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October 31, 2018


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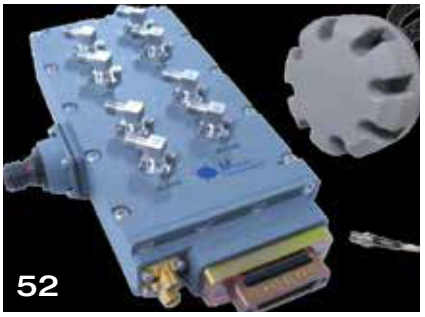

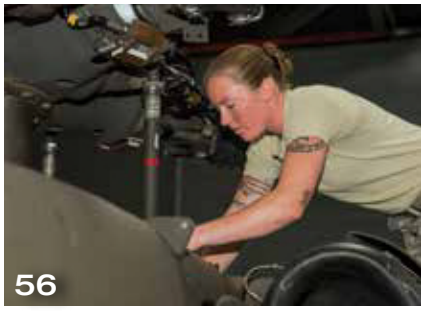

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ARMY AVIATION COMMUNITY NEWS

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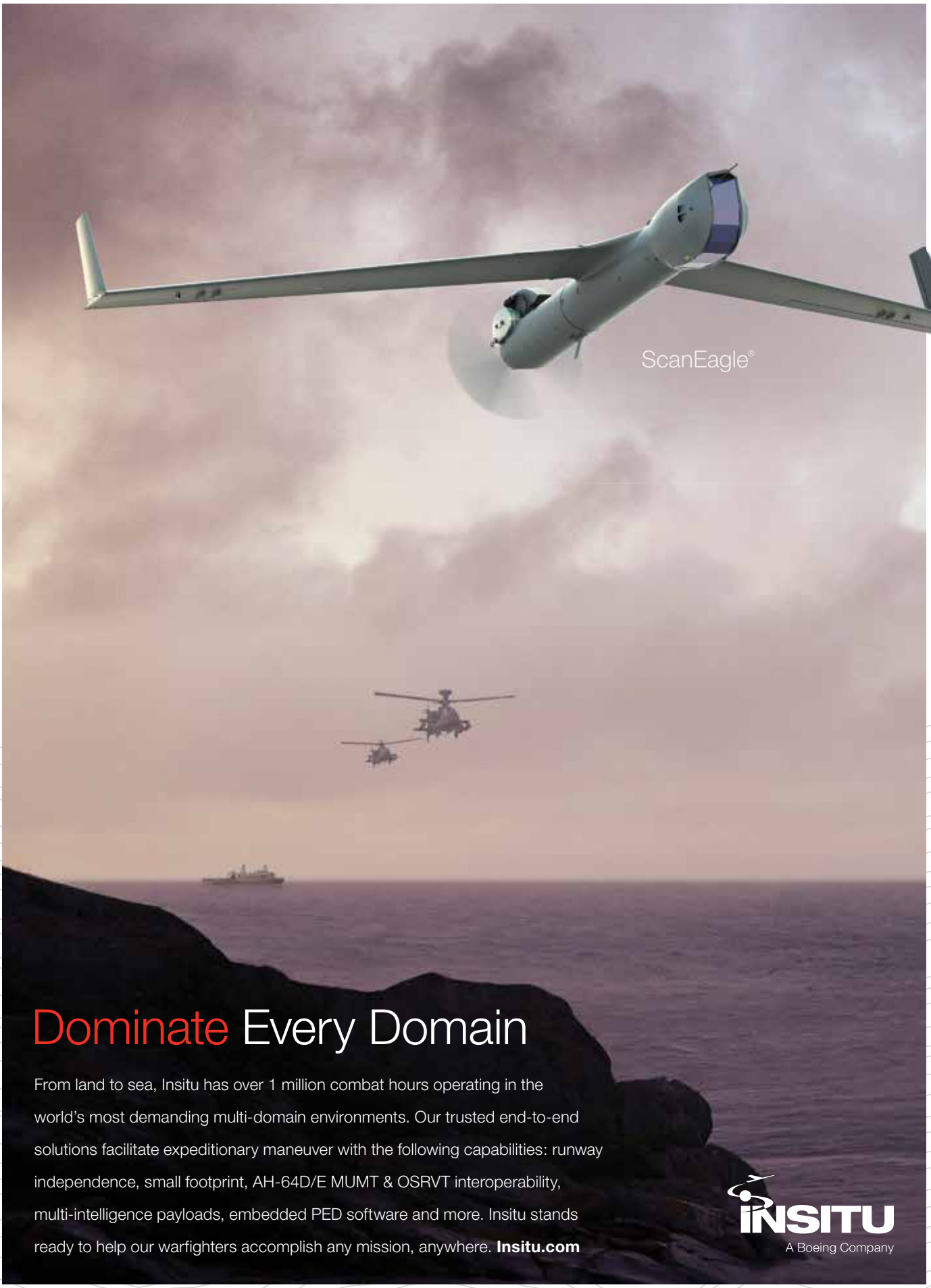

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On The Cover

Briefings ▶ *Late Breaking News - Announcements*

Wright Honored by AUSA

DEPARTEMENT OF DEFENSE FILE PHOTO

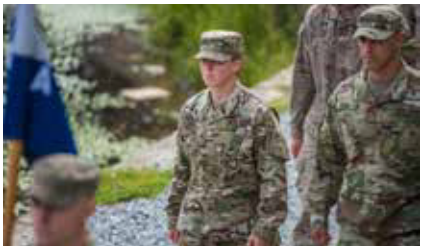
MG (Ret.) Jessica L. Garfola Wright, the former adjutant general of Pennsylvania who served as undersecretary of defense for Personnel and Readiness after her 35-year military career received AUSA's Lieutenant General Raymond S. McLain Medal given to a current or former member of the National Guard for advancing a seamless and component-integrated Army. The Guard's first female aviator, she graduated from the CH-47 and CH-54 Aviator Qualification Courses. She commanded the 28th Cbt. Avn. Bde., 28th Inf. Div., at Fort Indiantown Gap, PA becoming the first female maneuver brigade commander in the Army. The award was presented during the opening ceremonies of the AUSA Annual Meeting on Oct. 8, in Washington, DC.MG Writgt is a member of the AAAA National Executive Board

McClain Headed To ISS

NASA PHOTO

U.S. Army Astronaut LTC Anne C. McClain, along with her crewmates, David Saint-Jacques of the Canadian Space Agency and Oleg Kononenko of the Russian Space Agency Roscosmos, is scheduled to launch Dec. 20 aboard the Soyuz MS-11 spacecraft from the Baikonur Cosmodrome in Kazakhstan for a six-month rotation on the International Space Station. McClain earned her wings as an OH-58D Kiowa Warrior scout/attack helicopter pilot and has more than 2,000 flight hours serving in Army aviation units at Wheeler Army Airfield, HI, and at Ft. Rucker, AL, as well as combat operations during Operation Iraqi Freedom.

1st Enlisted Female Ranger from 1AD CAB



U.S. ARMY PHOTO BY PATRICK A. ALBRIGHT, FT. BENNING MANEUVER CENTER OF EXCELLENCE

SSG Amanda F. Kelley, assigned to the 1st Armored Division's combat aviation brigade at Fort Bliss, Texas, marches in formation during her Ranger School graduation at Fort Benning, Georgia, Aug. 31, 2018. Kelley is the first enlisted woman to earn the Ranger tab.

Action Required: TRDP Ends Dec. 31, 2018

The TRICARE Retiree Dental Plan (TRDP) will end on December 31, 2018. TRDP members may enroll during the 2018 Federal Benefits Open Season (Nov. 12-Dec. 31 2018) in their choice of FEDVIP dental plans. TRDP enrollees must take action to enroll in a FEDVIP plan in order to receive dental benefits starting on January 1, 2019; when TRDP ends at the end of 2018, there will be no automatic enrollment in FEDVIP. For the latest information, visit *TRICARE.benefeds.com.*

ARNG Tuition Assistance Changes

Starting Aug. 5, Army Guardsmen are able to use tuition assistance (TA) as soon as they return home from the Advanced Individual Training (AIT) course after Basic, according to NGB officials. Currently Army Guardsmen must serve a full year before using TA for an undergraduate degree or 10 years for a master's. The change also removes the 10-year cap. Instead, TA can be applied to a graduate program once the next step of schooling is completed. Enlisted soldiers must finish the Advanced Leaders Course (ALC), officers must complete the Captains Career Course, and warrant officers must finish the Warrant Officers Advanced Course. And troops who moved from enlisted to officer can complete either ALC or the captain's course to meet the requirement, officials said. Check with your individual state for additional programs.

CORRECTION:

On page 20 of the July 2018 issue the commander should be COL Rick Zampelli; and on page 62 of the August/September 2018 issue the correct name is Aviation Turbine Engines Project Office; we apologize for the errors.

Membership and Recognition

The pace of all things AAAA is certainly picking up now as we head into Fall with the Luther Jones event at Corpus Christi (October 24-25), and both the Joseph P. Cribbins (November 13-14) and the Aircraft Survivability Equipment symposia (November 15-16) coming up in Huntsville.

We have just had our semi-annual AAAA Board Meeting in October during the AUSA Annual Meeting so please ask your chapter leadership for an update on where we are and how we are set for the 2019 Army Aviation Mission Solutions Summit in Nashville (14-16 April, 2019). And later that same week we followed up with a Senior Executive Associates meeting and I will provide an update in the next issue.

We were scheduled to have a meeting with the Army Aviation Congressional Caucus but it was cancelled at the last minute due to Congress being released for most of the month of October to prepare for the elections in early November. Please get out and vote as we know it is not just a right but a responsibility!

I want to focus on two points in this issue: membership and recognition. Let's start with membership! During last year's Summit, it was brought to my attention and that of other board members that spouses of members could not be members. I assured those who raised the concern that was not true and AAAA welcomes spouses and family members to join in keeping with our philosophy of taking care of the Aviation Soldier and family member. The spouses I was talking to quickly asked me that if it was true why was there no block on the membership form to check signifying they are spouses and they are supporting their Aviation Soldier? It seemed incredible to me that after 61 years of existence since AAAA started in 1957, this was the first time that this issue had come up. Considering our AAAA mission statement, "Supporting the U.S. Army Aviation Soldier and Family," this was a no-brainer.

The AAAA national office took a quick look at editing the application form and membership online process and – voilà! – we now have the spouse category at the same rate as the existing enlisted and student rate of $15. Keep in mind that both that rate and the basic rate of $26 for all others has not changed since 1998 so both are a pretty good deal indeed.

We are sad to see CW5 (Ret.) Dave Cooper step down as the VP of Membership but excited to announce that CW4 Becki Chambers is our new VP for Membership. She did confide in me that Dave had agreed to stay on her committee as a condition for her taking on this new role. She is excited and working on a number of initiatives to get the word out on this spouse membership category, new and innovative ways to increase our membership and a special focus on our younger enlisted soldiers, as well as many other ideas you will see rolled out over the next few months. You will soon see a themed membership campaign from Becki with a realistic goal and timeline to position AAAA for success in the next decade including increased tangible membership benefits. The key to membership however is each and every member taking an interest in letting others know why you joined, why they should, and what we at AAAA National need to do to make it even better for each and every member.

Networking, Recognition, Voice and Support are the tenets of AAAA and what we are all about. The next few months you will see example after example of how AAAA: creates Networking opportunities through our events; presents awards on everything from Depot Maintenance Artisan to ATC, ASE, Medicine, Trainer, and Air/Sea Rescue; is your Voice to Congress through the Army Aviation Congressional Caucus; and provides Support to our chapters for local events that benefit you all directly, and will soon be rolling out an A&P license support package for our enlisted members.

The second topic I need to discuss is RECOGNITION! We have so many great people in our ranks. One of the leading reasons that people join organizations is for recognition, according to the professionals. Unfortunately with the pace everyone is moving, in many cases units and businesses fail to take the time to recognize excellence! I am amazed at the responses I get when I ask chapters and units why. Suffice it to say everyone has stories about the great folks in their unit that should and need to be recognized. As they say, you cannot win if you do not compete. If you need help let us at National know or better yet go and enlist your chapter leadership to help!

AAAA has always been there for you the Army Aviation Soldier and family through good times and bad, war and peace, before there was a Branch and since, always adapting and changing to provide you with what you are looking for. Like the spouses at the last Summit – all you have to do is ask.

Above the Best!

BG Stephen Mundt, Ret.
33rd President, AAAA
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Editor's Note: For this issue, the branch chief, MG William K. Gayler, has coordinated having the Army Aviation Enterprise maintenance leader, MG Douglas M. Gabram, his command sergeant major, and the Branch Aviation Maintenance Officer, provide the lead, "To the Field," command group article.

Attacking Aviation Readiness Drivers

By MG Douglas M. Gabram

U.S. ARMY PHOTO BY CHARLES ROSEMOND

Soldiers with Company D, 1st Battalion (Attack Reconnaissance), 3rd Aviation Regiment, 12th Combat Aviation Brigade, conduct routine maintenance on an AH-64 Apache helicopter on Aug. 17, 2018, at Katterbach Army Airfield in Ansbach, Germany.

As I reflect on the past year, the Aviation Enterprise has accomplished a great deal through incredible teamwork and determined leadership. That said, I am often asked the question, what keeps me up at night? Two things:

- Overall Fleet Readiness – specifically, fixing our Apache issues.
- Are we ready for a near-peer fight?

We are working with the entire Aviation Enterprise to fix the strap pack issue, but also to improve the AH-64E transmission and 30mm accuracy. We must restore confidence in the field and reduce the maintenance burden on our Soldiers. First, CW5 Mike Cavaco will cover the "mega nut" strap pack (MNSP) in his article in this issue. Second, large-scale combat operations against a near-peer competitor will likely have surging supply chain demands, interrupted lines of communication, and extended expeditionary operations. One could say, given our sustained high OPTEMPO (15-plus years of Iraq and Afghanistan) and associated fully mission capable (FMC) rates, we are doing pretty well. So what's the problem? No doubt from the outside looking in, the surface is calm, but below the water line, it is a complex and daily battle to meet unit requirements.

Looking back, I was the beneficiary as a field commander at multiple levels during many deployments – I never worried about parts, they were always there. I didn't truly understand what was behind the supply chain, but now I

do. Do we have the right parts in depth on the shelf to sustain ourselves in a near-peer conflict?

To strengthen our position, we have identified key readiness drivers for every one of our aircraft types and we are striving to increase the supply depth. The entire enterprise (AMCOM, Corpus Christi Army Depot (CCAD), Program Executive Officers (PEO), Aviation Engineering Directorate (AED), Defense Logistics Agency (DLA), Army Contracting Command-Redstone (ACC-R), and Original Equipment Manufacturers (OEMs)) is moving in this direction. It starts with three questions: What's our stock on hand? What is the average monthly demand? What are the sources of supply? Our goal for our top readiness drivers is 90-days stock on hand based on the average monthly demand with no backorders greater than 30-days. Think engines, transmissions, blades, and other key aircraft components.

For over 15 years, we have been operating on a just-in time basis. We must have depth and predictability in our supply chain to anticipate our Soldiers' needs in a large scale combat operation. A combat environment against a near-peer competitor will be much different than today's conditions, and it might occur at the same time we are conducting our current U.S. Central Command (CENTCOM) operations.

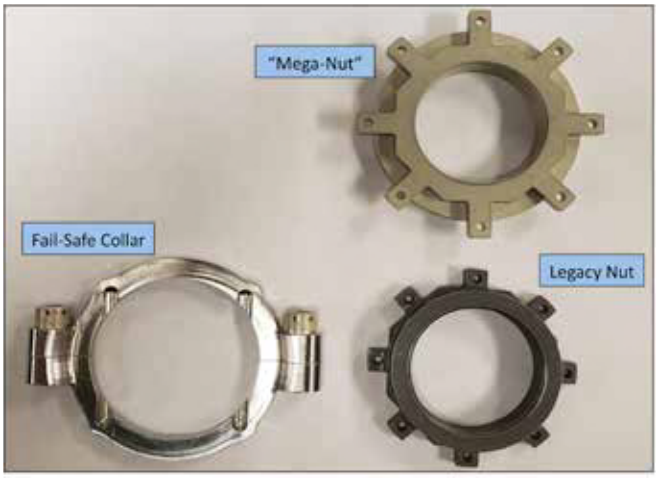
Great organizations adapt and fight the enemy, not the plan. As I review our actions over the past 12-months, AMCOM, in coordination with the Aviation Enterprise and industry partners, have made great strides in improving readiness. We are shaping the fight and setting conditions to remain flexible and successful. Our efforts are changing the way we sustain readiness and continue to improve every day. We have a long way to go, but having a common target of our readiness drivers with everybody rowing towards increasing our supply chain depth is a good start to increasing our overall readiness.

MG Douglas M. Gabram is the commanding general of the U.S. Army Aviation and Missile Life Cycle Management Command at Redstone Arsenal, AL.

Power of the Aviation Enterprise – Apache "Mega-Nut" Strap Pack and Fail-Safe Collars

By CW5 Michael D. Cavaco

AH-64E Mega-Nut / legacy Nut / Fail-Safe Collar



Two years ago, the investigation into a fatal Apache crash identified a crack in the outboard nut of the main rotor strap pack. It occurred as a result of stress corrosion cracking.

This issue didn't ground the fleet, but we were close. It resulted in a drop in readiness, as we worked to mitigate the risk through frequent borescope inspections, with which the field is well familiar.

Over the last 20 months, the Aviation Enterprise and industry partners have worked non-stop to design, build and field a new strap pack to reduce both the risk to our force and the maintenance burden on our Soldiers. As we begin fielding our ninth battalion this month, I want to take a moment to highlight some of the unprecedented work that has gone into this effort over the last year.

Redesigning any component of a helicopter from square one is no easy task. This was no exception. The team that worked on the strap pack included representatives from the Apache Project Office, the Aviation Engineering Directorate, the AMCOM Logistics Center, and the Defense Contract Management Agency. We partnered with the Boeing Company, the manufacturer of the Apache, and their sub-vendors. All stakeholders attended weekly meetings that were chaired by the AMCOM Commanding General, MG Doug Gabram. The CG and the Program Executive Officer–Aviation, BG Thomas Todd, were the linchpins for keeping the team and the effort focused on the task at hand – eliminating the risk and burden in the field as quickly and responsibly as possible.

The solution to resolve this issue for the Apache fleet is known as the "mega-nut" strap pack (MNSP). It is designed with new geometry, larger cross section, reduced stress loads and constructed using a more durable, corrosion resistant material.

The Department of the Army Execution Order (DA EXORD) sets the priorities for which units would receive either the fail-safe collar (FSC) or the MNSPs first. We have fielded retrofits for nine units, focusing on those that are stationed in coastal environments first. Teams from Boeing and AMCOM are rapidly retrofitting all AH-64 battalions with MNSPs, but it will take time. In the meantime, to reduce risk and burden, we are delivering FSCs to be fitted over the legacy hardware to provide a redundant safety capability. The FSC provides the means to rapidly mitigate risk across the force while the MNSP is gradually fielded.

I've participated in fielding both the FSC and the MNSP to those units. Whether the team consisted of Soldiers, contractors or both, the efforts I have seen over the last three months have been outstanding. Some of those observations are highlighted below.

Mega-Nut Strap Pack (MNSP):

The MNSP fielding is an exercise in P4T3 (Problem, People, Parts, Plan, Time, Tools, & Training), collaboration,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and teamwork. Success requires equal amounts of work from both the unit's Soldiers and the Boeing team and this process has shown tremendous results so far. The unit prepares the aircraft, the Boeing team steps in for the strap pack replacement, at which time the unit conducts the repopulation and test flight. This clear delineation of task and purpose allows each team to move rapidly, but also maximizes quality control by keeping each team focused on specific tasks. The DA EXORD mandates retrofit of four aircraft per day, but allows for units to assist in order to increase throughput. In recent fielding efforts, we have completed as many as nine aircraft in one night.

Be deliberate. Quality is paramount. No short cuts. Like any other maintenance event, there is a perfect balance between operations and maintenance – there is no rush. At the same time, don't sell your unit short. Plan for what you can sustain, but be prepared to flex – the opportunity to accelerate may present itself. To ensure all units are satisfied with the MNSP retrofit and associated business rules, MG Gabram and BG Todd personally receive a de-brief from the unit leadership.

Fail-Safe Collar (FSC):

Because the fail-safe collar is far easier to install than the entire strap pack, smaller teams can attack one aircraft at a time. Two mechanics can install the collar in about an hour and a half. Because it is easier to install, the initial inclination will be for units to install collars on all aircraft at once. That is certainly possible, but not recommended. Keep in mind that the FSC is an interim repair. Units will have to disassemble the head again for MNSP fielding. That means twice the spare parts, twice the down time and twice the maintenance burden. The recommended course of action is to install the FSC in conjunction with scheduled maintenance and on any aircraft that will deploy to combined-training center rotations or other major field exercises.

At the time of this article, approximately 25% of the Apache fleet will have MNSPs installed, and all FSCs will be located at the appropriate PBL windows for specified FSC units. Regardless of which fielding your unit will undergo next, the common key to success is teamwork. This has been a long, challenging journey but the Aviation Enterprise is committed to making this right to restore confidence and readiness of the aircraft in the field and reduce the maintenance burden. There is no doubt in my mind that without the tremendous cooperation between Boeing and all the aviation stakeholders involved, we would be months behind where we are today. This is also a good example of how contractors can, and must, be used to augment our maintainers at the right time and place. At the end of the day, we are all on the same team – we may be wearing different jersey numbers, but all the jerseys are green.

CW5 Michael D. Cavaco is the Aviation Branch Maintenance Officer, U.S. Army Aviation and Missile Life Cycle Management Command at Redstone Arsenal, AL.

THE WORLD'S EVOLVING THREATS
HAVE MET THEIR MATCH.

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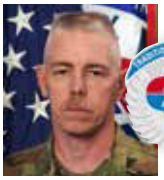

See You at AMCOM 101 in Huntsville!

By CSM Mike Dove

U.S. ARMY PHOTO

AMCOM Commanding General, MG Doug Gabram, gets up close and personal with attendees at the 2017 AMCOM 101.

I was in my first week as a new brigade command sergeant major when I attended my first AMCOM 101-Aviation.

