholas Mitchell
PV2 Jacob Wilson
PV2 Montana Howard
PV2 Joshua Brenizer
PV2 Dakota Busby
PV2 Matthew Carter
PV2 Santana Cruz
PV2 John Harrison
PV2 Jose Herrera III
Class 002-20
PFC Paxton Wells * - DG
PV2 Evan Weber
SPC Nicholas Wagner
SPC Zakai Norwood
PV2 Connor Kenchel
PV2 Mason Logdahl
PV2 Cody Mansil
PV2 Tariq McLamb
PV2 Timothy Miller
PVT Dylan Nalley
PV2 Fabio Ramosperez
PV2 Coulten Robinson
Class 003-20
PV2 Gavin Herr * - DG
PVT Tyler Bax
SFC Muhamad Amri
SPC Kainnon Booker
PVT Kyle Bradley
PVT Cameron Clark
PVT Joshua Coleman
PVT Tyson Eheler
PFC Cory Hendrix
PVT Noah Inman
SPC Chase Jacques
PV2 Jenna Ramker
Class 004-20
PVT Andrew Santos * - DG
PV2 Garret Ball
SPC Jordan Minden
PVT Arthur Ortizcook
PFC Thomas Parker
PVT Chandler Pointer
PVT Brandon Rioux
PV2 Dylan Smith
PVT Christian Torres
PVT Joseph Weaver
- 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
8 Graduates, 7 May 2020
SPC Patrica S. McClain
SPC Kristian Mercado
PV2 Austin M. Macclemmy
PV2 Matthew J. Vasquez
PVT Toney L. Bonetti
PVT Tayler T. Nguyen
PVT Brandon L. Reyes
PVT Brandon F. Schiller

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

Shadow UAS Operator Course
48 Graduates, 24 April 2020
SGT Landis S. Garza
SGT Niels C. Wenblad
SPC Derell H. Chandler
SPC Benjamin L. Cropper
SPC Paul H. Jones
SPC Seth A. Matarazzooliver
SPC Pricilla Montebella
SPC Hunter C. Seals
SPC Jonathan W. Townley
PFC Gabriel W. Alvarado
PFC Argus R. Bennett Jr.
PFC Justin S. Ferko
PFC Luke B. Griffin
PFC Austin A. Lowery
PV2 Gaven A. Beck
PV2 Joseph K. Buickerood
PV2 Christopher L. Farmer
PV2 Sean P. Hansen
PV2 Jadan A. Jones
PV2 Joshua W. Klein
PV2 Jatavian D. Lusane
PV2 Hunter A. Madden
PV2 Colin C. Pare
PV2 Aaron J. Rota
PV2 Caleb R. Swayne
PV2 Alden W. Sylvester
PVT Alvaro A. Chacon
PVT Cole D. Cormier
PVT Matthew D. Delacerda
PVT Carlos A. Espinoza
PVT Chandler M. Farmer
PVT Britney M. Ford
PVT Nathan J. Gates
PVT Dejuan Gibson
PVT Marquez G. Gutierrez
PVT Ashleigh N. Hajher
PVT Devin J. Hansbury
PVT Tristan D. Hansen
PVT Jaydon R. Johnson
PVT Charle R. Parris
PVT Leonardo D. Martinez
PVT Charles W. Nazarenko
PVT Jace H. Patsel
PVT Gabriel A. Pellom
PVT Noah T. Rhode
PVT Zachary E. Storem
PVT Isaac Valenzuela
PVT Devin Von Robbins

Gray Eagle UAS Operator Course
24 Graduates, 28 April 2020
PFC George R. Rogers
PV2 Hellen Ballestas
PV2 Shane M. Bellocabral
PV2 Jeremiah V. Caspersen
PV2 Jaquan M. Epps
PV2 Zachary T. Krueger
PV2 Austin J. Mohlis
PV2 William R. Payne
PV2 Daniel Silva
PV2 Julia J. Wenshau
PVT Maynard Allison
PVT Sian J. Blackwell
PVT Calisa A. Boren
PVT David L. Guzman III
PVT Frank M. Herrera IV
PVT Lucas P. Hood
PVT Justin C. Huber
PVT Corbin F. Martinez
PVT Gabriella E. Mejia
PVT Angela I. Pernell
PVT Steven A. Powell III
PVT Kaleb M. Rogers
PVT Hunter M. Trostle
PVT Nathan A. Westrick
DHG = Distinguished Honor Graduate
HG = Honor Graduate
* = AAAA Member

UPCOMING EVENTS

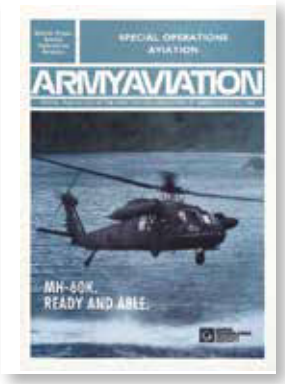
AUGUST 2020
1 Submission Deadline – Logistics Support Unit of the Year; Materiel Readiness Awards; Fixed Wing Unit of the Year; UAS Soldier and Unit of the Year Awards
25-26 AAAA Luther G. Jones Army Aviation Depot Forum, Corpus Christi, TX
28-31 NGAUS 142nd General Conference & Exhibition, Boston, MA.