I wasn't sure what to expect when I arrived at Redstone Arsenal, AL. for the two-day course; but, what I found was a team committed to enabling aviation readiness throughout the Army by providing the supplies, maintenance and logistical support that make our Army aviation capabilities faster, safer and more lethal than any other in the world. This year, U.S. Army Aviation and Missile Command (AMCOM) is again hosting the AMCOM 101 – Aviation, scheduled to begin on Oct. 30. I'm proud to be one of the hosts this time around.

AMCOM 101 is an introductory course designed to ensure everyone is on the same sheet of music. Each year, AMCOM invites Soldiers from across the Aviation Enterprise, ranging from specialists to the leadership of combat aviation brigades – specifically anybody who has anything to do with aviation maintenance and logistics – to the AMCOM headquarters at Redstone Arsenal to attend a series of training events. We listen as they talk about their challenges and issues, and then we provide the necessary assistance to attack those challenges and issues.

AMCOM 101-Aviation brings together aviators, maintainers and logisticians from across the Army aviation enterprise to learn about AMCOM's sustainment capabilities and to discuss aviation challenges and solutions. The U.S. Army Forces Command (FORSCOM) deputy commanding general has mandated attendance for new battalion and brigade commanders. It is a venue that allows Soldiers to engage on issues related to maintenance, sustainment, and future needs with each other and the workforce to enable their success. In short, we want to ensure our aviation leaders and Soldiers know how to tap into AMCOM's resources.

During AMCOM 101-Aviation, Army aviation Soldiers meet with and receive briefings from their AMCOM support team. We give briefings on the role of the AMCOM Logistics Center, field support and readiness, condition based maintenance and tips to expedite the Army supply chain, just to name a few.

Readiness is our #1 priority and AMCOM has a vital role in achieving that goal. Our command is actively solving issues impacting Army aviation readiness, to include focusing on key aircraft readiness drivers that are impacting near and mid-term readiness and trying to build strategic depth in our supply chain. We are also attacking specific challenges like replacing strap packs and installing fail-safe collars on the AH-64 Apache helicopters, reducing the time to recapitalize helicopters, improving engine and blade repairs, addressing generator and transmission modifications, and developing solutions for making helicopters safer and more lethal. AMCOM, as part of the Aviation Enterprise, is working for our Soldiers

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 2017 National winners were featured in the April/May AAAA Annual Summit issue.

AAPI FILE PHOTO

SGT MICHAEL C. HOLENCHICK

Company F, 3rd Battalion, 10th Aviation Regiment
Fort Drum, New York

Air Traffic Controller of the Year Award, 2015

Sponsored by The Raytheon Company

SGT Michael C. Holenchick is the most engaged and motivated facility chief in the company. Working at a level above his pay grade, he has been able to make the AN/MSQ-135 Mobile Tower System (MOTS) the premier air traffic control (ATC) system for the battalion and the brigade. He has conducted multiple training events to include a Joint Readiness Training Center (JRTC) rotation at Fort Polk, Louisiana, which saw the MOTS execute airspace operations in tandem with the Tactical Airspace Integration System (TAIS). The training conducted in conjunction with the TAIS was the first ever at the JRTC, and included around the clock coordination, integration and synchronization between the two facilities. The JRTC rotation was a great success, with his team being responsible for over 2,500 movements. His leadership and ATC knowledge enabled him to stand out from his peers during the Air Traffic Services Command (ATSCOM) Aviation Resource Management Survey (ARMS). During that inspection, the MOTS was the best rated facility, which helped the company achieve an overall satisfactory rating. SGT Holenchick's outstanding duty performance and accomplishments have earned him recognition as the 2015 Army Aviation Association of America Air Traffic Controller of the Year.

and their units. We must continue to leverage the power in the Enterprise to address the most pressing needs. It is this unified effort that makes us successful as a force and provides the best capabilities for our Soldiers.

By coming to Redstone, Soldiers get to meet face-to-face with the people who are providing that support… the same people they are going to call for assistance. In fact, networking is one of the most important aspects of AMCOM 101, both Aviation and Missile courses. AMCOM's workforce is a team of dedicated professionals. Instead of reaching out to a faceless voice on the other end of the phone, they will know exactly who they are calling.

At AMCOM, our mission is to sustain a well-trained, deployable and agile aviation force. AMCOM 101-Aviation is our way of introducing ourselves, informing the Aviation Soldiers what we do and – most importantly – ensuring that they all know AMCOM is here to help.

CSM G. Mike Dove is the command sergeant major of the Aviation and Missile Life Cycle Management Command at Redstone Arsenal, AL.

Army Reserve Aviation Command Welcomes New Commanding General

By BG Jami Shawley and COL Andrew Doehring

On July 8, 2018, I was both honored and humbled to accept the organizational colors of the Army Reserve Aviation Command (ARAC) from the deputy commanding general of the U.S. Army Reserve Command, MG Scottie Carpenter.

U.S. ARMY PHOTO BY FORT POLK, LA PUBLIC AFFAIRS OFFICE

Soldiers from 5th Battalion (General Support Aviation), 159th Aviation Regiment are briefed at the Joint Readiness Training Center, Fort Polk, LA. The 5-159th GSAB participated in a JRTC rotation during July and August of this year.

Having the opportunity to lead this great command is by far the highlight of my career. In my short time within the command, I have had the privilege of visiting many of our units. Each of these opportunities has reaffirmed that Reserve Aviation has some of the most capable, professional, and dedicated Soldiers in the Army. With two expeditionary combat aviation brigades (ECABs), the capability the ARAC projects is the greatest it has ever been. We will continue to improve Reserve Aviation's readiness posture and to provide premier war fighting and disaster response capabilities to the nation.

Each year across the Army Reserve, the summer months are a surge period for training. This is no exception for Reserve Aviation. In order to continually improve collective readiness, ARAC units participated as both training audience and training enabler in a vast array of training opportunities this summer including joint and multi-national training events, Army Reserve-wide and multi-component exercises, combat training center rotations, and mobilization/deployment preparation.

The training our 244th ECAB units conducted this summer centered on their Focused Readiness role as well as their preparation for an upcoming Operation Spartan Shield rotation. The 244th Headquarters and Headquarters Company (HHC) executed their mission essential tasks as a staff during Warfighter Exercise (WFX) 18-05 at Camp Atterbury, IN, during May and June. The 5-159th General Support Aviation Battalion (GSAB) completed a rotation at the Joint Readiness Training Center at Fort Polk, LA, in July and August; the 8-229th Assault Helicopter Battalion (AHB) provided key aviation support for Northern Strike 18 at Camp Grayling, MI, in August; and the 2-228th Fixed Wing Theater Aviation Battalion (FW TAB) supported EUCOM and USAREUR during Saber Strike 18 in June.

The 11th ECAB continued the path to sustainable readiness. The 11th HHC conducted its first brigade level command post exercise since its activation in September 2017, utilizing the Mission Command Training Center at Ft. Carson, CO. The 7-158th GSAB provided assets in support of River Assault 18, Global Medic 18 and unit extended combat training (ECT); the 6-52nd FW TAB provided forward support to Operation Cryptic Dragon from Okinawa, Japan, throughout the Pacific Command area of operations; the 90th Aviation Support Battalion (ASB) continued improving their capabilities through a robust ECT; and the 1-158th AHB completed intense mission training and reported to Ft. Hood, TX for final mission training and validation for deployment.

Army Reserve Aviation continues to improve its performance of mission essential tasks. Our focus remains on readiness; from the individual to the brigade level. Our Soldiers continue to do their part to ensure we remain a key partner within the Aviation enterprise that can be counted on to execute every mission. I am thankful to BG Scott Morcomb for his due diligence as my predecessor and to the leadership team who brought the ARAC to the place it is today. I am proud to lead this organization and look forward to serving with this incredible team of professionals as we continue building a world class aviation fighting force that is ready to deliver whenever the Nation calls.

BG Jami Shawley is the commanding general and COL Andrew Doehring is the former deputy commander of the U.S. Army Reserve Aviation Command located at Fort Knox, KY.

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From the New USACRC Commander

By BG Timothy J. Daugherty

As the newly assigned commanding general of the U.S. Army Combat Readiness Center and Director of Army Safety, I want to take the opportunity to thank you for what you do each and every day to keep our Army strong, capable and ready.

U.S. ARMY PHOTO

BG Daugherty

While I am a Field Artillery officer and my deputy commander, COL Christopher Waters, will pen most of the USACRC's articles for this publication, I would be remiss to not introduce myself and offer my team's services for your risk management needs.

Our outstanding men and women who wear the Army uniform, backed by a professional team of Department of the Army Civilians, are the foundation of our Army, which is without question the finest ground force in world history. Leaders at all levels, individual Soldiers and the Army Safety and Occupational Health community have tirelessly worked together to drive down mishaps during the past decade. I am proud to serve alongside them and honored to lead the effort in preventing loss and preserving our Army's readiness.

In my view, the USACRC has three primary lines of effort: ***Gather/Investigate***, where we receive accident data and conduct investigations into the Army's most severe mishaps; ***Analyze/Develop***, in which we analyze that data and develop policies, programs and tools to effect behavior change; and ***Deliver***, the processes whereby we push that information to the field. Many of you will be familiar with the steps in these LOEs, having reported or investigated mishaps at the unit level or from completing one of our resident safety training courses. None of the work we do happens in a vacuum; please help us stay on point by ensuring mishaps are reported in a timely manner and providing feedback on how we can improve our risk management products.

ARAP Loss Prevention Tool

I would also like to draw your attention to a loss prevention tool that is near and dear to me as a former commander: the Army Readiness Assessment Program. This survey-based tool provides commanders at brigade and battalion level actionable information derived from responses supplied anonymously by their Soldiers. It is one of the most powerful ways commanders can see inside their safety cultures and make improvements at every level of leadership. Yet some units, across all components, have either not registered for ARAP within the last three years or never registered at all.

Army Regulation 385-10, The Army Safety Program, requires that all new command teams of battalion or battalion-equivalent organizations register and complete an ARAP survey within their first 90 days of duty, with a midpoint survey encouraged (Forces Command units are required to complete the midpoint evaluation). Additionally, brigade commanders should know both the registration status of their battalions and their resulting scores.

Again, I cannot overstate the importance of this invaluable tool and the criticality of having all our formations in compliance with the Army's mandate. The ARAP portal is available online at *https://arap.safety.army.mil/*, and my team will be happy to answer any questions you have on registration or the survey process.

I look forward to the weeks and months ahead, as well as the opportunity to meet our Army's leaders, Soldiers and SOH professionals. Your observations, insights and perspectives are important to me as we move into the future.

Thank you for all your hard work, commitment and devotion.

Readiness Through Safety!

BG Timothy Daugherty is the commanding general of the Combat Readiness Center at Fort Rucker, AL, and the Director of Army Safety.

Our goal continues to be providing realistic and relevant training to Soldiers. In this article, Mr. Gary McKeeby offers insight into how the operational force can assist us in future training development. Above the Best! *COL Zampelli, Commander*

Critical Task and Site Selection Board – Mobile Teams (CTSSB-MT)

By Mr. Gary McKeeby

It's Monday morning and you are at your computer checking email. You open an email inquiring about your availability to participate in a Critical Task and Site Selection Board (CTSSB).

You like the idea of making a difference in your Aviation Military Occupational Specialty (MOS), but you can't imagine all of the work that will be waiting for you once you get back. You think...wouldn't it be great if these CTSSBs came to us? We've heard you, and we'd like to try something new.

One of the challenges at the 128th Aviation Brigade is enlisting subject matter expert (SME) participation in the CTSSBs that we convene for the eleven Career Management Field (CMF) 15 courses that belong to the 128th AB. CTSSBs are crucial in developing quality and relevant training; TRADOC Regulation 350-70 describes CTSSBs as a management device that serves as a quality control function in critical task selection. CTSSB members determine the critical tasks for their MOS based upon their expertise and the job analysis survey data; the CTSSB also prioritizes tasks for training.

The 128th AB designed and developed the construct of a Critical Task and Site Selection Board-Mobile Team (CTSSB-MT). The team will travel to different combat aviation brigades (CAB) and convene the boards at the active units. The CTSSB-MT is comprised of senior training specialists and staff members from the 128th AB Training Development and Quality Assurance Divisions. This team is a fully functional board that will complete a CTSSB in accordance with TRADOC regulations and pamphlets, at locations across the Aviation Enterprise.

Weighing the pros and cons of the CTSSB-MT, we identified issues that could surface when conducting the board at a single unit, such as environmental and/or regional restrictions (e.g., Germany quiet hours). Another example would be holding the CTSSB-MT at a unit in the south that may not face the same challenges as a unit in a colder climate. To mitigate this, we will enlist participation from the U.S. Army Reserve (USAR) and the Army National Guard (ARNG) from different geographic locations. In addition, the CTSSB-MTs will send board results to other CABs for input.

128th AVN BDE PHOTO BY CPT SEAN DWYER

"Our goal continues to be providing realistic and relevant training to Soldiers." (COL Zamparelli, 128th Avn. Bde. Commander)

The 128th AB plans to maximize time at the CABs by completing supervisor surveys which assist in determining the relevancy and quality of the training at advanced individual training (AIT). After graduation, a survey is sent to both the graduating Soldier and their supervisor. The survey asks if the Soldier is performing the tasks they were taught at AIT and how well they are performing these tasks. This vital information can help identify training deficiencies or training requiring updates, in order to stay relevant to the operational force. By performing these surveys in person we are able to communicate face-to-face with supervisors, explain how Soldiers are trained, and get ideas for improvements to training.

The first CTSSB-MT is set to be held at Ft. Bragg, NC 26-30 November 2018 in support of the 15Y MOS. After the board is concluded a detailed after action report will be completed and adjustments to the team and our processes will occur. Stay tuned and check your email, your unit may be next in our CTSSB-MT process!

Mr. Gary McKeeby is the chief of the Training Development Division of the 128th Aviation Brigade at Joint Base Langley-Eustis, VA.

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U.S. Army Mi-17: Past, Present, and Future

By Mr. Kevin T. Cahill

In 2006 the Aviation Engineering Directorate (AED) of the Aviation and Missile Research, Development, and Engineering Center (AMRDEC) was directed to take responsibility for airworthiness of U.S. operated Mi-17 helicopters.

Previous airworthiness responsibility resided with the Threat Systems Management Office (TSMO) managing the Mi-17 program. AED determined that there were high risks areas with respect to operating and maintaining the Mi-17 due to the fact the U.S. Army did not have any engineering data or technical cognizance of the aircraft. These risks were adjudicated through the Army Safety Action Team (ASAT) process and eventually accepted by the Vice Chief of Staff of the Army with the direction to develop plans for reducing the risk level. Due to uncertainties with the design, AED implemented a Service Life Reduction Program which cut the service life by approximately 25-50% on eighteen critical components. This action reduced the risk category from High to Serious.

The Non-Standard Rotary Wing Aircraft Project Management Office (NSRWA) initiated purchase of numerous Mi-17-V5 helicopters directly from the Russians and the original equipment manufacturers (OEM); the contract included a requirement for AED to perform an assessment and technical interchange with the Russian Military Airworthiness Authority (MAA), Mil Moscow Helicopter Plant (MMHP), Kazan Production Plant, and other technical organizations. Through the process of site visits and numerous technical interchanges, AED recognized the Russian MAA as a competent airworthiness authority. This action resulted in further reduction of the risk to the Medium category.

For the past twelve years the Mi-17 and its variants have been a workhorse for both the U.S. Army Special Mission Wing (formerly the Air Interdiction Unit, AIU) and the Afghan Air Force (AAF) performing various functions from counter-narcotics missions to direct battle engagements. In addition to V5 aircraft being purchased with Western cockpits and crashworthy crew seats, and legacy 1V aircraft being modified with Western cockpits and crashworthy crew seats through OEM service bulletins, the NSRWA PMO recently re-chartered as the Multi-National Aviation Special Project Office (MASPO), and implemented other modifications using an AED qualification process. The Defensive Weapons Upgrade (DWU) added the capability for the installation of the M134 and M240 machine guns in the doors and windows. The Ballistic Protection System (BPS) provided improved protection for the crew, passengers, and critical drive components. The development of the internal crashworthy auxiliary fuel tank replaced the previous non-crashworthy OEM tank. Based on a request from the user community, a Fast Rope Insertion Extraction System (FRIES) capability out the back of the aircraft was designed and qualified. An aircraft survivability equipment (ASE) suite is currently being installed to address potential developing threats.

PHOTO BY KAZAN HELICOPTERS, OCT 2011

Mi-17V5 helicopter under production at Kazan Helicopters Plant, Kazan, Russia

The majority of Mi-17 aircraft overhauls and heavy repairs have been occurring in Eastern Europe due to their technical expertise, use of the aircraft, and relationship with Russia. Some overhauls have also occurred in the United Arab Emirates (UAE) as well as some initial efforts in Kabul, Afghanistan. The standard requirement for an overhaul facility is an Interstate Aviation Committee (IAC, the Russian version of the FAA) or an AED recognized Military Airworthiness Authority (MAA) certification along with OEM certification and/or a technical support contract. AED performs a site visit of the overhaul facilities and an airworthiness risk assessment identifying any shortcomings that may impose some level of risk for MASPO.

There are complications and risks in utilizing an aircraft for which the U.S. Army does not have complete technical cognizance. Technical support for overhaul, repair, and modification of fielded systems is difficult and labor intensive without complete supporting technical data. Communication with the OEMs has been constrained due to ongoing political issues and sanctions impacting the long term sustainability of Mi-17. Therefore the aircraft are slowly becoming logistically and technically more difficult to support without potential additional risks. The U.S. Army has started to look for alternatives. The future of Mi-17 appears to be a slow reduction of the fleet through attrition and gradual replacement by other aircraft such as modified UH-60A models for the Afghan Air Force.

Mr. Kevin T. Cahill is the lead aerospace engineer heading up the Aviation Engineering Directorate Mi-17 team, at the U.S. Army Aviation and Missile Research, Development, and Engineering Center, Redstone Arsenal, AL.

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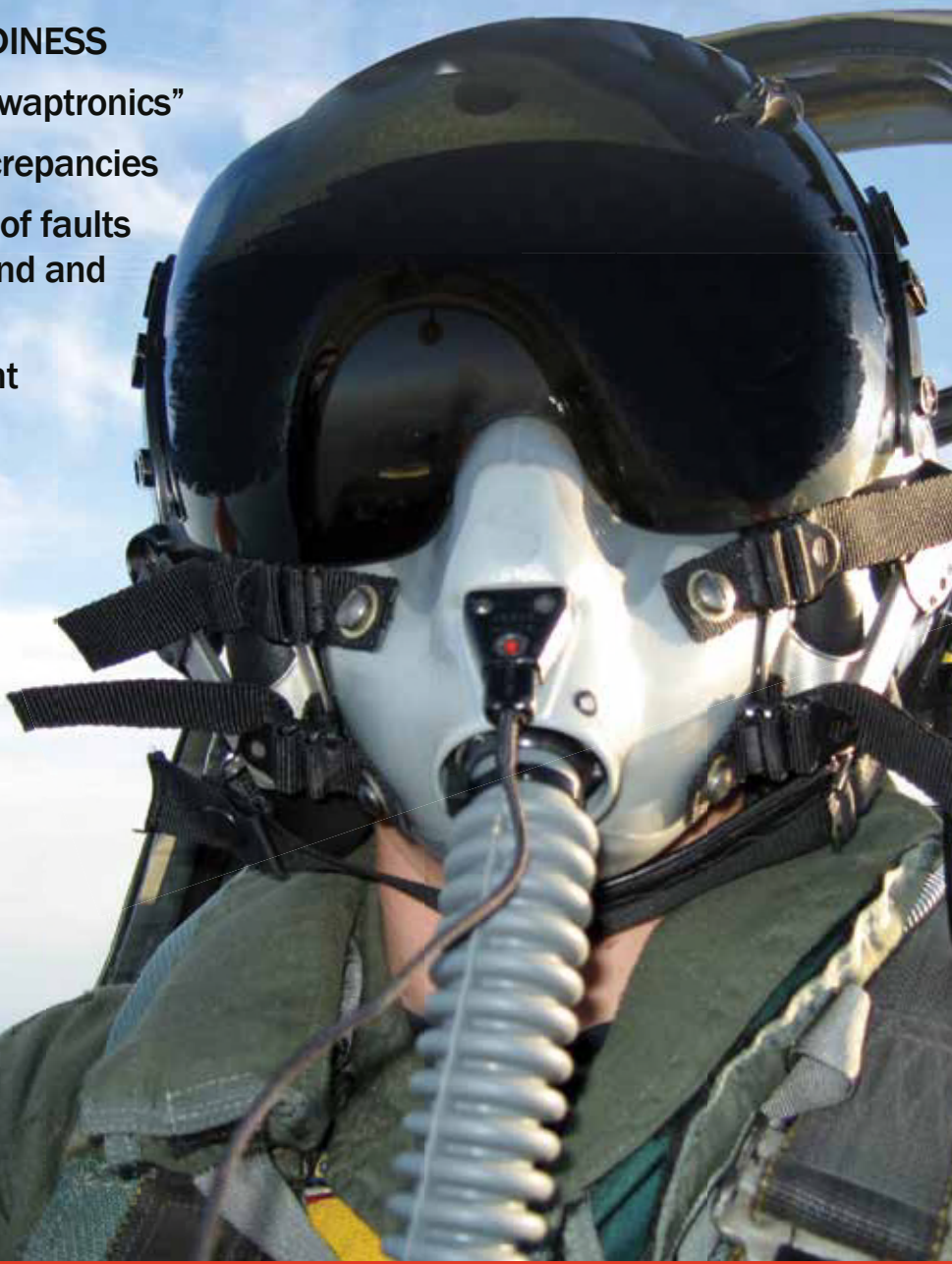

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Antibiotics

By MAJ Steven E. Brown, DO, MPH

Q: I have had a cold with a cough for a few days, but when I went to see my flight surgeon, I was not given antibiotics. Why not?

FS: It is a common misperception that people with cold or flu symptoms require a prescription for an antibiotic from their provider to get better. Antibiotics treat bacterial infections such as seen in strep throat, most inner ear infections or bacterial pneumonia. The majority of cold and flu symptoms however are caused by viruses and are therefore not affected by antibiotic therapy. Sinus infections are another common ailment that often lead to an expectation of antibiotic treatment. You might be surprised to know that sinus infections are also frequently caused by viruses. While it is true that viral sinus infections can eventually lead to a secondary bacterial infection, this typically takes ten or more days, and even then the infection may not require treatment with antibiotics. Selective and appropriate use of antibiotics is essential to avoid subjecting people unnecessarily to possible side effects like nausea, vomiting, diarrhea or strong allergic reactions. Furthermore, over-prescribing antibiotics can lead to decreased effectiveness of antibiotics (a.k.a. antibiotic resistance) that reduces our ability to fight bacterial infections when we really need to.

Q: What is antibiotic resistance?

FS: Before the discovery of antibiotic medications, people were at a high risk of dying from bacterial infections most Americans are not even familiar with today. Most have never met anyone infected with, let alone died from, tuberculosis, leprosy or bubonic plague. However, just 100 years ago, tuberculosis was among the leading causes of death in the United States. While these infections still exist, antibiotics (and vaccinations to prevent them) have made many of these killers of the past relatively inconsequential. Never-

theless, bacterial agents have continued to change in ways that can make antibiotics ineffective. Antibiotic resistance occurs when bacteria undergo genetic mutations or gain genetic material from other bacteria that allows them to defeat an antibiotic's mechanism of action. To some extent the development of antibiotic resistance is unavoidable, but this process can be greatly accelerated when antibiotics are used too frequently and for inappropriate lengths of time. The Center for Disease Control and Prevention (CDC) estimates that over 2 million illnesses in the U.S. each year can be attributed to antibiotic resistance. If antibiotics lose their efficacy against bacteria, we may find ourselves susceptible to the microbes we once thought we had conquered.

Q: Should I ask for antibiotics?

FS: It is always appropriate to have a frank discussion with your medical provider about possible treatment options, to include the prescription of antibiotics. Often, laboratory tests, as well as signs and symptoms of your illness, may indicate a viral illness or it may be too early in the course of an infection to determine if the cause is bacterial so your provider will recommend against antibiotic usage. This should not be interpreted as not receiving quality care. Watchful waiting is a treatment technique that consists of paying close attention to certain aspects of the illness, such as a high fever or prolonged duration, and taking action once the cause is more apparent. A follow-up appointment within a few days might be appropriate so that your provider can reassess your signs and symptoms and reconsider the need for antibiotic treatment.

Q: Can I fly on antibiotics?

FS: Most antibiotic medications are not, by themselves, disqualifying for flight. That said, most bacterial infections that require antibiotic treatment likely reflect a condition that should warrant a temporary break from flight activities as the symptoms themselves may distract from, or directly impact, safety of flight. In cases when antibiotics are used for prevention of infection, such as after stitches, or when they are used for long periods of time, such as for acne, antibiotics do not necessarily require grounding as long as your flight surgeon is aware of the situation and approves their use. Keep in mind, just as with any new medication, a trial period of at least 24 hours should be given to watch for unwanted side effects before resuming flight duties. All medications have a side effect profile (some more complex than others) so although common medications may be prescribed, waiting the 24 hours ensures we do not compromise safety of flight.

Fortunately, we still benefit greatly from antibiotics. In order to maintain antibiotic effectiveness, let us be good stewards of these medications.

Fly safe!

Dr. Brown

Questions?

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 (Dr.) Steven E. Brown is a flight surgeon at the U.S. Army School of Aviation Medicine, Fort Rucker, AL.

Project Manager Aircraft Survivability

Equipment Update

By COL Kevin S. Chaney

U.S. AIR FORCE PHOTO BY TECH. SGT. GREGORY BROOK

It is an honor to return back home to the Project Management Office for Aircraft Survivability Equipment (PMO ASE). Having previously served as the Product Manager for Infrared Countermeasures in PMO ASE, I'm well aware of the threats that our Soldiers face in all types of deployed environments. Additionally, I know that we have some of the brightest and most dedicated military and civilian personnel solving these complex challenges. Their passion to protect our Soldiers is what drives PMO ASE.

Thanks to the leadership and guidance of my predecessor, COL Jong H. Lee, PMO ASE is addressing current needs, while also posturing for the future. My challenge is to continue this evolution of capability for the legacy fleets and posture our products to support Future Vertical Lift (FVL) aircraft in the future. As you will see from the product updates below, PMO ASE has several efforts in motion in order to provide our Soldiers the best capabilities possible.

ASE Infrared Countermeasures (IRCM)

The ***Advanced Threat Infrared Countermeasures (ATIRCM)*** system continues to provide CH-47 aircrews protection against Man-Portable Air-Defense Systems (MANPADS) in combat and around the world. Over the past year, PMO ASE has been fielding ATIRCM systems to combat aviation brigades (CABs) outside of Operation Enduring Freedom, Operation Freedom's Sentinel, and Operation Inherent Resolve to increase the survivability of the CH-47 fleet. PMO ASE has continued to test the ATIRCM system against emerging threats and will continue to ensure that it remains relevant on the battlefield.

The ***Common Infrared Countermeasure (CIRCM)*** system is the light-weight follow-on system for ATIRCM that will provide aircrew protection for all rotary-wing, tilt-rotor, and small fixed-wing aircraft across the Department of Defense. CIRCM is a revolutionary leap in laser-based countermeasures technology and its open systems architecture will pace the threat for years to come. After completing a successful engineering and manufacturing development (EMD) phase, the CIRCM team is starting preparations for an initial operational test and evaluation (IOT&E) in the near future.

ASE Missile Warning (MW)

The AAR-57 ***Common Missile Warning System (CMWS)*** continues to protect deployed aircraft and personnel from MANPADS and hostile-fire threats. Fielding of the 3rd Generation Electronic Control Unit (Gen3 ECU) to rotary-wing aircraft is complete, with integration to select fixed-wing aircraft ongoing. The Gen3 ECU brings an increase in processing power and memory, improved threat algorithms, and hostile-fire detection capability for small arms and rocket-propelled grenades (RPGs). Multiple software updates and improvements run in parallel through the next few years to provide protection against emerging threat systems and to support foreign military sales (FMS).

The ***Limited Interim Missile Warning System (LIMWS)***, a QRC program, is the result of a directed requirement (DR). The DR validates the need to develop, procure, and field a missile detection system that provides an enhanced missile warning system to detect emerging and evolving enemy MANPADS threats.

A U.S. Army crew chief, assigned to Task Force Brawler, flying on board the CH-47F Chinook, observes the successful test of threat countermeasures during a training flight in Afghanistan, March 14, 2018. The Army crews and Air Force Guardian Angel teams conducted the exercise to build teamwork and procedures as they provide joint personnel recovery capability, aiding in the delivery of decisive airpower for U.S. Central Command.

LIMWS will detect infrared homing missiles and unguided hostile fire and protect aircraft by deploying flares and/or by cueing laser-based countermeasure systems. LIMWS will bridge the capability gap between the current legacy Program of Record (CMWS) and the next missile warning system, anticipated to be the Advanced Threat Detection System (ATDS). The LIMWS QRC contract was awarded in record time and began Initial Production in August 2018. The program is currently ahead of schedule, exploiting all obtainable risk reduction opportunities. The team is composed of eight joint U.S. Government/Vendor Integrated Product Teams and breaks the typical program management paradigm. The program's motto, "Hold the Rope," is a testament to the dedicated team effort.

Also in the Missile Warning portfolio of systems is the ***AN/AVR-2B Laser Detecting Set (LDS)***. The LDS is a passive laser warning system that receives, processes, prioritizes and displays threat information resulting from aircraft illumination by laser energy from laser designators, laser rangefinders and laser beam-rider missile guidance systems. LDS serves to increase aircrew situational awareness when being actively targeted by weapon systems utilizing emitted laser energy as a function of their targeting or target engagement process.

ASE Threat Warning (TW)

The Army adopted the Navy's ***APR-39D(V)2 Radar Warning Receiver (RWR)*** as a replacement for the APR-39C(V)1. The D(V)2 provides a generational leap in RWR capability not seen in over 20 years. It introduces digital technology, upgrades the processing capability of the AN/APR-39 family, and provides capability for today's radio frequency (RF) threat environment.

The next phase of improvement for the AN/APR-39 RWR will complete the transition from analog to full digital technology. The Modernized RWR (MRWR) enhances capability and increases performance over the entire RF spectrum. The MRWR will ensure capability against emerging agile threat radars.

ASE Common Systems Integration (CSI)

As the ASE mission has grown in recent years, the need to synchronize across each product line and address enabling technology within the ASE portfolio has become more apparent. This led to the establishment of the Product Director for ASE Common System Integration. The ASECSI office initially served to field urgently required quick reaction capabilities on a limited number of rotary-wing aircraft in response to a Joint Urgent Operational Need (JUON). The phased materiel solution approach meets urgent operational timelines and leverages advanced technology as they become available. The solution enhances both MW and IRCM capability and initiated fielding to supported units three months ahead of schedule. The CSI office is now expanding to address a number of other activities to include ASE training in both imbedded and integrated air defense (IAD) scenarios, open system architecture (OSA) strategies for more seamless integration of ASE capabilities onto Army platforms, and ASE requirements for the Army's FVL program.

Conclusion

The product updates described above highlight some of our immediate and mid-term priorities. As for the future, PMO ASE will continue to pursue multi-spectral detect and defeat technologies to outpace our adversary through a collaborative effort with our sister Services, industry, academia, and our science and technology organizations.

Although the leadership at PMO ASE has changed, our mission and passion for our job has not. Our adversaries continue to evolve, but we are aggressively pursuing better products and training aids to give our Soldiers the competitive advantage. Support to theater operations and our users in the field remain our highest priorities. User feedback is a critical part of our process and I look forward to meeting many of you at the upcoming AAAA 2018 Aircraft Survivability Equipment Symposium in Huntsville on 15-16 November 2018.

COL Kevin S. Chaney is the project manager for Aircraft Survivability Equipment located in Huntsville, AL, under the Program Executive Office Intelligence, Electronic Warfare & Sensors.

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This Isn't the TACOPS of Old – This Is the AMSO of Today

By CW5 James O. VanMeter

U.S. ARMY PHOTO SPC THOMAS SOAGGS, 10TH COMBAT AVIATION BRIGADE

CW2 Michael Hoehn, a UH-60 Black Hawk helicopter pilot in command with Company A, 2-10 Assault Helicopter Battalion, explains the way a formation of UH-60 Black Hawk helicopters will fly during a planning session at Plovdiv, Bulgaria, on July 7. U.S. Army Aviators were meeting with Bulgarian Air Force pilots to plan an upcoming combat search and rescue mission as part of exercise Saber Guardian 17.

As the Army refocuses on large scale combat operations (LSCO) against a peer/near-peer adversary, the mission of Army Aviation continues to evolve and adapt to meet the needs of the Warfighter. This mission evolution created a culture change in the training and application of rotary winged tactics and mission readiness. At each level within the combat aviation brigade (CAB) the aviation mission survivability officer (AMSO) gained a vital role in preparing the aviators and non-rated crewmembers for the tactical missions within a complex, contested battlespace. The AMSO provides combat readiness of the aviation warfighter through the understanding and training of aircraft survivability equipment (ASE) employment, advanced intelligence preparation of the battlefield (IPB), advanced mission analysis, tactical flight maneuvering, aviation mission survivability (AMS) training development, AMS program assessment, etc..

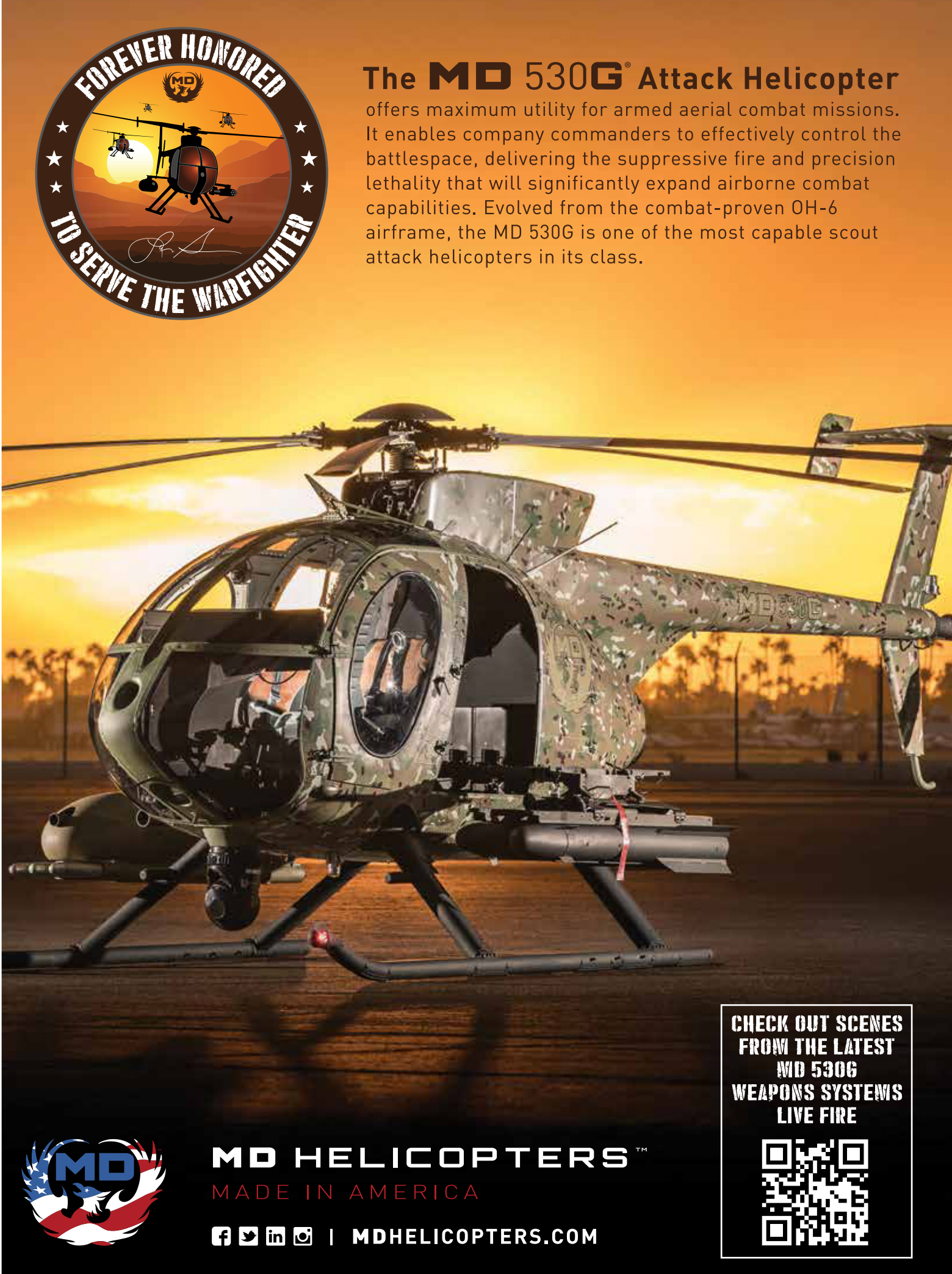
With the release of the 2018 Individual Critical Task List (ICTL) replacing the 2012 ICTL, the AMSOs gain 13 tasks, bringing the total to 21. The 21 tasks require the AMSO to become a primary trainer within the unit. With the focus on mission analysis, ASE, and tactics, the AMSO becomes invaluable to the unit's readiness. This growth of responsibility does not replace or impede the role of an instructor pilot (IP) but rather supplements and standardizes the tactical mission training across the force. Each commander should leverage the skills and experience of the SP/IP and AMSO to balance the unit's training plan and expand the skill set of each aviator within his/her formation. The shift from counter-insurgency (COIN) to LSCO is happening quickly, and the Survivability Branch is working diligently to update and create the doctrine, revise training, and validate tactics that enhance survivability across all missions and airframes. These initiatives require the dedication and perseverance of the AMSO to disseminate and educate at all levels throughout the Army. This article provides insight into the immense efforts to ready the force while seizing the opportunity to shape and influence commanders, warfighters, and our industry partners to invest more in this critical Aviation team.

AMSO Course

The Survivability Branch in concert with Aviation Survivability Development and Tactics (ASDAT) and Directorate of Evaluation and Standardization (DES) began a complete review and revision of the AMSO course in third quarter FY18. The initial revision of the academics and course structure goes into effect second quarter FY19 to increase the AMSO knowledge and capabilities during the interim. The revised AMSO course requires completion of testable prerequisites designed to establish a baseline of knowledge at the beginning of the instruction. The enhanced advanced academics are a combination of lecture, briefing, group projects and practical exercises designed to build from a mission pilot-in-command to an advanced graduate level trainer within their unit. An entire module focuses on AMS training and development, fundamentals of instruction and methods of instruction (FOI/MOI), and added simulator hours to develop skills in the application of evasive maneuvering flight tactics. Including the test on the prerequisites, there are three challenging exams, a peer-reviewed brief on threat analysis, and a graded final exercise that incorporates the knowledge gained during the course. The review also determined the need for course growth to support additional training and expertise required to support the new ICTL and tactics trainer responsibilities. The requested growth is under review by USAACE Directorate of Training and Doctrine (DOTD) and will advance to Training and Doctrine Command (TRADOC) for action and approval.

ASE Program Focus

The Branch's ASE program continues to grow at a rapid pace and requires significant devoted effort to training and sustaining aviation readiness. The AMSO must be fully immersed in the world of diverse sensors, interactive communication systems, and enhanced protection systems that provide increased capability and situational awareness. Digital systems of today provide precise networked outputs faster than the Warfighter can process. To fully employ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Soldiers with Company B, 6th General Support Aviation Battalion, 101st Combat Aviation Brigade, 101st Airborne Division (Air Assault) and the 3rd Brigade Combat Team participate in a large-scale air assault training exercise January 19, 2018 at Fort Campbell, KY.

these capabilities and understand the limitations of these systems, the knowledge and training requirements have to actively parallel the growth. To accomplish this, AMSOs must focus on Objective T/ Mission Essential Task List (METL)-defined readiness with a thorough understanding of the training capabilities and resources available (e.g., computer-based, academic support packages, simulation, and live environments).

AMSOs must harness advanced cognitive ASE Training Aids Devices Simulators and Simulations (TADSS). These include computer-based ASE training (CBAT-O/M/C), aircraft technical simulators, Aviation Combined Arms Tactical Trainer (AVCATT), and Man-portable Aircraft Survivability Trainer/ Weapons Effective Signature Simulator (MAST/WESS). Future TADSS capabilities include Training ASE Simulation Suites (TASS) and ASE B-Kit Emulators (ABE). These TADSS each have unique strengths that must be leveraged, as well as weaknesses that must be mitigated by the AMSO, to provide the optimal training environment for the Warfighter. With the rapid development of new threats by our adversaries, changes in associated tactics techniques and procedures (TTP), and delay in fielding/ receipt of newly updated training aides AMSOs must be proactive and creative in the use of fielded TADSS to provide the knowledge and skill-sets necessary for success in future operations.

Mission Planning

Given Army Aviation's dynamic battlespace, the ability to apply decisive combat power with joint and coalition forces is paramount. The ability to synchronize operations with joint enablers begins with accurate and timely mission planning, allowing precession aviation operations anywhere on the battlefield. Within the Aviation Mission Planning System (AMPS) arena, Army Aviation continues to overcome these challenges while pursuing advanced interoperability, connectivity, and synchronization enhancements for mission planning in a LSCO. To implement this ability Army Aviation began fielding AMPS version 7.7 with the Execution Planner (XPlan) software. The XPlan software provides an improved multi-service replacement to the legacy Portable Flight Planning Software (PFPS) within the mission planning environment and meets Windows 10 Compliance. These enhancements will maximize Army Aviation support in all environments worldwide. Overseeing this transition, the Aviation Networks and Mission Planning (ANMP) product office provides the support and troubleshooting assistance through the AMPS Help Desk which can be reached 24 hours a day, 365 days a year to support the warfighter whether serving CONUS or OCONUS in support of operations.

Tactics Development

Working with Army and Joint agencies the Survivability Branch completed the Aviation Radar Frequency Survivability Validation (AVRFSV) Quick Reaction Test (QRT) in early FY18. The AVRFSV provided verified and validated aviation tactics to the joint rotary wing community while addressing a critical war-fighting gap for the services and combatant commands, and allowing aviation assets to remain survivable against current and emerging threats. Several classified and unclassified doctrinal products, to include a tactics manual, flight tasks, and training support packages (TSP), have been approved and published from DOTD based on the collected AVRFSV data analysis. A current effort is underway to conduct the Joint Aviation Multi-ship Survivability Validation (JAMSV) QRT throughout FY19. The JAMSV QRT will optimize the use of fielded ASE, inform multi-ship TTPs, and enable freedom of maneuver in an anti-access aerial denial (A2AD) contested environment. Additional doctrine updates are expected in FY20 from the data analysis collected in JAMSV QRT.

Summary

A multi-tiered approach must be used to overcome the challenges of today's resource limited force while synchronizing modernization with combat readiness. The production of viable and relevant doctrine will provide measureable goals to unit commanders. The improvement of simulated and synthetic training systems will provide realistic training necessary for aviator proficiency. The upgrades and improvements to ASE increase aircraft survivability against emerging threats. Each tier of effort is important but a blended solution provides necessary readiness across the multi-domain battlefield. The training burden upon each aviation unit is immense and time consuming. Success relies on improving and refining the training and skillsets provided to the AMSO tracked aviators enabling them to meet readiness challenges and ensure the Aviation Warfighter will be ready to fly, fight and win on a dynamic, complex and contested battlefield.

Note: The Survivability Branch is always searching for interested and qualified personnel. If you feel that you have the experience and the ability to contribute to the Aviation Branch's survivability areas of concentration, contact the DOTD Survivability Office for a consideration packet.

Above the best!

CW5 James O. VanMeter is the chief of the Survivability Branch, Directorate of Training and Doctrine, U.S. Army Aviation Center of Excellence at Fort Rucker, AL. Additional major contributors to this article were: CW4 Lee Kokoszka, CW4 Kenneth Kimber, CW3 Christian Ramirez, CW3 Cesar D. Urquiza and Ms. Deborah Countryman.