SEPTEMBER 2020
1 Award Submission Deadline – Air/Sea Rescue, ATC Facility of the Year, ATC Company of the Year, ATC Maintenance Technician of the Year, ATC Controller of the Year, ATC Manager of the Year, DUSTOFF Flight Medic of the Year, Medicine, Trainer of the Year Awards

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 1995

Special Operations Aviation

With his guest editorial, General Wayne A. Downing highlighted a significant point with regards to Special Operations Aviation: "The challenges of adapting a high-technology force to a low-technology environment will not be easy. "The fight in Mogadishu on 3 October 1993 exemplifies this challenge. "The 160th SOAR (A) employed some of its best-trained aviators and the best helicopters in the world in a low-technology environment. "In an asymmetrical application of force and technology, a simple weapon—the RPG-7—was used to shoot down two Black Hawks and make the fight exceedingly difficult." *NOTE: See page 6, "Special Operations Aviation," Army Aviation, July 31, 1995, by General Wayne A. Downing*

160th SOAR(A) WANTS YOU!

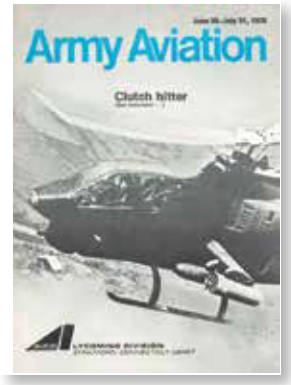
— Contact —
CW3 Bob Holcomb
DSN: 635-5689
Comm: (502) 798-5689

Briefings

The Vietnam Veterans of the 282nd AHC, will hold a reunion at the Ramada Inn South, Nashville, Tenn., on 11-13 August 1995. Those interested in attending should contact, Mr. Tom Pullin, 910-822-2902.

Briefings

The Government of Romania and Bell Helicopter Textron announced on 15 June a major cooperative program to produce 96 AH-1F Cobra attack helicopters for the Romanian armed forces. Production will be centered in Romania, commencing in 1996. The production run is due to conclude in 2005.



50 Years Ago

April-May 1970

Presidio of Monterey

CW4 Donald R. Joyce (right), a student of the Thai language at the Defense Language Institute and a member of AAAA's National Executive Board, receives his Master Army Aviator wings from Colonel Kibbey M. Horne, Commandant. The dual rated CW4 has logged over 6,800 flying hours during his Army career.

"By the Buy, Ye Shall Know Them!"

Auston Garland attempted to answer the question. "Does technology engender increased cost?" The question of cost is a stark dilemma of war: Cost in lives… cost in money. America decided on the latter. This, of course, leads to more sophisticated and therefore more expensive weaponry; with the helicopter as an example. Mr. Garland bears this out with The Congressional Record: "It reports that the helicopter support furnished in Vietnam has had the equivalent value of one million combat troops. Since that support is later identified as having come from approximately 3,000 machines and 30,000 men, it follows that the 3,000 machines offset the costs of 970,000 men. At $13,000/year/soldier (same reference), the cost of over two billion dollars for troops equates to an annual allowable cost of over seven million dollars per machine."

Experience

The 100 members of Aviation Warrant Officer Intermediate Class (AWOIC) 70-2, now in residence at USAAVNS, have cumulative fixed wing and rotary wing flying time exceeding 274,000 hours; this includes 133,007 of combat time, close to 1,500 hours per man.

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 2022 induction is June 1, 2021

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

Major General George S. Beatty Jr.

Army Aviation Hall of Fame
1992 Induction - Atlanta, GA

During the 1960's when the Army's Air Mobility concept was born, tested, and proven in combat, George Beatty played key roles in each of the phases.

In 1962 he was assigned to the Army's Tactical Mobility Requirements Board ("Howze Board") where he was instrumental in the writing of the plan for the accomplishment of the Board's mission. He supervised the running and recording of the field tests of all aspects of the Board's interest. Upon completion of the Board report, he and Colonel (later Lieutenant General) John Norton went to Washington to brief the Board's findings and recommendations to the Secretary of Defense and other interested Federal Agencies.

He was assigned to the 11th Air Assault Division (AAD) in January 1963 as Commanding Officer, 1st Brigade and commanded that Brigade through all of the testing and field exercises. He briefly commanded the 11th Aviation Group in 1965 during which time a composite Aviation Company was formed and sent to the Dominican Republic to support the XVIII Corps.

When the 11th AAD was redesignated as the 1st Cavalry Division (Airmobile), Beatty was assigned as Chief of Staff where he coordinated the planning and loading out of the division. In Vietnam, he served as Chief of Staff, and then Brigade Commander of the 1st Brigade. During this eventful year he saw the air assault concept, which he had helped pioneer, proven under fire and accepted by the U.S. Army.

From 1968 to 1970, he commanded the Army Flight Training Center at Hunter Army Airfield at Fort Stewart, Georgia where several hundred rotary wing pilots were graduated every two weeks. Training of South Vietnamese students was initiated during this period, and their unfamiliarity with the English language required the introduction of special innovative teaching techniques to enable those students to succeed.

Throughout his career, General Beatty was involved in many pioneering developments in the concepts, training, organization, tactics, and equipment that have been incorporated into Army Aviation as we know it today.

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