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Aviation Survivability Development and Tactics Team, USAACE

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Aircraft Combat Damage Reporting

By CW5 R. Scott Brusuelas

Reporting and collection of aircraft combat damage is vital to improving the survivability of both current and future aircraft. Design standards derived from the analysis of aircraft combat damage incurred in Vietnam were used to integrate improved survivability standards into the current Army Aviation fleet. This has driven the Operations Iraqi and Enduring Freedom (OIF/OEF) combat loss rate to seven times less than those observed during the Vietnam era. Army and Joint agencies use aircraft combat damage and loss data in order to make informed development and procurement decisions. The last 15 years of combat has generated survivability improvements in the form of material solutions (e.g., Common Missile Warning System (CMWS)), as well as procedural changes (e.g., UH-60 boost pumps). Additionally, aircraft combat damage data has provided commanders with information to determine if current tactics, techniques, and procedures (TTPs) are effective and/or need modification; or if new TTPs are needed in order to decrease the susceptibility of being successfully engaged by the enemy.

The Aviation Survivability Development And Tactics (ASDAT) team, the Army element of the Joint Combat Assessment Team (JCAT), is tasked to investigate and report on aircraft combat damage incidents. These reports are used to assess the threat environment for operational commanders, and collect data to support aircraft survivability research and development. Reporting and collection of aircraft combat damage increases the affordability, readiness, and effectiveness of tri-service aircraft through the joint coordination and development of survivability technologies and assessment methodologies.

In an effort to improve the reporting process, the Joint Aircraft Survivability Program Office (JASPO) submitted an Aircraft Combat Damage Reporting DOTMLPF-P [Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy] change recommendation to the Joint Staff. The change recommendation was approved on 29 November 2016 (JROCM 144-16) by the Joint Requirements Oversight Council (JROC). Approved changes include Joint doctrine updates to incorporate aircraft combat damage reporting capability in concept format/operational plans (CONPLANS/OPLANS), integrate aircraft combat damage reporting capabilities into aviation deployment planning, and establish a universal joint task for aircraft combat damage reporting.

In support of JROCM 144-16, ASDAT has updated the Army Aviation Combat Assessment Program requirements outlined in AR 95-1 dated 22 March 2018. Commanders are responsible for ensuring aircraft combat damage incurred during missions are reported, recorded, and submitted for assessment. Centralized aircraft combat damage assessments will be conducted by ASDAT or JCAT. However, when a centralized assessment is not called for IAW AR 95-1, or ASDAT/JCAT personnel are not available, units will collect the data and forward to ASDAT for assessment. Aviation mission survivability officers (AMSOs) and maintenance organizations will record aircraft combat damage caused by weapons and weapons effects. Recording via photographs of exterior and interior damage, as well as taking photographs of any effected components prior to

removal or repair. Once the damage collection is completed, the unit AMSO or designated personnel shall forward all photographs and the estimated cost of damage to the ASDAT team.

In order to provide the requisite training associated with these requirements, ASDAT, in collaboration with the Aviation Mission Survivability Officer (AMSO) course and the Survivability Branch, has developed an aircraft combat damage reporting and collection task. During the AMSO course students receive academic training and conduct a practical exercise on aircraft combat damage reporting and collection procedures. Additional training can be requested during ASDAT unit assistance visits or by attending the JCAT Phase 1 training. However, JCAT Phase 1 is limited in space available and prioritized based on deploying units.

Over the last 15 years the Army has led the way on aircraft combat damage reporting. ASDAT appreciates the level of effort and emphasis the field has placed on the aircraft combat damage reporting process. These policy updates help solidify the requirements for the aircraft combat damage reporting process. Additionally, the results of these efforts will continue to positively impact the survivability of the current Army Aviation fleet, as well as integrating survivability features on future Army aircraft.

CW5 Scott Brusuelas is the chief of the Aviation Survivability Development and Tactics Team (ASDAT), headquartered at the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.

Communication is Key:
ARAT Stays Connected to the Soldier

By Mr. Eric R. Bowes and CW3 Luciana Spencer

U.S. ARMY ARAT COURTESY PHOTO

ARAT-PO provides MDS for multiple systems on board all types of Army aviation as they work as a task force to complete the mission.

"If a tree falls in a forest and no one is around to hear it, does it make a sound?" The Communication Electronics Command (CECOM) Army Reprogramming and Analysis Team Program Office's (ARAT-PO) goal is to ensure effective communication through continuous contact with the customer at all levels. This ultimately results in a better product and service. Although ARAT-PO is the Army's infrastructure that develops, delivers, and sustains system software that enables cyberspace electromagnetic activities (CEMA), it is far more than engineers programming software. To produce quality products and service, the team engages, connects, supports, and educates Soldiers throughout the software development lifecycle.

Engage the Community

ARAT-PO established a six month process to update mission data sets (MDS). It begins with intelligence analysts performing a full Order of Battle (OB) review for a specified region to ensure any changes or new information is fully captured. ARAT-PO then reaches out to the user community, which includes the aviation mission survivability officers (AMSOs) in U.S. Army Aviation Center of Excellence's (USAACE) Directorate of Training and Doctrine (DOTD), Training and Doctrine Command (TRADOC) Capability Managers (TCMs), and system program managers (PMs) to solicit user requirements and prioritization. At this point, the user community provides MDS requirements based on mission and operational needs for eleven specific regions of the world.

Customer interaction with ARAT-PO provides invaluable insight from the field for direction and product refinement and helps to build trusted relationships between those who sustain mission software and those who rely on mission software for success in the operational environment. The DOTD Survivability Branch holds quarterly briefs for all AMSOs. While the TCMs and AMSOs work with ARAT-PO, they also prepare the user community for the upcoming changes and communicate with deployed personnel through weekly Department of the Army Military Operations–Aviation (DAMO-AV) hosted secure video tele-conferences. These ongoing status updates give brigade and battalion staffs the opportunity to plan implementation of the update after release.

Using the OB and customer input, threat analysts work the selected emitters that go into each MDS based on the lethality of the systems, the likelihood of encountering the systems, and our ability to detect and/or deny those systems. The TCM, with assistance from threat analysts, determines the priority list with specific parametric data to allow the engineers to program, simulate, and test each threat in the MDS.

ARAT-PO accelerates this process for a rapid release, required to satisfy an urgent operational requirement resulting from a new threat system moved into a region, or if a region's parametric data changes. Since rapid releases are critically time sensitive to the aircrews flying overseas in harm's way, ARAT-PO transitions to twenty-four hour operations to complete the update.

Deliver Software Updates to the Soldier

While the TCMs and AMSOs communicate requirements and help define priorities with ARAT prior to MDS build, they have significant input on the finished product as well. The TCMs and AMSOs review and give approval to the MDS final product including the kneeboard cards and pertinent notes as well as the software load.

The first direct communication between ARAT and Soldiers is when ARAT-PO delivers MDS products to Soldiers through an upload to the ARAT Warfighter Survivability Software Support Portal (AWSSSP) on SIPR. This immediately triggers an email notification, sent to all users via NIPR, that an updated MDS is available for download. AMSOs download the MDS to the Miltope computer, also known as the Aviation


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Left: Soldiers conduct a 500-hour Phase Maintenance cycle and upload an updated MDS on an AH-64E Apache.
Above: One of many visits by ARAT-PO to support units around the country.

Mission Planning System or "AMPS" box, and use mission loader variable (MLV) kits to connect to the appropriate aircrafts for upload.

Provide Support to the User

ARAT-PO support does not end with a posted software update. Reach back support is always available as oftentimes aviators and AMSOs have questions about the new MDS, such as, "What is the source of this new intelligence so I can share it with my S2?" Some AMSOs have specific questions about how the emitters work and, although this information may be available from other agencies in other locations, both the reputation of dedicated effort and the familiar working relationship ensure that ARAT-PO is the expert of choice for any questions. "ARAT typically responds to over 40 requests for information a month. Whether the need is operational or technical, ARAT has 24/7 reach back capability to provide support whenever needed."

CW3 Luciana Spencer, a member of the ARAT-PO TA team who spent 2017 deployed to Iraq as the 29th Combat Aviation Brigade AMSO, can attest to the constant support of ARAT. "Managing six platforms, with both infrared and radar ASE, across thirteen locations in five countries was made easier by ARAT's emails, phone calls, and updates."

Educate the Customer on Aircraft Survivability

Each Aviation Warrant Officer receives track-specific technical training and education to support their specified duties and responsibilities at the tactical and operational level. The AMSO fills the Electronic Warfare (EW) Officer role essential to Army Aviation units and serves as the expert, the trainer, and the advisor to the commander. Although ARAT-PO performs an important role in the education of all Aviators, its contribution to AMSO development is crucial.

Each AMSO receives their initial qualification training at the Army's Tactical Operations (TACOPS) Course at Fort Rucker, AL, where ARAT-PO provides instruction on its role and functions in support of their mission. ARAT-PO also provides an introduction to the AWSSSP and creates user accounts that enable AMSOs to download MDS software to load onto the aircraft ASE. Finally, AMSOs receive training for all fielded ASE systems on all Army Aviation platforms. This training is an essential part of unit operational readiness and a commander's awareness of the capabilities available to accomplish the mission.

AMSOs continue their Professional Military Education (PME) when they return to Fort Rucker for the Aviation Warrant Officer Advanced Course (AWOAC). At this level, the ARAT-PO provides updates on the Army's electronic warfare (EW) reprogramming priorities and reinforces the reach back capability integral to continued communication. In addition, ARAT-PO provides a Mission and Capabilities briefing to all AWOAC students, regardless of their career track.

AMSOs and ARAT-PO have a career-long relationship and the communication between the Army's Survivability Community and ARAT-PO is indispensable. The mission essential task of "reprogramming" ASE is enabled only through the diligent support of ARAT-PO. This collaboration directly contributes to Army Aviation's ability to support the commander's intent and mission accomplishment in any operational environment.

Experienced Users Become Sustainers

Continued communication with the field enhances the effectiveness of ARAT-PO. ARAT inherently maintains connection to the customer by including previously deployed members of the military as part of the team and in fact, several of the analysts and developers are current or former users of the products ARAT provides.

For example, TSgt. Adam J. Baddeloo, a member of the USAF Reserve 512th Aircraft Maintenance Squadron, Dover, DE, works as a lead test engineer for the Common Missile Warning System (CMWS). His electronic warfare (EW) experience spans 18 years across multiple Army and Air Force radar and infrared (IR) platforms. "I've seen the CMWS system work first hand on more than one occasion, that's probably why I'm the happiest person on the team. I owe my life to ASE. CMWS/ASE works and I'm proud to continue the legacy of saving lives."

Throughout every step of the process ARAT-PO strives for constant improvement in its processes, products, and its relationship with its customers. Communication with its customers is a key element to allowing ARAT-PO to serve its customer – the Soldier – to the best of its ability and to accomplish its top priority of saving the lives of those who defend our Nation.

Mr. Eric R. Bowes is the program officer for the CECOM Software Engineering Center Army Reprogramming Analysis Team Program Office and CW3 Luciana Spencer is a threat analyst in support of the ARAT-PO. Both are located at

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Making Threat Warning Systems Smarter

By Mr. Ralph Troisio and Mr. Mark Calafut

U.S. ARMY PHOTO BY CAPT. SCOTT WALTERS, 3-4 ABCT

Infantrymen with 3rd Armored Brigade Combat Team, 4th Infantry Division, conduct an air assault in August with 3rd General Support Aviation Battalion, 10th Combat Aviation Brigade during the U.S. Army Europe Combined Resolve IX exercise at Grafenwöhr Training Area, Germany. Army S&T is pursuing aircraft survivability technologies across a spectrum of technologies and areas of expertise.

Artificial intelligence is a buzzword today. Films and television depict future worlds with super-human machines and ubiquitous technology. However, beyond these grand concepts, machine learning is a rigorous science and its results are already changing our lives. From smart phones to home automation devices, the capabilities and prevalence of these technologies are constantly increasing. The Army's Science and Technology (S&T) community is leveraging these advances to improve our future systems across many domains. It's not about setting unrealistic expectations, but instead about making smart use of academic and commercial trends to help our warfighters. The Army Aviation community will be one of the major beneficiaries of this approach.

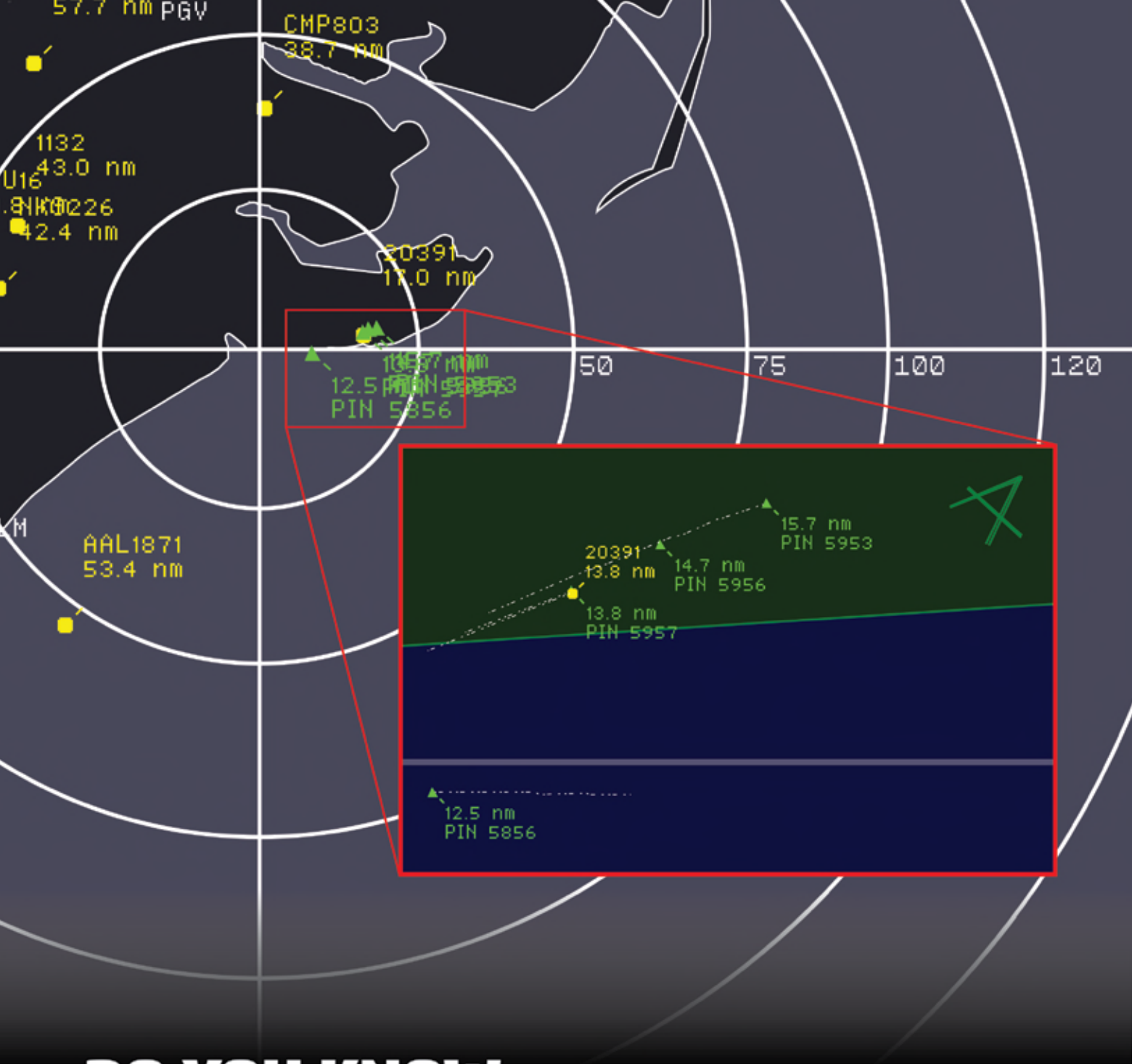
In the aviation survivability context, machine learning can help our systems in many ways. One important case is the use of machine learning to rapidly detect threats to aircraft. Machine learning offers the potential to analyze more data faster and more efficiently than ever before for this application. In coordination with new higher performance sensors, machine learning can enable a major jump in performance.

Proving the Approach with Argos

At the Communications-Electronics Research and Development Engineering Center (CERDEC), in FY17 we initiated the Argos S&T effort to develop and prove out this approach. In this effort, we are currently developing new sensor and signal-processing technologies to detect emerging and advanced threats to Army aircraft. The goal of the effort is to develop the key technologies that will help future threat detection systems to be as robust and effective as possible in all situations.

The signal-processing component of Argos is focused on the application of machine-learning to the threat detection problem space. Fundamentally, the goal of machine learning is to develop machines that can learn and behave in ways similar to humans. One key component of machine learning is to create a device that can teach itself to perform its function by using a source of data. This is conceptually similar to how human children learn through experience. The central goal of machine learning is to have the machine generalize beyond initial training data and accurately interpret new data that the machine has never experienced before.

Machine learning can be very useful to humans because machines can use high levels of processing to analyze large datasets, detect patterns that cannot be seen by human observers, and sift through new data very rapidly. Machines



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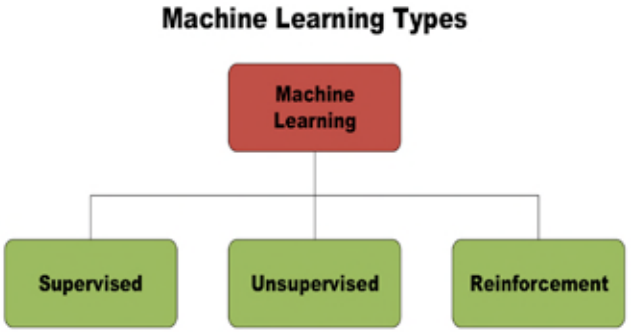

Figure 1. Types of Machine Learning

can also work in collaboration with human users to augment overall performance. For these reasons, machine learning approaches are being applied today across diverse fields, from medical disease diagnosis to political and economic forecasting.

Machine learning is also frequently used for many object detection and classification problems and is well-suited to the threat detection application. Machine learning methods are fundamentally divided into three major categories that are depicted in Figure 1.

Machine Learning Methods

The first of these methods is referred to as ***supervised learning***. In this scenario, the machine is provided with correct answers up front. The machine is given a training dataset with correctly labeled outputs. The outputs must be labeled manually, often by a human. The machine then uses the available labeled data to create its own method to determine outputs. For example, imagine that the machine is provided with an image of an object. If the object is a threat, the machine should recognize the object's characteristics, such as shape, and determine that it is a threat. Similarly, objects with different characteristics should be not be determined as threats. During the training process, the machine learns by matching its approach as closely as possible to the pre-labeled data. The question then is how effective the machine's approach will be when provided new unlabeled data, as would occur in the real world. Overall, supervised learning requires human involvement and is essentially task driven.

The second major machine learning method is ***unsupervised learning***. In this case, the machine is not provided with the correct answer up front. Instead the machine works to identify clusters or groupings of similar objects in the data. Objects with similar characteristics are assumed to be related. The machine can be told the number of clusters to expect or determine the number of clusters itself. The result is that the machine can map both existing and new data to its defined clusters, determining something about the underlying structure of the data. As in the previous example, imagine that the machine is provided an image. In this case, the machine may create a cluster that reflect objects of interest and other clusters that reflect clutter sources, based solely on their properties and without knowing which are important to the human user. This process is fundamentally data-driven and it may be useful to have the results interpreted by a human.

The third major machine learning method is referred to as ***reinforcement learning***. In this case, the machine is given an objective or reward function. This tells the machine whether an outcome is positive or negative and to what extent. Using trial and error, the machine develops its own method or policy to achieve the most positive outcomes. The machine will try many policies and iteratively adjust the policies to improve, effectively learning from its mistakes. The different machine

Figure 2. Example Results. The confusion matrix illustrates how successful the machine was in identifying the correct output. High scores along the green diagonal indicate successful outputs.

learning methods can also be employed together, with different methods applied to different aspects of a larger problem.

The Argos S&T effort, as well as machine learning in general, relies critically on the quality of data available to teach the machine. For this reason, Argos began with data acquisition focused on the threat warning problem space. In coordination with the greater aviation community, the Argos team gathered and consolidated live data to support development. The team also identified simulation tools capable of generating accurate synthetic data.

With data available, the next steps were to select and then implement the algorithms. This is a challenging problem due to the large number of alternatives. The Argos team surveyed candidate approaches from across academia and industry, and selected multiple promising candidates. In CERDEC laboratories, the team is currently assessing these approaches across key elements of system effectiveness, including both ability to detect threats and to reject false alarms. This process will continue to be flexible, taking advantage of new techniques, data sources, and computing technologies. Example results are shown in Figure 2.

The Argos machine learning based approach also offers benefits beyond performance. Threat detection systems using machine learning will be significantly more flexible and adaptive than historical systems. As new datasets become available, systems will be able to be updated very rapidly to ensure effectiveness. This is of critical importance as Army Aviation faces the challenge of complex operating environments and new and emerging threats. It's also important to note that Argos is only one example of a larger S&T trend. Across the S&T roadmap, machine learning is now being applied in many domains to solve challenging problems, improve technical performance, and increase adaptability.

Mr. Ralph Troisio is the chief and Mr. Mark Calafut the senior engineer of the Electronic Warfare Air/Ground Survivability Division of the Intelligence and Information Warfare Directorate (I2WD), Communications-Electronics Research, Development, and Engineering Center (CERDEC), U.S. Army Research, Development, and Engineering Command located at Aberdeen Proving Ground, MD.

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Product Manager Air Warrior 2018 Update to the Field

By LTC Bryan Bogardus

A crew chief on a UH-60 Black Hawk keeps watch on a mission.

PM AW COURTESY PHOTO

The Product Manager Air Warrior (PdM AW), serving under Project Manager Soldier Warrior (PM SWAR) within Program Executive Office Soldier (PEO Soldier), is chartered by the Army Acquisition Executive to develop and field Aviation Life Support Equipment (ALSE). The AW product office improves rotary wing crewmember mission effectiveness and survivability through continuous improvements to the equipment worn or carried by the aviation Soldier. This equipment includes flight helmets and helmet mounted displays; mission gear carriage and associated personal survival equipment; and protective equipment and systems required for missions in hostile environmental conditions including extreme heat or cold, overwater, and high altitude mission. The PdM AW integrates the aviation Soldier with the aircraft platform to enhance aircrew survivability and Situational Awareness.

The modernization of Army aviation crewmember mission equipment continues in 2018 through the ***Air Soldier System (Air SS)***. The Air SS reduces aircrew load through the reduction of bulk and weight of the current equipment worn by Army rotary wing crewmembers, and improves aviator situational awareness through new helmet mounted displays, enhanced flight symbology, and electronic mission equipment. 2018 was a milestone year for the PdM AW with the successful completion of initial operational test and evaluation of Air SS capabilities specific to the UH-60L Black Hawk. The test was supported by the Army National Guard in Jackson, TN where aircrews formally evaluated the Air SS configuration for the UH-60L including the new Computer Display System (CDS), a replacement for the legacy Electronic Data Manager. The CDS provides the crew with Blue Force Tracking and digital moving map capability and consists of two Mission Display Modules (MDM), mounted outboard of the glare shield on the UH-60L instrument panel (one for each pilot), each driven by their own detachable center console-mounted display processor known as the Soldier Computer Module (SCM). The UH-60L aviator uses the SCM to load mission planning, route, and threat data and displays that data on the MDM, enhancing aircrew tactical SA and survivability. The TN NG aviators also provided feedback to the Army test and evaluation community regarding Air SS SA capability including 3D conformal symbology and other pilot line of sight.

In 2018 the PdM AW team supported deploying combat aviation brigades with lightweight Air SS body armor and the improved HGU-56/P Rotary Wing Helmet (RWH). Replacement of legacy aft crewmember restraint systems with the Quick Release Extension Tether (QRET) also continued providing Utility and Cargo crews with a means of rapid disconnect and emergency egress while resolving a safety issue with the legacy crewmember tether.

The AW product office also concluded preliminary design reviews for the ***Aircrew Combat Equipment (ACE)***, the integrated survival vest that will replace the current Primary Survival Gear Carrier (PSGC) beginning in FY21. The ACE incorporates new textile technologies and integrates and distributes protective and survival equipment, Soldier power, and personal mission electronics to achieve an additional 20-25% reduction in bulk and weight as compared to the current Air Warrior system. The ACE will provide digital control of aircrew-worn connected devices and wireless power to eliminate tethered connections between the aircraft and the non-rated crewmember. The PdM will accomplish this by integrating Soldier-worn electronics and power supplies via miniaturized, highly durable USB/power connectors and electrical distribution mechanisms incorporated into the survival vest in lieu of bulky external cables and connectors.

The AW team was also fully engaged in 2018 working towards the contract award of the new digital ***Common Helmet Mounted Display (CHMD)*** that will replace the analog Heads-Up Display (HUD) in the UH-60 and CH-47 aircraft. The CHMD will provide a wider field of view and en-

hanced color symbology to increase aviator SA while resolving the obsolescence of the legacy HUD. The PdM's objective is one CHMD for use both day and night in order to reduce cost and to increase the acceptability and use of HMDs within the Army Aviation community. Contract award is expected by year end followed by individual platform qualification testing in Fiscal Year 2019.

Rescue hoist training with a UH-60 Black Hawk.

Electronic Flight Bag (EFB) Update

Another high priority capability the AW team focused upon in FY18 is the requirement to field an Electronic Flight Bag (EFB) capability. The primary mission of the EFB is to consolidate and replace the paper publications that aircrews are required to use with a computer tablet. The EFB has the potential to fundamentally change the way aircrews perform their missions. The PM AW embraces this transformation and is developing applications focused on enhancing aircrew situational awareness and safety while reducing cockpit workload.

While the use of the EFB greatly enhances the mission effectiveness of Army Aviators, it also poses challenges to the status quo with regard to logistics, cybersecurity, and airworthiness qualification in the Army acquisition process. To that end, the PM AW team is executing a plan to deal with these areas while focusing primarily on the user's experience (UX). The goal is to give aircrews the UX they desire (use of the latest commercial products, with minimal training required, and up-to-date apps) while ensuring the latest technology is fielded before it becomes outdated. This requires us to rethink our processes and gain buy-in with our contracting, test, and requirements communities to support new and innovative acquisition approaches.

To align the process required by the Army to field a new piece of equipment with the dynamic commercial tablet computer and software app industry refresh tempo, PdM AW negotiated with industry leaders in these areas to assure a baseline level of airworthiness requirements, user functionality, and cockpit compatibility are included in the next generation of the most common commercial products currently in use by Army aviators. By leveraging recent Army initiatives promoting the use of commercial off the shelf (COTS) hardware and software, the AW team reduced the normal 18 month qualification test and cyber security approval process for the EFB in half. The program has been designed in such a way that refreshing the various COTS components, (e.g., tablet, operating system, apps, management software, content distribution, etc.) should not require re-qualification of the entire EFB system.

One way Air Warrior EFB Program addresses logistics and cybersecurity is the use of Mobile Device Management (MDM). MDM is an industry term that refers to remote management of a commercial computer or tablet utilizing either on premise or cloud-based servers to allow an organization to dictate the security and configuration settings on a device. Utilizing these management tools simply means that Air Warrior, along with a unit's local EFB Administrator, will be able to remotely keep our devices "healthy" with system patches, app and OS updates. This means that units will no longer require a full time EFB Officer to have a successful program, as all of the back-end work will be done via MDM.

In summary, under the PEO Soldier, the PdM AW develops, fields, and sustains Army ALSE and provides enhanced aircrew SA and safety. Our focus is on integrating the soldier–both air and ground–with current and future aviation platforms and with the battlefield. The Air Soldier System increases Army aircrew situational awareness and mission effectiveness. All of these capabilities ultimately result in an overall increase in the effectiveness of the aircrew.

LTC Bryan Bogardus is the product manager, Air Warrior located in Huntsville, AL, under the Program Executive Office, Soldier.

The Aviation Systems Project Office

By COL John Frasier and Mr. Craig Besaw

ALL GRAPHICS COURTESY AVN. SYS. PMO

The sole reason that the Aviation Systems Project Office exists is to support the combat aviation brigade (CAB) and the entire Army Aviation enterprise. Our products enhance the capability of current and future aviators, maintainers, and command teams to execute rotary wing, fixed wing, and unmanned aerial system missions and maintenance. Our mission software, secure radios, air traffic control, tools & test sets, and future advanced pilotage systems define the architecture backbone of all Army platforms. We partner every day with the Training and Doctrine Command (TRADOC) Capability Manager for Aviation Brigades (TCM-AB) to ensure our efforts are aligned with the Field's priorities. With over forty-nine distinct product lines, the Aviation Systems PO plays an integral role in maintaining, communicating, planning, executing, and safely negotiating the CAB battlespace. Aviation Systems is committed to remaining modernized, relevant, adaptable, and survivable – just like the professional aviation enterprise we support.

Aviation Network and Mission Planning (ANMP) – ***Open Systems Architecture***

Army Aviation has pursued a common open system architecture (OSA) for years, but safety critical constraints and proprietary interfaces have blocked effective implementation. The Aviation Mission Common Server (AMCS) will solve this elusive OSA challenge. Sitting on a certified, multi-core computing environment, AMCS's certified operating system will support multiple interchangeable applications: cyber; situational awareness common with the ground force; weather; communications planning; and payload applications such as target recognition. Aviation Systems, with PEO Aviation, has initiated model-based system engineering and architecture activities that will support successful implementation and certification of AMCS. AMCS will be both the 'door and the lock' for future aircraft – providing rapid response, lower life-cycle cost, increased reliability, and quicker insertion and integration of future applications.

Aviation Mission Equipment (AME) – ***Modernization Efforts***

Army Aviation communication, navigation, and surveillance products will continue to evolve to counter emerging threats and meet commercial airspace mandates, while supporting the Army Aviator in a combat and training environment.

Army Aviation communication suites will evolve to crypto modernized software defined radios allowing for the more rapid introduction of emerging waveforms, such as the next generation satellite communication Mobile User Objective System, SATURN, and Advanced Networking Waveforms.

Army Aviation navigation is postured to implement assured-position, navigation, and timing capabilities such as resiliency software, improved selective availability anti-spoofing, incorporation of next generation military GPS M-Code capability, and alternative navigation and timing technologies all critical for operation in a GPS denied or degraded environment.

Army Aviation surveillance will continue to pursue smaller, more effective transponders to address cyber-security, size, weight, power, and obsolescence, while supporting emerging global air traffic management requirements.

Enhanced commander situational awareness continues to be a priority. The intent of future Blue Force Tracking systems is to fill technology gaps and concerns such as low probability of intercept and low probability of detection, operations in a satellite denied environment, and additional satellite communication channel capability, among others.

Air Traffic Control (ATC) – ***to 2021 and Beyond***

The Air Traffic Control (ATC) Product Office is posturing itself to develop new systems to meet future threats. Ensuring Army ATC is best postured to remain a key enabler for Army Aviation, the Department of the Army continues its review of the Army's current ATC capability to determine the best way to shape the community and possibly TCM-AB has initiated the development and approval process for the next generation of systems for both the Tactical Airspace Integration System (TAIS) and Air Traffic Navigation, Integration, Coordination System (ATNAVICS).

Users should anticipate a new radar with increased fidelity and range, Soldier-friendlier, with more robust fusion of air track data and mission command focus. Regardless of future direction, the ATC community will provide continued tremendous support to Army Aviation, providing air traffic services that reduce operational risk and enable the world's finest pilots to execute their mission.

Aviation Ground Support Equipment (AGSE) – *Modernizing Maintenance*

The Aviation Ground Support Equipment (AGSE) Product Office is aggressively pursuing a commercial Next Generation Auxiliary Ground Power Unit (NxGen AGPU). Industry has made invaluable investments in converting the NxGen AGPU from a Turbine to a Diesel Engine (increasing fuel efficiency, reducing noise), along with advanced filtration to remove water and particulates from hydraulic fluid. These enhancements will pull AGPU into the next century.

Closer to now, AGSE recently executed a contract award on the Expeditionary Self-propelled Crane Aircraft Maintenance and Positioning Increment II (SCAMP II). The SCAMP II is internally transportable by CH-47, enhancing forward maintenance and Downed Aircraft Recovery. AGSE will complete some heavy lifting and begin fielding SCAMP II in late 2019.

Degraded Visual Environment (DVE) – *Future Vision*

The Degraded Visual Environment (DVE) Product Office vision is to equip Army Aviation with evolving modular and scalable degraded visual environment solutions that provide a tactical advantage while increasing survivability and reducing Soldier burden.

The DVE PO is currently responding to a Quick Reaction Capability Directed Requirement to provide an immediate situational awareness capability for the HH-60M to operate in a degraded visual environment through a fused sensor system with overlaid symbology. In parallel, the DVE PO is leveraging the science and technology communities' achievements and knowledge products as a foundation for growth toward a fully integrated semi-autonomous capability. The DVE PO's approach is to evolve innovative situational awareness solutions for the current Army Aviation fleet and the maturation of pilotage and semi-autonomous degraded visual environment solutions for Future Vertical Lift. This includes leveraging current non-developmental sensors, a modular open system architecture, and technology insertions and the pursuit of multi-use sensors.

End state is to deliver degraded visual environment solutions that will improve how we do things today, and enable us to do what has never been done before (and see what hasn't been seen).

Our Commitment

The Aviation Systems PO is dedicated to ensuring current and future Army Aviation platforms uphold innovative and cutting edge technologies to support Army Aviators and Maintainers to effectively, efficiently, and lethally execute their mission. We will continue collaborating with Army and Industry partners to define, develop, acquire, field, and sustain equipment that maximizes readiness and harnesses innovative and affordable future capabilities.

COL John Frasier is the Aviation Systems Project Manager, Program Executive Office Aviation and Mr. Craig Besaw is the product director for the Aviation Ground Support Equipment Product Office; both are located at Redstone Arsenal, AL.

Aviation Ground Support Equipment (AGSE) Update

By Mr. Craig Besaw and LTC William H. Graham

The Self-Propelled Crane Aircraft Maintenance and Positioning (SCAMP II)

The Aviation Ground Support Equipment (AGSE) Product Office is the life cycle manager for common Army aviation ground support equipment. The AGSE PO is embracing several acquisition initiatives to field safe and reliable systems more quickly – to include leveraging commercial off-the-shelf products developed by our industry partners. We are in continual communication with the platform PMs, our sister services, and international partners to drive synergy, commonality, and increased buying power. The AGSE team continually looks for ways to reset and modernize AGSE while ensuring U.S. Army Aviation maintainers have the "right tools, at the right time, at the right place."

The Self-Propelled Crane Aircraft Maintenance and Positioning (SCAMP II)

The SCAMP II expeditionary crane will remove and replace major aircraft components in support of Army Aviation maintenance forward on the battlefield. The crane is internally transportable in the CH-47 Helicopter. The SCAMP achieved Low Rate Initial Production Milestone in August 2018 and will complete system user evaluation and customer test to inform a 3QFY19 Full Rate Production Decision.

Next Generation Aviation Ground Power Unit (NxG AGPU)

AGSE PO will execute a commercial competition to replace the legacy AGPU. The Next Generation AGPU will provide increased power, hydraulic flow, and pneumatic pressure while providing enhanced technologies to better remove air, water, and particulates from the hydraulic fluid. AGSE will conduct a fly-off in FY19 and anticipates contract award in FY2020.

Aircraft Armament Repairer Tool Kit (AARTK)

In September 2018, AGSE will begin fielding a modification for the Individual Aircraft Armament Repairers Tool Set (IAARTS) for our Armament/Electrical/Avionic System Repairers (15Y). The Aircraft Armament Repairer Tool Kit (AARTK) is LIN: W59034 and NSN: 5180-01-667-9530; it will replace the following IAARTS: LIN W59034, NSN 5180-01-578-3697; LIN W59034, NSN 5180-01-516-0223; and LIN W59034, NSN 5180-01-433-4469.

Tool Set, Aviation Unit Maintenance

Unmanned Aircraft System General Mechanics Tool Kit (UGMTK)

AGSE PO is developing a common Unmanned Aircraft System General Mechanics Tool Kit to support Gray Eagle and Shadow maintenance performed by Unmanned Aircraft System Repairers (15E). Fielding will begin in FY2019.

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Aircraft Armament Repairer Tool Kit (AARTK)

Unit Maintenance Aerial Recovery Kit (UMARK)

The AGSE Team modernized 139 UMARKs in FY2018. The Modernization Work Order significantly improved safety, extended sling lengths (from 60' to 90' Legacy UMARK to 150' Modified UMARK), and increased sling storage life from five years to 15 years eliminating the recertification requirement.

Tool Set, Aviation Unit Maintenance

The Tool Set, Aviation Unit Maintenance: No. 2 Airmobile-Enhanced

(formerly Alpha 92) modernization effort is in final modification development and testing. The modification will improve maintenance support for the Aviation Maintenance Company and enhance split-based maintenance operations. The modified Tool Set will introduce five key enhancements: 1. replaces three obsolete S280 shelters with three Army Standard Family of Shelters; 2. provides enhanced storage space for common and peculiar ground support equipment; 3. modernizes the tool load; 4. adds a proven 7.5 ton commercial trailer (NSN 2330-01-506-5979) for each shelter; and 5. enhances rail, sea, air, and highway transportability, and improves physical security of internal shelter equipment. The first field application will begin in FY2019. Fielding of the first three modifications will occur in FY2019.

Aviation Ground Support Equipment Assistance

Please work closely with your unit Logistics Assistance Representative for assistance in fixing aviation ground support equipment. The AGSE Team utilizes the Joint Technical Data Interchange (JTDI) web site for communicating technical information, product updates, addressing issues and concerns, and providing a link to our online help ticket for our customers in the field. The AGSE tab on JTDI is currently under construction to ensure we provide the field with the most accurate and authenticated information on our products. More information on JTDI registration, access, and use is available at *https://www.jtdi.mil*. The AGSE Help Ticket (upper right corner at JTDI) allows users to submit equipment specific questions directly to a subject matter expert. An automated email notifies customers of their query progress. Responses are sent via email to ensure customers can reference them as needed.

Non-Destructive Test Equipment (NDTE) Suite

Non-Destructive Test Equipment (NDTE)

The NDTE suite is undergoing a modification through 2018 (MWO 1-1500-204-50-2, -3, and -4). This modification includes replacement of the 2000D and 1000e+ model Flaw Detectors and 1200M model Ultrasonic Detector. Interim inspection procedures for the modernized equipment are provided in an Aviation Maintenance Action Message (PD AGSE-17-AMAM-01) until Technical manual updates are completed. New Equipment Training is being provided during modification installations.

Flexible Engine Diagnostic System (FEDS)

AGSE PO is developing a modification to the FEDS. The modification will provide digital components, enhanced safety features, reduced cabling, government owned software, and the ability to test digital "bussed" engines.

Mr. Craig Besaw is the product director, and LTC William Graham is the operations officer, for the Aviation Ground Support Equipment Product Office, Aviation Systems Project Office, Program Executive Office, Aviation at Redstone Arsenal, AL.

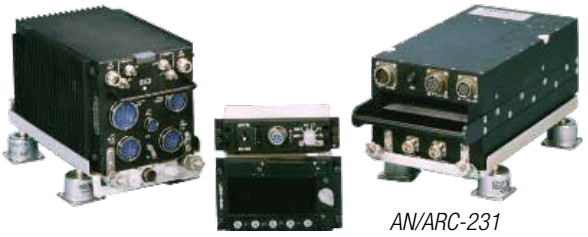
Aviation Mission Equipment (AME) Update

By LTC Ty LaStrapes

The Aviation Mission Equipment (AME) Product Office provides avionics equipment for communication, navigation, and surveillance (CNS), as well as situational awareness to the Army Aviator. Our mission involves developing, fielding, and modernizing common CNS equipment that meets the full range of Army Aviation requirements.

The AME portfolio currently includes the AN/ARC-231 Radio, AN/ARC-220 High Frequency Radio, AN/ARC-201D Single Channel Ground and Airborne Radio System (SINCGARS), the AN/ASN-128D and EGI H-764 navigation systems, the AN/APX-118 and AN/APX-123 surveillance systems, Blue Force Tracking-Aviation (BFT-A) system, and integration responsibility for the future Airborne Networking Radio.

Communication Systems



AN/ARC-231

The ***AN/ARC-231*** is a multimode radio that supports very high frequency/ultrahigh frequency line-of-sight and non-line-of-site tactical satellite communications (SATCOM) for all rotary wing platforms, the Gray Eagle unmanned aircraft system, and select fixed wing platforms. Current AN/ARC-231 improvements will meet National Security Agency cryptographic modernization requirements, and mitigate obsolescence by enhancing existing architecture with a software-defined open architecture to host future waveforms such as SATCOM Mobile User Objective System. Integration and qualification activities continue through FY2019. These upgrades will allow the AN/ARC-231 to maintain relevance in Army Aviation for the foreseeable future.

Navigation Systems

AME PO has initiated multiple efforts to implement Assured-Position, Navigation, Timing (A-PNT) initiatives. These efforts include Global Positioning Systems (GPS) Resiliency and Software Assurance Modification efforts for the current Doppler GPS Navigation Set (DGNS). The DGNS is a Military Code capable GPS receiver upgrade for the Enhanced Aviation Global Air Traffic Management Localizer Performance with Vertical Guidance Embedded GPS Inertial (EAGLE-M). These A-PNT efforts will culminate with fielding of new capabilities across the fleet to enable continued aviation operations in GPS denied and degraded environments.

ALL PHOTOS PM AME FILE PHOTOS

AN/ASN-128

The ***AN/ASN-128D, Doppler GPS Navigation Set,*** provides a combined GPS and Doppler navigation capability through an all-in-view satellite GPS receiver embedded into the signal data converter. The AN/ASN-128D is Instrument Flight Rules compliant, and certified for use as a supplementary means of navigation for enroute, terminal, and non-precision approaches using the Digital Aeronautical Flight Information File non-corruptible database. AME is obtaining certification to use the AN/ASN-128D as a primary means of navigation and Automatic Dependent Surveillance Broadcast (ADS-B) Out Position Source, along with a new computer display unit with a ruggedized graphical touch screen display.

The ***Embedded GPS Inertial Navigation system (EGI)*** is a tri-service program providing a combined GPS and inertial navigation capability for aircraft equipped with a MIL-STD-1553 digital data bus. The EGI provides precise location, velocity, and altitude to the aircraft fire control computer or integrated system processor for managing targeting information and sensor pre-pointing. Current EGIs are Instrument Flight Rules compliant, and certified for use of the GPS as a supplementary means of navigation for enroute, terminal, and non-precision when properly integrated. AME is currently completing EAGLE Phase II efforts to obtain certification for use of GPS as a primary means of navigation, ADS-B Out, and Localizer Performance with Vertical Guidance approaches using precision positioning service or standard positioning service with Wide Area Augmentation System. This year saw completion of the EAGLE integration. A-PNT efforts for this year include the conclusion of the EGI Blended Solution Coasting Study Phase II program that documented the accuracy of the navigation solution during inertial coasting after loss of GPS and the award/kickoff of the EAGLE-M development program.

EGI

The ***Multi-platform Anti-jam GPS Navigation Antenna (MAGNA)*** Small Business Innovative Research Phase III

MAGNA

effort is a small adaptive GPS anti-jam antenna system comprised of a Controlled Reception Pattern Antenna and antenna electronics. MAGNA will be capable of receiving legacy and modernized (M-code) NAVSTAR GPS satellite signals. The MAGNA reduces the effect of GPS jamming, enabling the Warfighter continued access to GPS-provided position, navigation, and timing in a GPS degraded environment. This year saw the continuation of the MAGNA development and qualification program, production of prototype assets, and initial platform integration efforts.

Surveillance

The ***Common Transponder (CXP)*** is a family of transponders that includes the AN/APX-118, AN/APX-123, and AN/APX-123A. The AN/APX-123 is an upgrade to the AN/APX-118, adding the Mode 5 Identification Friend or Foe capability.

AN/APX-123

The AN/APX-123A is a variant of the AN/APX-123, necessitated by obsolescence of the signal processor and Mode 4/5 crypto assembly. The Army is currently fielding both APX-123 and 123A CXP variants in order to meet a joint Mode 5 Full Operational Capability requirement. The APX-123 version 7.0 software adds the ADS-B Out capability, which is mandated by the Federal Aviation Administration in 2020. Platform software updates are required to utilize the APX-123's ADS-B Out capability. Once updated platform software is fielded, the APX-123's ADS-B Out capability will provide cooperative reports with data such as position, altitude, direction, and velocity to Air Traffic Services. AME is initiating studies for a potential next generation transponder program to address obsolescence, size, weight, and power, cyber security, and future surveillance requirements.

Blue Force Tracking-Aviation

The Blue Force Tracking - Aviation (BFT-A) system provides a beyond-line-of-sight integrated air-ground situational awareness picture and a command control messaging capability. BFT-A is continuing its evolution to BFT-2. BFT-2 integrates a more capable common satellite air transceiver and the KGV-72 Type 1 encryption device allowing classified message transfers. The BFT-2 system is significantly faster, more efficient, and is designed as a high capacity, full duplex network upgrade to the legacy system. It is capable of sending and receiving situational awareness picture and command control messages at the same time without interruption, dramatically reducing latency of the legacy system. To date, Contract Logistics Support solely supported BFT-1 and 2 systems. As part of the sustainment strategy, BFT-2 will transition to organic maintenance. The BFT 2 is currently being fielded to Army Aviation and will be installed on the UH-60L/M, HH-60M, AH-64 D/E, and CH-47F fleets.

Airborne Networking Radio Integration

The Tactical Radios and AME Product Office have the combined task to provide Army Aviation with a multi-channel aviation radio. Specifically, AME integrates the radio, which will provide increased data throughput to Army Aviation rotary wing platforms, unmanned aircraft systems Advanced Networking Waveforms, and maintain SINCGARS capability. The goal is an airworthy cryptographic modernized

Blue Force Tracking-Aviation System

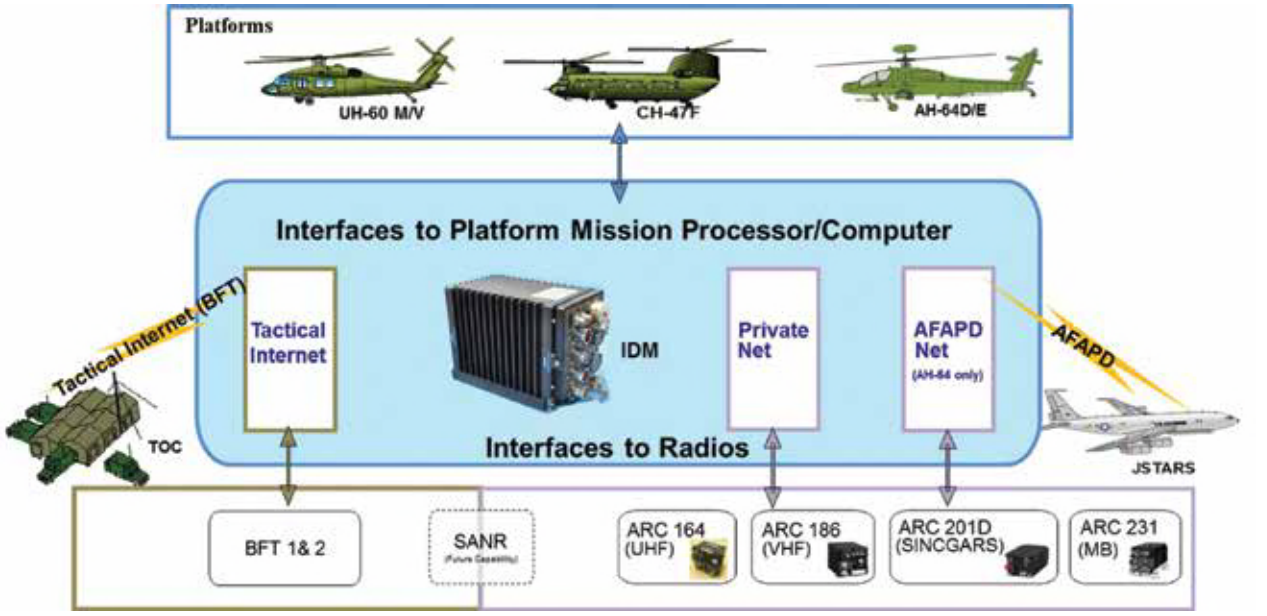
aviation radio, providing seamless real-time information, whether it's Air-to-Air or Air-to-Ground, for operations in mobile and dynamic combat environments.

The AME managed navigation, communication, surveillance, situational awareness systems are critical to the success of Army aviation missions. They ensure effectiveness, safety, and survivability in commercial and tactical airspace, and on the modern battlefield. The dedicated personnel in the AME Product Office continue to look to the future of technology and interoperability, bringing our Soldiers the best systems possible.

LTC Ty LaStrapes is the Aviation Mission Equipment Product Manager, Aviation Systems Project Office, Program Executive Office, Aviation at Redstone Arsenal, AL.

Aviation Networks and Mission Planning (ANMP) Product Office Update

By Mr. James Pruitt and Mr. Todd Smith



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The Aviation Networks and Mission Planning (ANMP) Product Office's core mission is to design, develop, and deliver software-intensive, common capabilities to the Army Aviation community. ANMP PO provides state-of-the-art interoperability, mission planning, maintenance, and operational tools that enhance crew member situational awareness, command and control (C2), and safety. ANMP PO supports the Army's rotary wing, fixed wing, and unmanned aircraft system platforms, while managing numerous foreign military sales cases for our international partners.

Improved Data Modem (IDM)

As the common modem solution for Army Aviation, the IDM establishes connectivity between Aviation platforms. It supports communication and data transmission through high frequency, very high frequency, and ultra-high frequency radios, and Blue Force Tracking satellite transceivers. Across the fleet, IDM enables network access and serves as a gateway between aviation and ground platforms. IDM processes Variable Message Format messages from the Joint Battle Command-Platform network and peer-to-peer messages via the Private Network and Air Force Applications Program Development protocols to facilitate sharing of situational awareness data, sensor data, and C2 data with our digitized Army, Joint, and coalition aviation partners.

In 2018, the IDM team supported integration of platform software updates maintaining information assurance and interoperability, and continued fielding of the IDM 401. These updates provided Army Aviation with increased processing capacity, enhanced cyber security posture, and a multiport Ethernet switch in a common Line-Replaceable Unit to enable current and future computing environments. The team also initiated the modification of the IDM 401 real-time operating system software to enable a certified, open system, multi-core processing operating environment. When complete, the IDM 401 will be able to host multiple, simultaneous software applications in an open systems environment on a common digital backbone. Potential applications could include increased interoperability, mission command, radio control, Aviation Survivability Equipment (ASE) training, and weather.

Aviation Mission Planning System (AMPS)

AMPS is a lightweight, portable, ruggedized workstation that automates aviation mission planning tasks, including risk assessment, tactical C2, aircraft configuration, flight planning, communications planning, and rehearsal. As an interoperable system with Army Mission Command Systems and associated networks, AMPS provides the Aviation Commander with continual situational awareness, enabling rapid adjustment and dissemination of new and updated mission plans. AMPS provides exceptional route/mission, aircraft configuration and performance planning. AMPS loads aircraft with configuration data types such as routes, ASE, maps, communication, weapons, geospatial data, threats, tactical graphics, and vertical obstructions.

The AMPS team is fielding AMPS 7.6, providing an improved interface, enhanced mission planning, and scal-

ability. The team also completed an AMPS 7.7 customer test with the 16th Combat Aviation Brigade (CAB) at Joint Base Lewis McCord, WA and Fort Wainwright, AK. The 16th CAB received the new Getac X500 hardware with the AMPS software on a Windows 10 operating system. The Getac X500 is a smaller, lighter, but still a ruggedized laptop that provides a state-of-the-art quad core processor, improved graphics card, 32 gigabits of memory, and a 1 terabit solid-state disk drive for speed and reliability.

Centralized Aviation Flight Records System (CAFRS)

CAFRS is a sub-system of AMPS that manages flight and training records while providing decision support, risk assessment, and risk mitigation tools for the Aviation Commander. CAFRS supports the Aviation Risk Assessment Worksheet tool, matching personnel qualifications, operations tempo, aircraft type, and mission needs. By tracking aircrew flight hours, aircraft currency, qualification, and training history, CAFRS supports effective risk assessment and mitigation throughout the aviation mission planning process.

CAFRS software v4.0.3, fielded in January 2018, is Windows 10 compliant. This version provides enhancements to every part of the Individual Aircrew Training Folder, including temporary duty and return functionality, auto-sort to all events on the DA Form 7122, removal of red ink entries on the DA Form 7122, range options for the DA Form 7120, and modification to the DA Form 7120 to automatically check for a current DD Form 2992, Medical Recommendation. ANMP is looking to pursue a web-based capability, enabling units in remote locations and task force configurations to access flight training records. The initial release will include records management for Air Traffic Services (ATS) Controllers; ATS Maintainers will join CAFRS in a future release.

Aviation Data Exploitation Capability (ADEC)

The ADEC system provides customizable data exploitation software to improve situational awareness of current flight operations, training effectiveness evaluation, aircrew readiness, safety and risk management, and aircraft status. ADEC is the U.S. Army implementation of the Military Flight Operations Quality Assurance process. It provides automated flight scheduling and mission briefings integrated with an automated risk assessment worksheet. It interfaces with CAFRS to streamline crewmember analysis and assignment. The system allows for consolidation of unit flight schedules, enhances flight activity tracking, and provides automated notifications for overdue aircraft and other key events. ADEC also enhances post-mission training and After Action Reviews through its flight visualization capabilities and supporting analysis, event detection, and constructive aircrew debrief. The automated ADEC Abbreviated Aviation Accident Report facilitates report processing from the unit to higher headquarters.

ADEC software v1.0 development and testing is complete, and its effectiveness, suitability, and supportability confirmed through Operational Testing with the 1-171st Aviation Battalion of the Georgia Army National Guard. Approval of the ADEC Full Materiel Release is scheduled for September 2018. Fielding is currently on hold pending Army approvals.

Aircraft Notebook (ACN)

The ACN System consists of the Platform Maintenance Application software, hosted on the Maintenance Support Device laptop computer, to deliver aircraft digital logbook functionality. Integration with Maintenance Consolidated Database Systems, Interactive Electronic Technical Manuals, and platform Condition Based Maintenance Plus tools streamlines the completion of aviation maintenance activities and documentation required to maintain airworthiness for all Army aircraft. The system significantly reduces manual inputs required to record maintenance activities and complete associated maintenance forms. Improved accuracy in record keeping enhances fleet managers' knowledge of performed maintenance tasks and associated faults. Additionally, ACN supports operations in both connected and disconnected environments.

The ACN team has completed fielding to the UH-72A Lakota fleet, completed approximately half of the unmanned aircraft fleet, and is now fielding to the Army's rotary-wing units. Fort Riley's 1st Infantry Division Combat Aviation Brigade was the first major unit equipped followed by the 25th Infantry Division, 10th Mountain Division, 1st Armored Division, and the 160th Special Operations Aviation Regiment. All rotary wing units will be fielded by the end of 2019. ACN will transition to the Global Combat Support System-Army Enterprise in 2020.

Summary

The Aviation Networks and Mission Planning Product Office strives to increase the combat power of Army Aviation by providing an open architecture, owned by the Army, centered on a digital backbone. IDM, AMPS, CAFRs, ACN, and ADEC are the key components in Aviation's digital toolbox enabling the future of data centric warfare.

Mr. James Pruitt is the product director, and Mr. Todd Smith is the deputy product director, for the Aviation Networks and Mission Planning Product Office, Aviation Systems Project Office, Program Executive Office, Aviation at Redstone Arsenal, AL.

AMCOM – Working to Attain Strategic Supply Chain Depth

By COL David K. Almquist and Mr. Brent Swart

The US Army Aviation and Missile Command (AMCOM) is the Army's materiel integrator for Aviation and Missile systems at the point of need. Key to our success is AMCOM's ability to accurately forecast, plan and execute "how" to meet supply chain demands. Future threats, whether near-peer competitors or unforeseeable events drive us to reassess our supply chain posture. When the unexpected happens, like pop-up hail storms or birds setting off hangar fire suppression systems, significant damage to aircraft can occur. There is no perfect way to prepare for those events, but we still have to meet the need and get damaged aircraft operational again quickly. Further, these threats create disruptions in our supply chain that cannot be ignored. That is why it is imperative we take a hard look internally and work with our manufacturing partners to identify and mitigate these disruptions.

At times it is difficult to see this challenge, our historic Non-Mission Capable Supply (NMCS) rates are within DA standard and we have been successful in United States Central Command (CENTCOM) operations for years. However, it is unrealistic to assume that we can replicate the Southwest Asia-style model, with static operating locations, clamshells of immobile unit parts stockpiles, and secure Air Lines of Communication (ALOC) from depot to forward operating bases (FOBs). This battlefield arrangement consumed massive amounts of critical parts and was largely duplicated at each aviation FOB supply support activity (SSA) and aviation tech supply. Future conflicts could require units to remain completely mobile, moving as often as every 24-48 hours. Units will carry and move with only the most essential parts. Supporting SSAs will be under the same constraints. A robust depth and breadth of stockage at the wholesale level must provide reasonable access to the customer to ensure operational readiness. We have to rethink how we limit forward stockage and enable mobility while simultaneously providing parts quickly to the unit.

Changing the Approach to Sustainment

We must change our current approaches and assumptions on sustainment to deliver mission-enabling parts and materiel. We need to adapt our acquisition methodologies, sustainment policy, current supply management practices, and industrial base planning. These factors impact our ability to rapidly expand parts availability in support of unforeseen events. As the Army's lead for Aviation materiel readiness, AMCOM continues to press for change in building strategic supply chain depth in parts on hand, expanding sources of supply, decreasing production lead

North Carolina National Guard Soldiers from the 1-130th Attack Reconnaissance Battalion assigned to Task Force Panther, 101st Combat Aviation Brigade, 101st Airborne Division conduct preventive maintenance checks and services on an AH-64D Apache Longbow helicopter at North Fort Hood, Texas, May 19, 2018.

times, and increasing commercial and organic repair times. Central to all these variables is the fact that we MUST repair FASTER and procure FASTER. Although simply stated, it is the construct for building strategic depth in the supply chain while maintaining readiness for today and tomorrow.

GEN Gus Perna, Army Materiel Command (AMC) commanding general, gave us a mandate to achieve 100 percent supply availability. We have to identify how to achieve that goal while sustaining unit readiness for the Soldier in the field. We have identified the top readiness drivers for each aircraft type, and are strategically working to build depth on those parts first. Repair parts that have a high burn rate or long-lead acquisition time that cause an aircraft to be non-mission capable are our first targets. Then come major components like engines, rotor blades, drive train systems that we know we will need if there is a demand surge. As we build depth in those stocked items, we will then move out further into the supply chain to continue building stock-on-hand. The goal is to have 90 days of stock on hand with no backorders older than 30 days for critical readiness parts.

Overcoming Challenges

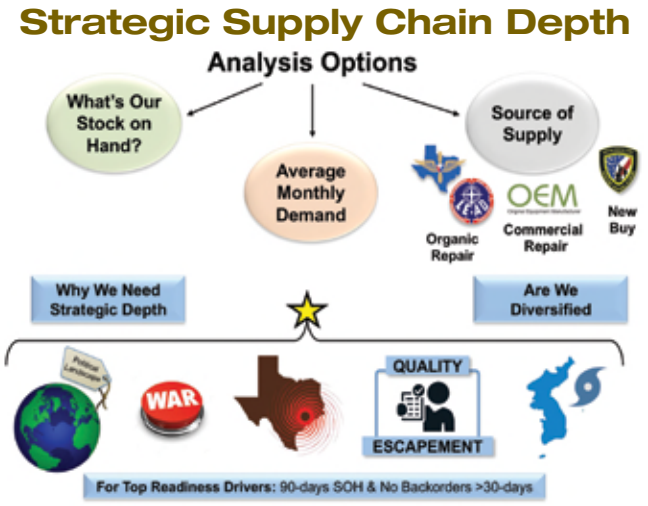
Supply chain depth is challenged by two current Army processes. Our first challenge can be found in the Army's ***Logistics Modernization Program (LMP)***. LMP logic maintains the lowest possible on-hand stock. This "Just-In-Time" inventory approach prioritizes efficiency and cost over abundance and depth. This approach hampers our ability to rapidly fix disruptions in the supply chain, unforeseen increases in OPTEMPO, deployments, Safety of Flights or other events that place unanticipated requirements on our stock. What most people don't realize is that these disruptive events occur all the time. Our systems must change to account for these events to mitigate the operational risk of this 'new normal' environment. We are not advocating large amounts of excess parts, but rather a designated metric for key readiness drivers.

Tactical formations can assist through emphasis and discipline in accurate reporting and requisitions in the supply system. The critical insight we need remains dependent on "seeing" what units require. This is an area where the AMCOM Logistics Assistance Representatives do yeoman's work in helping units get the right materiel at the right time and in the right place. In addition, units have another critical responsibility in this construct. Army aviation must re-inculcate a culture of repairing what can be repaired at the unit level. Accurate diagnosis and enhanced troubleshooting tools are widely available to build this capability and capacity. A unit's success on the future battlefield will to a degree be dependent on their ability to fix forward, repair forward and continue the attack. Further, if a unit cannot repair the part, rapid return to the supply system remains essential to a repair activity where the correct procedures can be accomplished.

Performance Based Logistics (PBL) processes present a second unique challenge to attain supply chain depth, especially in the event of a sustained near-peer conflict. PBL arrangements assume unhindered distribution and dependable repair velocity to justify reduced levels of inventory. These methods often use commercial distribution channels and on-site contractor personnel to control both the forward and reverse pipelines to rapidly repair and return unserviceable items to the repair activities. These approaches and methods work well in peacetime and counterinsurgency operational environments where conditions allow commercial distribution and contract personnel access to the repair activities. In some near-peer scenarios, commercial LOCs or forward positioning of contractors will not be available. Sustainment assets will use military distribution systems, especially during the early stages of a conflict. This will eliminate or minimize contractor direct support, increase losses, and increase the

U.S. ARMY NATIONAL GUARD PHOTO BY SGT AVERY CUNNINGHAM

U.S. Army SGT Kyla Farrow, a UH-60 Black Hawk mechanic, Charlie Company, 3rd Battalion, 126th Aviation Regiment (Air Ambulance), 86th Troop Command, Garrison Support Command, Vermont National Guard, replaces a part on a helicopter at the Army Aviation Support Facility in South Burlington, Vt., June 6, 2018.



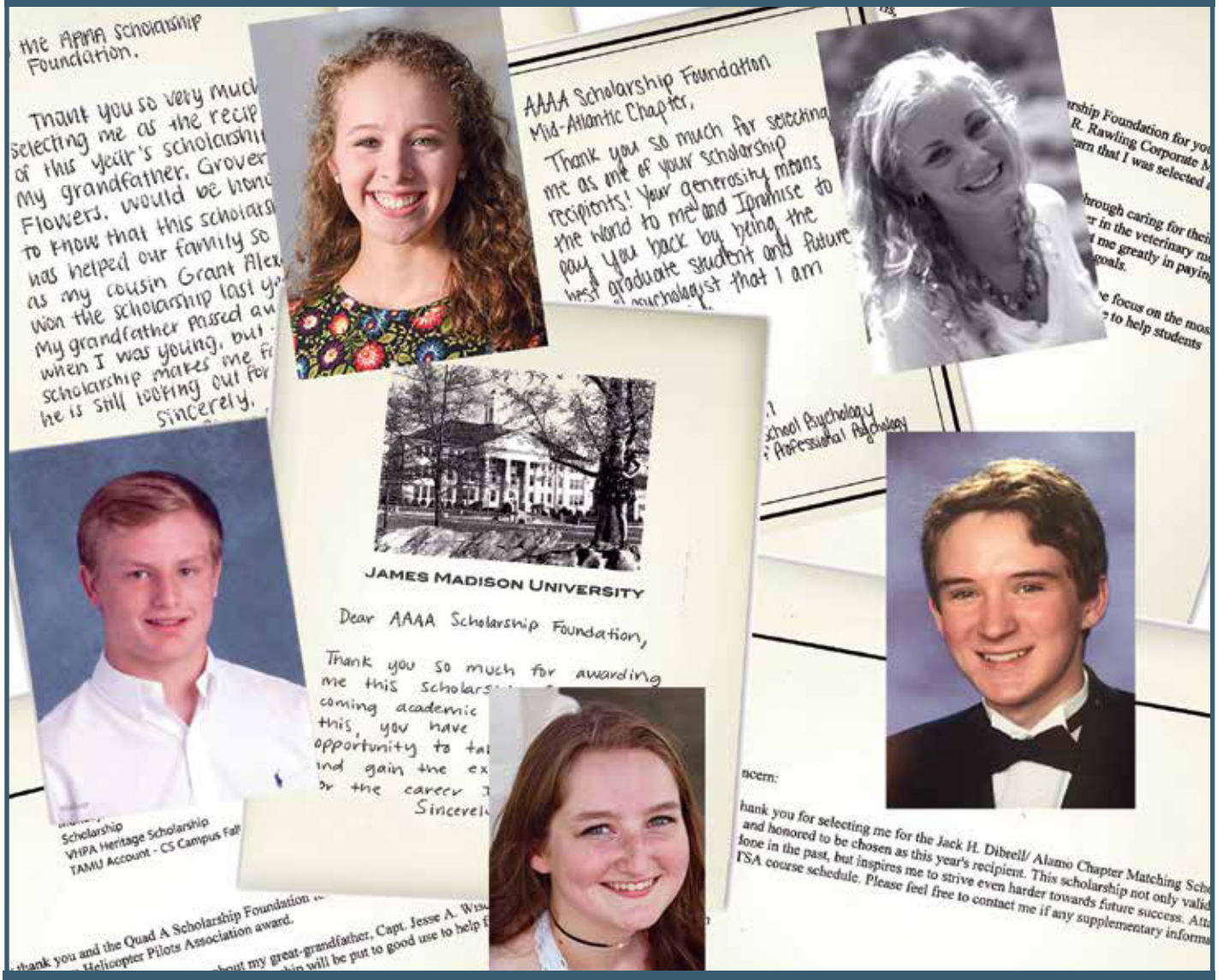
number of assets needed on hand forward and in CONUS required to support the unit (especially if pre-positioned assets are required to buffer the wait time from a CONUS based distribution point). Currently, there are no viable alternatives to address these challenges except to increase stockage levels.

We are moving in the right direction. There are challenges that we, as a community, must address to ensure our success on a future battlefield. We must buy and repair faster, and we must have depth on the right parts. Whether it is a hurricane or near peer threat aviation readiness is highly dependent on a "healthy" supply system that can predict and react in the gaps of the global environment. AMCOM and partners in the Aviation Enterprise are addressing the challenge of strategic supply chain depth now rather than later so we are ready when our nation calls.

PFC Brandon Pavey, a UH-60 helicopter repairer with 3-126th Aviation Battalion assigned to Task Force Panther, 101st Combat Aviation Brigade, 101st Airborne Division documents the results of a 40-hour preventive maintenance checks and services conducted on a UH-60 Black Hawk helicopter at North Fort Hood, Texas, May 19, 2018.

COL David K. Almquist is the Aviation and Missile Life Cycle Management Command G-3/5 and Mr. Brent Swart is a senior logistics analyst in the AMCOM G3/5 located at Redstone Arsenal, AL.

Making Dreams Come True



Since 1963, the AAAA Scholarship Foundation has played an important role in supporting the education of Army Aviation Soldiers and their families. This year, the Foundation awarded just over one-half million dollars in scholarships to 310 deserving applicants. This would not have been possible without the constant and generous support of the Army Aviation Industry and Private Donors.

For more information on how you can contribute or to learn more about the application process, please go to
quad-a.org/scholarship

The 2019 program will be opening in January

Available for AAAA Members, Spouses, Siblings, Children and Grandchildren

First Army's 166th Aviation Brigade is Reborn

By Mr. Darryl Howlett and LTC Joe Odorizzi

U.S. ARMY PHOTO BY FIRST ARMY PUBLIC AFFAIRS

MG Erik C. Peterson, First Army acting commanding general and First Army Division West commanding general (right) passes the colors to COL Ron Ells, 166th Aviation Brigade commander, during the 166th Aviation Brigade activation ceremony held on August 17, 2018 at Cameron Field, Fort Hood, Texas.

The uncasing of a brigade's colors meant more this time in the Texas sun on August 17, 2018. Standing on First Army Division West's Cameron Field, COL Ron Ells readily accepted the colors signaling the official rebirth of the 166th Aviation Brigade.

"Today is a monumental day in the history of the Archangel brigade and marks the beginning of a new legacy," Ells said. "Archangels, every day I spend among the professionals in our ranks brings a greater appreciation for the level of commitment each one of you brings to our mission. While small in size, compared to the average aviation brigade, the impact you have is truly immense. Whether contributing directly to the combat readiness of the Dutch armed forces or training and validating our Reserve Component aviation brothers and sisters prior to deployment, your impact on the security of our two great nations can't be overstated."

Shifting Goals

The unit was deactivated in June 2015 as part of First Army's "Operation Bold Shift" initiative. Under "Bold Shift," the brigade deactivated as First Army's 16 brigades downsized to nine. The nine brigades were augmented with combat support and combat service support observer, coach/trainers to better take on the mission of pre-mobilization training. One of the goals behind "Bold Shift" was to reduce the amount of time that reserve component units spent in post-mobilization training before deployment to overseas contingencies. The aviation mission was transferred to the 2nd Battalion, 291st Aviation Regiment, under the direction of First Army Division West's 120th Infantry Brigade.

By 2017, it became clear with the higher pace of aviation reserve components being deployed for various actions, the 166th's mission would be needed once again. On June 16, 2017, now retired MG Jeffrey Colt, former First Army Division West's commanding general, announced that as part of the fiscal year 2018 National Defense Authorization Act, the brigade was coming back.

"The re-activation of the 166th Aviation Brigade greatly enhances First Army's capability to achieve the Army's number 1 priority: Readiness. It further enables our ability to partner with Army Reserve and National Guard aviation units. Ultimately, it allows us to more effectively advise, assist and train these organizations through integrated pre- and post-mobilization collective training, providing combatant commanders trained and ready aviation forces," Colt said at the time.

Preparing Reserve Component Aviation for Deployment

The brigade and its 220 Soldiers will provide assistance, theater-focused training and validation of Reserve Component aviation units in order to prepare Soldiers and leaders for deployment worldwide. Additionally it is prepared to provide training to joint, interagency, combined and active duty Army forces to enhance Total Army Aviation readiness.

MG Erik Peterson, commanding general, First Army Division West, expressed confidence the new brigade will be up to the task of its mission. "The simple fact is the Army cannot accom-

plish its increasingly complex global mission without our Reserve Component teammates. This new normal places an increased demand on First Army and our vital mission of building Reserve Component readiness and deploying Reserve component units across the globe," he said.

"The 166th Aviation Brigade with its two aviation training battalions and our Royal Netherlands Air Force 302nd Squadron is purposefully built to provide FORSCOM [U.S. Forces Command] an enhanced aviation training capability that increases aviation mobilization throughput and reduces risk to the aviation mobilization mission."

The brigade is a multi-component collective training and resource integrator for Army Aviation; focusing on training, standardization, doctrine and maintenance. The brigade is uniquely postured and resourced to achieve this through partnership, communication and coordination across all three components of the Army Aviation Enterprise. Ultimately, the brigade will enable a more ready Total Army aviation force across all components.

ARMY NATIONAL GUARD PHOTO BY SGT WARREN W. WRIGHT, JR., 104th PA DET.

A CH-47 Chinook helicopter from 2nd General Support Aviation Battalion, 135th Aviation Regiment, Colorado Army National Guard, conducts a movement from the Combat Readiness Training Center in Alpena, MI to Camp Grayling Aug. 10, 2018 during Northern Strike 18, a multinational sharing of best practices.

The unit will look towards 2019 as the 244th Expeditionary Combat Aviation Brigade will be the first major validation of a reserve component aviation unit during post-mobilization training.

LTC Joe Odorizzi is the First Army Public Affairs Director and Mr. Darryl Howlett is the chief of media relations at First Army Headquarters, Rock Island Arsenal, IL.

2018 Functional Award Winners
Army Aviation Association of America

Awards Presented at the
2018 ASE Symposium

2018 Aircraft Survivability Equipment Award
Sponsored by BAE Systems

CW4 Brett A. McFarland
160th Special Operations Aviation Regiment (Airborne)
Fort Campbell, KY

CW4 McFarland continuously distinguished himself through a long Special Operations career across two Services. He continued to lead and innovate in each increased position of responsibility he has held. His training innovation led to significant progress in a complex and constantly evolving environment for Aviation Mission Survivability (AMS) through maximizing the utilization of aircraft survivability equipment (ASE), electronic warfare (EW), and tactical operations (TACOPS). His action and passion in the ASE realm have energized the Army and U.S. Special Operations Command (SOCOM) to invest in new technologies and training techniques, seamlessly working together for interoperability and collective progress. He deploys twice a year to ensure he remains on the cutting edge of tactics and proficiency and he consistently rates as one of the top Aviators in the 160th Special Operations Aviation Regiment (Airborne). He trains and leads at an extraordinary pace and delivers superior realistic training exercises to fight the Nation's future fight, ensuring training and equipment readiness across the entire aviation enterprise. CW4 McFarland is a visionary and is leading Army Aviation in his field.

2018 Aviation Mission Survivability Officer Award
Sponsored by VT Miltope

CW4 Daniel R. Cosson
3rd Battalion, 160th Special Operations Aviation Regiment (Airborne)
Hunter Army Airfield, GA

CW4 Daniel R. Cosson is the leading edge of Army Special Operations Aviation's transformative electronic warfare training regiment, with direct application to fighting and winning in an EW environment through high-tech, equitable, and repeatable tactics, techniques and procedures available across the force. As a direct result of his efforts, AR-SOA is unanimously seen as leading the way in EW/Aircraft Survivability Equipment (ASE) training across the DoD enterprise, regularly requested to attend the prestigious Marine Weapons and Tactics Instructor Course (WTI) due to their expertise in EW training, planning, and mission execution. Utilizing joint assets in the Air Force, Navy, and Marines he has facilitated exceptional evaluations to produce two national-level assets, with specific emphasis on defeating radar threats in denied environments. CW4 Cosson has revolutionized in-flight training capacities with low-cost software integration allowing realistic combat training without expensive EW range requirements; something Army Aviation as a whole can benefit from. In the 160th Special Operations Aviation Regiment (Airborne), his name is synonymous with AMSO, and expertise in electronic warfare and radar denied environments.

2018 Avionics Award
Sponsored by Cubic Defense Systems, Inc

SPC Mikail A. Ibraheem
Company D, 6th Battalion, 101st Aviation Regiment , 101st Combat Aviation Brigade
Fort Campbell, KY

SPC Ibraheem is a very driven and passionate individual in the avionics component repair platoon. He is extremely proficient technically and his work ethic has earned him a position of significant responsibility in the avionics squad – that of Squad Leader, a position normally held by a staff sergeant. He has deployed his section as part of Task Force Shadow to Bagram Airfield, Afghanistan with 9 Soldiers and zero noncommissioned officers in support of Operation Enduring Freedom. His squad was responsible for avionics maintenance of 55 aircraft in five different mission design series including the UH-60L, HH-60M, CH-47F, AH-64D, and AH-64E and has done so masterfully. He has easily become one of the key assets in his company. His vast knowledge enabled him to repair and fix an entire UH-60L lower console lighting system and FM2 wire fault that could not be fixed by the previous unit. After he completely rewired the two systems, the aircraft was brought back up to fully mission capable in just 5 days compared to what those before him couldn't fix in months.

Awards Presented at the
2018 Joseph P. Cribbins Aviation Product Sustainment Symposium

2018 Outstanding Aviation Logistics Support Unit Award
Sponsored by AAAA

248th Aviation Support Battalion
449th Combat Aviation Brigade, Boone, IA

LTC Charles H. Lampe
Commander

CSM Matthew D. Doty
Senior NCO

The 248th Aviation Support Battalion (ASB), 449th Combat Aviation Brigade (CAB) demonstrated superior aviation logistics support to Task Forces Hurricane, Liberty, and Voodoo in support of Operations Inherent Resolve and Spartan Shield during fiscal year 2018. The 248th ASB provided theater-wide aviation logistical support to include: distribution of aircraft parts and fuel; aircraft maintenance; signal, network, and communication support; vehicle and ground support equipment maintenance; medical care; and, critical personnel staffing across twelve locations in Kuwait, Iraq, Syria, Jordan, and Turkey. The 248th ASB filled critical vacancies within the CAB, to include brigade aviation maintenance officer (BAMO), Taji Airfield Management Element, and OSS partnership officer. Some of their accomplishments while deployed included reducing an inherited backlog of 1,500 past due services to less than 100 and maintaining an operational ready rate of 93%; moving 11,000 passengers and 575,000 pounds of cargo; pumping over 210,000 gallons of fuel; maintaining a supply support activity in Al Asad, Iraq with over 3,600 lines; and completing 11 UH-60 and 6 CH-47 phase maintenance inspections, to name a few. The outstanding performance by Soldiers of the 248th ASB clearly identifies them as the 2018 AAAA Outstanding Logistics Unit of the Year.

2018 Material Readiness Award For Contribution By A Small Business

Sponsored by AAAA

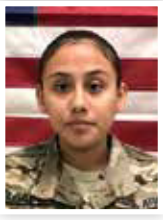
ARMA Aviation Corporation

Tampa, Florida

ARMA Aviation Corporation (ARMA) is a U.S. Veteran-Owned Business headquartered in Tampa, Florida with a Project Office in Huntsville, Alabama, and employees stationed in multiple countries and austere locations around the world. Founded, owned, and managed by former U.S. Army officers, ARMA is primarily staffed with former U.S. military professionals from all branches of service across many military occupational specialties. ARMA Aviation has successfully supported the operational readiness of the Mi-17 fleet in Afghanistan for nine years, as evidenced by the Non-Mission Capable Supply (NMCS) rate that has remained below 5 percent (Army standard-10%), providing spare parts, repair of repairable services, parts forecasting, warehousing, packaging, parts preservation, and logistics management. Since 2009, ARMA has procured, inspected and delivered over 1,100,000 individual helicopter spare parts in support of the U.S. Army's Multi-National Aviation Special Project Office (MASPO). During the period of August 1, 2017 – July 31, 2018, ARMA delivered 95,878 Mi-17 helicopter spare parts and repaired or overhauled 288 main aggregates. An additional 16,450 spare parts and 94 repairables remain on order, scheduled for delivery.

Unmanned Aircraft Systems Soldier of the Year Award

Sponsored by General Atomics Aeronautical Systems



SGT Angelica M. Delgado

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

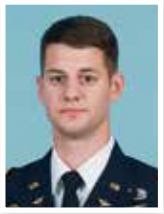
SGT Angelica M. Delgado, while performing duties as an Instructor Operator for Fox Company, 1st Aviation Regiment, played a vital role in the success of Operation Freedom's Sentinel in 2017 and 2018. She personally flew over 1,400 hours while completing 8 Readiness Level 1 progressions and training 6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

2018 Unmanned Aircraft Systems Unit of the Year Award

Sponsored by Textron Systems

Company E, 3rd Aviation Regiment

3rd Combat Aviation Brigade, Fort Stewart, GA



CPT Stefan F. Borden
Commander

1SG Calletano D. Ortega
Senior NCO

Over the past year Echo Company, 3rd Aviation Regiment compiled an unmatched record of achievement in garrison and combat while supporting Operation Freedom's Sentinel and Resolute Support-Afghanistan. The unit's Soldiers flew over 1,000 combat sorties and 15,000 hours in direct support of Special Operations Forces, Marine Expeditionary units, and conventional Army commands throughout Afghanistan constituting a 50 percent increase in Gray Eagle operational support over all previous rotations. During this deployment, Echo Company Soldiers successfully executed numerous reconnaissance, security, and attack missions, conducting over 200 autonomous engagements, representing a more than 600 percent increase over the previous two rotations combined. Echo Company is credited with more than 300 Enemy Killed in Action (EKIA), 52 Enemy Wounded in Action (EWIA), and the destruction of 19 enemy vehicles, 8 weapons caches, and 6 insurgent utilized structures. Echo Company developed multiple initiatives and piloted innovative employment techniques redefining how the United States Army unmanned aircraft system (UAS) fleet trains and fights in combat.

2018 Fixed Wing Unit of the Year Award

Sponsored by CAE USA Defense and Security

206th Military Intelligence Battalion (Aerial Exploitation)

Task Force ODIN, Bagram Airfield, Afghanistan

LTC Jarred M. Lang
Commander

CSM Jose L. Bermudez
Senior NCO

The 206th Military Intelligence Battalion (Aerial Exploitation) is a truly unique organization that has performed a critical expeditionary Army Aviation mission. The unit's most recent reactivation was as the nucleus for Task Force Observe Detect Identify Neutralize (TF ODIN) in support of Operation Iraqi Freedom (OIF). Subsequent to the deactivation of its sister battalion, 306th MI BN/TF ODIN-Afghanistan (TF ODIN-A) in January of 2016, 206th MI BN (AE) has been continuously deployed as the headquarters for TF ODIN in Afghanistan. As Task Force ODIN, the 206th MI BN (AE) has conducted over 13,000 sorties consisting of more than 78,000 flight hours completed without loss of life due to incident or accident; in excess of 43,000 hours of full motion video (FMV), 25,000 signals intelligence (SIGINT) reports, and detection/elimination of 13 improvised explosive devices (IEDs); detection and elimination of over 700 enemy combatants in conjunction with Special Forces units in theater and direct elimination of over 250 enemy combatants; and the identification and destruction of over 3,500 pounds of explosives and $234 million in narcotics.

From Air OP to Army Aviation

By Mark Albertson

When does Army Aviation, as generally accepted by its adherents, become Army Aviation? The rudiments were certainly on display with the Balloon Corps during the War Between the States. 1914-1918 conflict aircraft were utilized for the purposes of observation, photographic reconnaissance, direction of artillery fire, but also for bombing missions, ground support of troops, fighter sweeps, etc. The lack of sophistication emblematic of an understanding of the specialized nature of directing artillery fire from aircraft was thoughtfully brought forth in 1919 by the Hero Board.

Major General Andrew Hero chaired one of several boards convened in 1919 to vet the performance of the Field Artillery on the Western Front. And a recommendation that emerged was that of trained aviation personnel organic to the Field Artillery.

A practitioner of the Hero Board findings was William Wallace Ford, an artillery officer. As a pilot, Ford was an ardent booster of the use of flivver planes for the aerial direction of artillery fire. In the April 1941 issue of, The Field Artillery Journal, Ford wrote, "Wings over Santa Barbara," outlining the advantages of flivver planes directing artillery fire, making the case for the Air Observation Post concept. Events towards the Field Artillery obtaining light planes for organic aerial assets proceeded; and, on June 6, 1942, what is construed as being the birth certificate of Army Aviation is actually a charter for the Air Observation Post. For as the official memorandum reads: "WDGCT 320.2 (2-5-42), Memorandum for the Commanding General Ground Forces: Subject: Organic Air Observation for the Field Artillery."

ALL PHOTOS PUBLIC DOMAIN

GEN Andrew Hero chaired the Hero Board of the Field Artillery, 1919, which recommended organic artillery fire direction aviators.

The memorandum, then, was not for Army Aviation, a terminology which does not appear; rather, for "Air Observation for the Field Artillery." At this stage, the aerial direction of artillery fire is the Field Artillery aviator's reason for existence. Though, of course, experience during the war would see to additional tasks, such as light transportation, medical evacuation, general aerial observation duties, route column control, air taxi for brass… most of which was indulged during war games prior to the June 6, 1942 memorandum.

Prior to the aforementioned memorandum, January 2, 1942, William Wallace Ford was named Director of Air Training. Again, this is not Army Aviation at this point as opposed to organic Air Observation for the Field Artillery, as offered by the aforementioned Hero Board. Yet a progression of change was in the wind.

August 1945, the War Department broadened organic aviation, beyond the Field Artillery to include Armor, Cavalry, Infantry, Engineers and Tank Destroyer units. "The agreement, which had been reached previously by General Jacob L. Devers, CG, Army Ground Forces, and General Ira C. Eaker, CG, Army Air Forces, also called for additional light aircraft for the AGF."

ALL PHOTOS PUBLIC DOMAIN

William Ferrar Smith, first American general to order an aircraft into the air to direct artillery fire, Falls Church, Virginia, September 24, 1861.

Opening up organic aviation to most branches of the Ground Forces necessitated a larger Department of Air Training for classes. December 7, 1945, the Department of Air Training of the Field Artillery School: Major General Louis E. Hibbs was named commander, since he was the commandant of the Field Artillery School. The Assistant Commandant was the original Director of Air Training, Brigadier General William Wallace Ford, and ran the tactical air training program. Yet the Army Air Forces still provided the primary flight training.

The Korean conflict and the postwar period accelerated the transformation process away from the Air Observation Post concept:

April 21, 1954: Army Aviation Branch, Organization and Training Division, within the Office of the Chief of Staff, G-3, in the Department of the Army.[5]

February 1, 1955: Army Aviation Branch was discontinued.

Per General Matthew Ridgway, aviation in the Army was becoming much more intricate and sophisticated. This translated into aviation becoming more important to the Army. And it was becoming readily apparent that it be organized into a single portfolio of the Office of the Chief of Staff; and, that it should he headed by a general officer.

February 1955, General Hamilton H. Howze reported to the Pentagon, for an audience with Lieutenant General James M. Gavin. Howze was picked to head the Army Aviation Division,

ALL PHOTOS PUBLIC DOMAIN

GEN Hamilton H. Howze became the first Director of Army Aviation, January 3, 1956.

News Spotlight ▶

USAPAT Reflects on 30 Years

By MAJ Jonathan Coe, USAPAT Executive Officer

The United States Army Priority Air Transport (USAPAT) Command, commanded by LTC Matthew Rowland, serves as the primary transportation for the Army's most senior leaders within and outside the continental United States. Prior to USAPAT's activation 30 years ago, the idea that the Army would fly jet aircraft was an implausible dream. This dream would not have come to fruition without the leadership of the late COL William F. O'Neal, along with several key personnel in strategic positions.

COL O'Neal served his country proudly for 29 years, including two tours of duty in Vietnam. His awards and decorations included the Bronze Star, Legion of Merit (2OLC), and he served as the Director of Aviation for the U.S. Army Training and Doctrine Command, and as a brigade commander, Davison Aviation Command at Fort Belvoir, VA.

On August 3, 2018 The Army Aviation Brigade (TAAB), commanded by COL Mark Kappelmann, dedicated the UH-72A Lakota Hangar at Davison Army Airfield in honor of COL O'Neal. The TAAB command team unveiled COL O'Neal's name displayed on the hangar's exterior and on a memorial plaque mounted inside the hangar. Many special guests attended, most notable being COL O'Neal's spouse, children, and grandchildren. Personal friend, CW4 (Ret.) Delbert Hardiman who served with COL O'Neal during the activation of USAPAT, served as the guest speaker.

ALL PHOTOS: U.S. ARMY PHOTO BY SGT NICHOLAS T. HOLMES, TAAB

MG (Ret.) Carl H. McNair, Jr. speaks at USAPAT's 30th Anniversary Ceremony on August 3, 2018.

Honoring Past Members

The Hangar Memorialization Ceremony honoring COL O'Neal was the start of three events held during USAPAT's 30th Anniversary weekend. Shortly following the Hangar Memorialization Ceremony, USAPAT hosted its 30th Anniversary Ceremony on Joint Base Andrews, MD to honor personnel who were original members assigned to the organization in 1988. Those in attendance heard inspiring words from LTC Doug Crockett, USAPAT's first battalion commander, as well as MG (Ret.) Carl McNair Jr, the first Army Aviation Branch Chief. During USAPAT's 30th Anniversary Ceremony, eight individuals were inducted into the Honorable Order of Saint Michael for their career-long service to Army Aviation; seven Bronze, and one posthumous Silver. See page 67 for more details.

Last Call

The final event for USAPAT's anniversary weekend was a semi-formal dinner held on 4 Aug 2018 at The Club, Joint Base Andrews, MD. The Colors were posted by the Joint Armed Forces Color Guard and the U.S. Army's Brass Quintet provided the music. In attendance were guests of honor MG (Ret.) Carl H. McNair, Jr., BG (Ret.) Myrna Williamson, and keynote speaker, Mr. Joel B. Hudson, former Administrative Assistant to the Secretary of the Army from April 3, 1996 until his retirement on November 3, 2004. Hudson has maintained a close relationship with USAPAT, and served as the keynote speaker for USAPAT's 20th Anniversary weekend formal.

G-3, Headquarters, Department of the Army, Office of the Army Chief of Staff. And to fulfill the requirement of a general officer to chair the above effort, on January 3, 1956, General Hamilton H. Howze became the first Director of Army Aviation.

The political significance of the aforementioned developments was conducive to the eventual branchhood of Army Aviation. Terminology such as the Army Aviation Branch indicated, quite clearly, to the burgeoning autonomous nature of aviation as an entity within the Army; a development which would inflame the Army-Air Force rivalry. However, the Army Aviation Division seemed less provocative.

Politically and for propagandistic advantage as well, General Howze's success in ratcheting up the weight limits for Army fixed wing aircraft, in addition to forging ahead with the development of the helicopter, must be construed as being priceless advancements for the cause. For with the growing sophistication of modern war, trained personnel manning the proper equipment and modern weaponry was required to ensure the survival, let alone the success of Army Aviation. In other words, the reality of 1983 was not the case in 1954.

Lastly, the importance of Hamilton Howze as the first Director of Army Aviation cannot be overstated. He was the product of a military family. His father, Robert Lee Howze, had been a general and Commandant of Cadets at West Point, 1904-1908; and, had been a Medal of Honor recipient. Howze's brother, Robert Lee Howze, Jr., also became an Army major general. And both Hamilton and his brother were West Point graduates. His mother, Anne Chifelle Howze, was the daughter of Army Brigadier General Hamilton Smith Hawkins, while his wife, Mary Ingraham Henry, was the daughter of a previous commandant of the Cavalry School at Fort Riley, Kansas.

Hamilton Howze, for all intents and purposes, was establishment. Hence, politically this was a boon for Army Aviation. A general officer, with a protracted family history in the Army, in charge of the Aviation Division at the Pentagon, provided Army Aviation what it needed to carry forth from 1956… a seat at the table.

The incubation period of the Air Observation Post, as directed by William Wallace Ford, based on the recommendations of the 1919 Hero Board, was over. And by 1956, that consequence known as Army Aviation was well into its evolution towards branchhood. However, semantics aside, established lore is well ~~cemented among the faithful – June 6, 1942 is construed as~~ being the starting date of Army Aviation.

AAAA Chapter Affairs

By LTC (Ret.) Jan Drabczuk

I greatly appreciate the support from COL Glen Heape, Northern Lights Chapter President, for co- authoring and sharing this information with our membership.

The Northern Lights Chapter

The Northern Lights Chapter members are primarily made up of U.S. Army Alaska (USARAK) Soldiers and retirees that are fortunate to call Fairbanks, Alaska home.

CHAPTER COURTESY PHOTO

CW5 Mark Simmons (right) and COL Glen Heape (left) prior to tee off at the Northern Lights golf scramble on July 24, 2018.

Only 90 miles South of the Arctic Circle on Fort Wainwright, two separate Aviation battalions, 1-52 GSAB, 16th CAB and 1-25 ARB, 25 CAB occupy Ladd Army Airfield and are proud to fly, support, and train with Soldiers of USARAK. Despite recent unit deployments and a major reorganization, the chapter is dedicated to grow its member base and expand chapter operations.

Membership and Activities

Since Spring, the chapter leadership has worked hard to increase members and to educate junior officers and enlisted aviation Soldiers about the many benefits of AAAA. At their latest general membership meeting, their members were treated to a guest speaker from the Alaska Airmen's Association, Mr. Adam White. From the chapter's perspective, it was fantastic to hear Adam's insight and perspective of flying for over 25 years in the Alaska interior.

In addition to the chapter's local new-member drives, AAAA's National Office generously supported the 1-25 ARB May Formal. This event provided an extraordinary opportunity for Soldiers to experience AAAA's soldier support in action. The event was also the right venue to recognize the Northern Lights Chapter's deserving members and outstanding spouses as they were inducted into the Order of Saint Michael and the Order of Our Lady of Loreto respectively. Congratulations to SFC Brewer, a dynamic UAS leader, and the newest inductee to the Order of St. Michael. His distinguished career and influence will be felt throughout Army aviation for years to come.

The chapter members are also committed to increase the chapter's scholarship program support this year and hope to continue growing the scholarship program in future years. In support of this effort, the chapter successfully hosted their largest ever AAAA golf tournament at Fort Wainwright. Led by the new secretary, CW4 Matt Rood, local sponsorship and participation in the tournament was amazing. AAAA is extremely happy, that through the chapter's hard work, the funds raised will go to help fulfill the needs of some deserving students.

Future Plans

The Northern Lights Chapter looks to expand their reach and help create opportunities for military aviators in Alaska. The chapter's goal is to reach out to the very large Alaskan general aviation community to network and dialogue about the unique aspects of flying in the interior of Alaska. Also, the chapter looks to soon integrate UAS leaders from the two ground brigade combat teams into their chapter leadership to ensure maximum opportunity for representation and participation of all members in the Army Aviation family.

Soon, the Northern Lights Chapter will farewell CW5 Mark Simmons who will retire after more than 30 years of extraordinary service to our Nation and Army Aviation. Mark is a great aviator, consummate professional, and a dedicated coach and mentor. The chapter certainly wants to thank him for his unyielding support and leadership as the senior chief warrant officer of the U.S. Army Alaska Aviation Task Force.

Summary

The Northern Lights Chapter is proud to represent AAAA and serve in the "Last Frontier." This is a great chapter that continues to support Army Aviation and its aviation families. They definitely embrace the four pillars of AAAA – Network, Recognition, Voice, and Support.

Feel free to contact me if you need help for your chapter, Executive Board support, or to obtain clarification of National procedures. I look forward to working with you and supporting AAAA.

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

ORDER OF ST. MICHAEL and OUR LADY OF LORETO INDUCTEES

Black Knights Chapter

CHAPTER COURTESY PHOTO

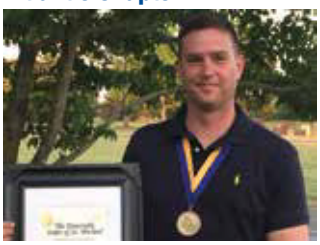
Black Knights Chapter President, COL Rich Melnyk, inducts **CPT Clyde Daines** as a Knight of the Order of Saint Michael at West Point, NY on Aug. 16. Daines was recognized for his outstanding contributions to Army Aviation in his previous assignment as an Intelligence Observer/Controller at the National Training Center where he was instrumental in training over 20 task force staffs on the emerging threats to Aviation.

Colonial Virginia Chapter

CHAPTER PHOTO BY MRS. RACHEL KARNES

LTC Louis (Lou) J. Karnes, Product Manager, MH-60M Aircraft, Joint Base Langley-Eustis, VA, is inducted into the Silver Honorable Order of St. Michael, by COL David (Dave) C. Phillips, U.S. Army Program Executive Officer-Rotary Wing, U.S. Special Operations Command, MacDill AFB, FL on Aug. 9 at the Delavan C. Clos Regimental Room at the U.S. Army Transportation Museum, JBLE. Over a 21 year career LTC Karnes' contributions resulted in improvements to the MH-60M aircraft that greatly increased the combat capabilities of the 160th Special Operations Aviation Regiment (Airborne).

Mid-Atlantic Chapter



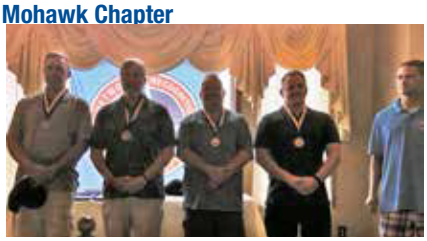
CHAPTER PHOTO BY HEATHER GALLAGHER

MAJ Brian C. Schlesier was inducted into the Bronze Order of Saint Michael Award during the 244th Expeditionary Combat Aviation Brigade (ECAB) Hail and Farewell at Joint Base McGuire-Dix-Lakehurst, NJ on June 28. He served as the 244th ECAB Operations Officer (S3) and is changing duty to serve as the Office of the Commander Army Reserve (OCAR) Aviation Force Integration Officer, G3/5/7 at Ft. Belvoir, VA.

CHAPTER COURTESY PHOTO

LTC Casey A. Martinez, commander of the 2-228th Theater Aviation Battalion (Fixed Wing), inducts **MAJ Elizabeth C. McNamara** into the Bronze Honorable Order of Saint Michael during their battalion hail and farewell event at JBMDL, NJ on July 13. She served as the 2-228th Battalion Executive Officer and is changing duty to serve as the Office of the Commander Army Reserve (OCAR) Aviation Policy Planner, G3/5/7 at Fort Belvoir, VA.

Mohawk Chapter



CHAPTER COURTESY PHOTO

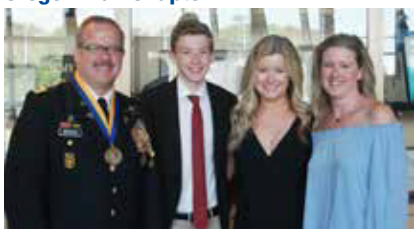
Chapter president and Army Aviation Support Facility #3 commander, LTC Kevin J. Ferreira (right), inducted four individuals into the Bronze Honorable Order of St. Michael during the chapter annual golf tournament at Fairways of Halfmoon in Mechanicville, NY on Jun. 28. The following individuals were recognized for their long-term contributions to Army Aviation. (l to r) **CW5 Mark E. Shumway**, Standardization Pilot (SP) AASF #3, Latham, NY, and Command Chief Warrant Officer, 42nd Cbt. Avn. Bde.; **CW5 (Ret.) Michael Johnson**, for his 35 year career as an Army Aviator with over 3,600 hours of accident free hours in the Active Duty, and National Guard; **COL (Ret.) Albert J. Ricci** for his 31 years of Army Aviation service, culminating with command of the 42nd CAB; and **MAJ Paul Bailie**, Operations Officer, AASF #3, Latham, New York.

Tennessee Valley Chapter

CHAPTER PHOTO: SHANNON KIRKPATRICK

Mrs. Celeste Cassino is inducted into the Honorable Order of Our Lady of Loreto by chapter president, Mr. Gary Nenninger, during a PM Apache Attack Helicopter change of charter/retirement ceremony for her husband, LTC Anthony Cassino, on June 29 at the Bob Jones Auditorium, Redstone Arsenal, AL. She was recognized for her more than 21 years as an Army Aviator spouse, donating her time, financial support, and efforts to support a variety of Army organizations, Soldiers and their families, and charities. They will be moving to Philadelphia where he has taken a job flying for Piedmont Airlines.

Oregon Trail Chapter

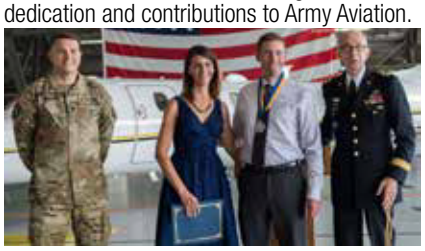


CHAPTER PHOTO BY AMANDA EDGECOMB

MAJ Jerry Brennan, operations officer for the Oregon Army National Guard State Army Aviation Office, poses with his family: son, Charlie; daughter, Emma; and wife, Sara following his induction into the Bronze Honorable Order of St. Michael by Oregon SAAO, COL Mark A. Ulvin, during a June 15 retirement ceremony at the Diebert Aviation Operations Facility in Salem. Brennan was recognized for his dedicated service to Army Aviation and the Oregon National Guard from Dec. 2002 to Feb. 2017. He will continue working full time as a healthcare executive for a medical device company.

Washington-Potomac Chapter

During the U.S. Army Priority Air Transport (USAPAT) Command 30th Anniversary celebration on Aug. 30 at Joint Base Andrews, MD, MG (Ret.) Carl H. McNair, Jr., former Aviation Branch Chief, and LTC Matthew Rowland, current USAPAT commander, inducted one former commander of the Davison Aviation Command into the Silver Honorable Order of St. Michael posthumously, and 7 former members of the command into the Bronze in recognition of their dedication and contributions to Army Aviation.



ALL PHOTOS BY SGT NICHOLAS T. HOLMES

The late **COL (Ret.) William F. O'Neal**'s children, Ashley Spaulding and Brian O'Neal receive the Silver Honorable Order of St. Michael on their father's behalf.

The following individuals were inducted into the Bronze Honorable Order (l to r): **CW2 (Ret.) Miguel "Mike" Carrosquilla, CW4 (Ret.) John "Jack" Cattilini, CW4 (Ret.) Delbert "Del" Hardiman, CW4 (Ret.) Michael McDonald, CW4 (Ret.) Chris Nauer,** and **CW4 (Ret.) Lyle Real**. Not pictured is **CW4 (Ret.) John Dahmer** who was unable to attend. His wife, Susan, accepted the induction on his behalf.

AAAA **Membership** By CW4 Becki Chambers

The Membership Corner

By CW4 Becki Chambers

It was a beautiful day back in May, and I happened to be driving past Lowe Army Heliport watching the Black Hawks taking off when my phone started to ring. I think that was an appropriate place to be taking a call from Dave Cooper.

AAPI PHOTO BY RENE BIDEZ

Incoming VP Membership, CW4 Becki Chambers and son, Ryan, work the membership booth with outgoing VP Membership, CW5 (Ret.) Dave Cooper, at the 2018 Army Aviation Mission Solutions Summit at the Opryland Hotel, Nashville, TN.

Dave wanted to know if he had my permission to recommend me to take his place as Vice President of Membership for AAAA. ME? Wow. I was totally blown away. Dave had filled this position for the past 5 and a half years, and had done an amazing job at it. If I decided to do this, I knew I would have some big shoes to fill (10½ - I asked). After discussing it with my husband Greg, and our kids, we decided I should accept the challenge. Thank you, Dave, Steve Mundt, Jeff Schloesser, Bill Harris and all the other wonderful staff at AAAA for entrusting me with this position.

So what now? The goal of this position is to increase our membership numbers. My first initiative in this effort is to put out a challenge to YOU, our members. I challenge each and every one of you to bring in just one new member over the next month. Just one. That should be easy, especially if your spouse is not a member yet. Did you know that spouses can become a member in their own right? Spouses are an important part of this Army Aviation Family and deserve their own membership; therefore, we've added that category under the Civilian Membership box. Also, this isn't the first time you are going to see the "one new member" challenge. We have an exciting promotional campaign that will be announced very soon!

A tool to help you recruit that new member is to come up with your "elevator pitch." An elevator pitch is a short, pre-prepared statement that explains what an organization or business does succinctly. Do you have an elevator pitch about AAAA? If not, start thinking about why AAAA is important to you. Why should people join? I spoke with Ingrid Strange as to why she feels it is important to join AAAA. Ingrid was our top recruiter for the month of August and is the owner of Ingrid's Jewelers and The Castle Cafe in Daleville, AL. She said that when her husband was going thru flight school, no one shared information with them or was there to help them. People need help, and in her opinion, AAAA does just that. To Ingrid, AAAA is the "moon and the sun" for Soldiers in the Army Aviation Community, and young Soldiers need to understand and appreciate all that AAAA does for them and the families. As a way to say thank you to AAAA, Ingrid pays for all new members that she signs up in her restaurant.

So, start thinking about why membership in AAAA is important to you and develop your own elevator pitch. Think about the four pillars of AAAA: **N**etwork, **R**ecognition, **V**oice, and **S**upport. What do those pillars mean to you? How can you tailor your pitch to your audience? Having a good elevator pitch will make it easy for you to recruit one new member this month.

I would be remiss if I did not say thank you to those that have agreed to serve on the Membership Committee. So far, Mark Ballew, Tracy Stapleton, Brian Fields, John Maez, Dana Trakel, Lauren Sullivan, Lisa Wilson, Patrick Sullivan, Mike Gomez, Victoria McDermott, and Dave Cooper have said yes. I told Dave that if I was going to take this assignment, I wanted/needed him to stay on the committee. I'm not finished forming the committee yet. My goal is to have a cross section of ranks and experience from Active Duty, Reserves, National Guard, Industry, and Spouses. If you or someone you know are interested in serving, please let me know.

CW4 Becki Chambers
AAAA Vice President for Membership

New Lifetime AAAA Members

Air Assault Chapter
MAJ Christopher Anthony
Aviation Center Chapter
MAJ Stephen F. Koach, Ret.
MAJ Kris Wilson
Big Sky Chapter
CPT Norman Simpson
Central Florida Chapter
Rick Crogan
Colonial Virginia Chapter
COL Michael Dallas, Ret.
Great Lakes Chapter
SPC Matthew N. Preston II
Greater Atlanta Chapter
CW3 Gilbert R. Price
Keystone Chapter
COL Patrick Birchfield
North Texas Chapter
LTC Allen Hahn
Prairie Soldier Chapter
MAJ Donald Ulrich, Ret.
Tennessee Valley Chapter
SFC Martin F. Charlier, Ret.

New AAAA Members

Air Assault Chapter
MAJ Christopher Anthony
MAJ Patrick Reeves
Aviation Center Chapter
CW3 Joshua N. Ronkainen
Connecticut Chapter
CW4 John R. Weaver
SSG Silas Kelly Holden
CPT Matthew Marcella
Mount Rainier Chapter
CW4 Kenneth Sleeger
North Texas Chapter
LTC Allen Hahn
Oregon Trail Chapter
SFC Robert E. McCree
SGT Brent Parrymarini
Rio Grande Chapter
PFC Anthony Perullo
Stonewall Jackson Chapter
Leo Laraway
Tennessee Valley Chapter
Russ Fortner
Tyler Clark
Steven Tibaldo
Michelle Jenkins
Lisa Correia
Kenneth Nebrig
SGT Cameron P. Renth
Utah Chapter
SGT Benny D. Houston
Volunteer Chapter
SGT Daniel J. Mills
PFC Marcus A. Lipham II
SPC Jesse D. Korenoski
PFC Nicholas O. Kannard
SFC Michael D. Jones
CPT Brandon N. Hicks
SGT Dobias L. Giles
SPC Damien P. Espitia
SPC David A. Curley
CPL Blake B. Call
SGT Michael L. Bumpus
PFC Corey C. Bonsell
SPC Marcus T. Barnett
SPC Enrique D. Bagley
PFC Abdirahman H. Ahmed
SGT Christopher L. Wright
SPC Toby L. Robertson
1LT Arthur C. Powers
SSG Anthony W. Pierce
CW2 Steven M. Losey
SPC Dakota V. Gallagher
CW2 Christopher W. Duckett
SGT Marion O. Bradshaw
SPC Travis M. Adkins
1LT Corey Devin Vick
SGT Steven Herod
SGT David Walker
SGT Bernard Roach
CW2 Jeremiah M. Christian
SGT Raymond Z. Cabrera

Lost Members

Help AAAA locate a member on this lost list and receive a FREE one month extension to your membership.
PFC Jabrai D. Abrams
SPC Jeremy Aguirre
Michael Bielefield
Michael Boies
LTC Don E. Bridgers, Ret.
CW5 Jimmie D. Brooks
Brian Cheek
Dereck T. Cobb
LtCol John T. Coffindaffer, Ret.
SGT Joshua A. Cribson
LTC Linn Desaulniers
Ann Dietzel-Bailey
Chris Diser
E. Allen Eason, III
1LT Stephanie Eldridge
LTC Carl E. Engstrom
SPC Skyler Evans
CDT Nicholas V. Farese
SSG Israel J. Fiaser
1SG Garvin George
MAJ Jeremy Gibbs
1LT Antonio M. Giori
CPT James Gleason
2LT Ethan Henry Gleue
LTC Heidi Jones
CW2 David Kellogg
PV2 Matthew Kurtz
LTC Jamie R. LaValley
1SG Pedro Lopez
GEN Gary E. Luck, Ret.
CW2 Matthew E. Madden
WO1 James W. Manning
WO1 Nestor J. Marin
CPL Williams D. Marquez
SGT Landon Hal Mintz
CW2 Justin Patin
SPC Tiffany Pineda
CW4 William C. Purser
Terrence Reaviel
CSM Terrence D. Reyes
SFC William D. Romanoff Jr.
Christopher E. Scaife
WO1 Jacob W. Schmidt
PV2 Duron E. Spencer
SFC Craig M. Sunstedt
COL John S. Sweeney, Ret.
CSM Michael Telesco
CPT Mark H. Thomson
MSG Cavell Trought
2LT Kacey Marie Tyra
SPC Zachary S. Valade
Frank Wilcox
1LT Michael C. Yarmie
CW4 John Yearwood

AAAA Chapter News

Connecticut Chapter


CHAPTER COURTESY PHOTO

The Connecticut Chapter held its annual Scholarship Awards reception on August 14th at Great River Golf Club in Milford where 11 awards were presented totaling $20,000. Awards included eight (8) CT Chapter Matching scholarships, including the chapter's highest award; The AAAA William J. May memorial award, two (2) AAAA Igor Sikorsky Memorial scholarships, and one (1) Timken Corporate Matching scholarship. Pictured (L-R): Top: family members and chapter officers; bottom: Scholarship award winners Jayne Pacelli, Cheyenne Gibilaro (accepting for her sister Ariel), Elise Moreau, Sarah Lukowski, Ashley Penczynzyn, Jack Hanke, and CPT Christopher Gibb (holding his daughter). Winners not present were Victoria Pantalone, Chrissy Chow, Justin Sadownick, and Emily Romanoff. Since 2003, a total of $189,000 in scholarships has been awarded by the AAAA Connecticut Chapter.

Griffin Chapter


CHAPTER COURTESY PHOTO

Soldiers from the 12th Combat Aviation Brigade recently participated in an AAAA Griffin chapter sponsored Golf tournament that took place on August 1st at the Lichtenau Golf and Country Club Course in Baden-Württemberg, Germany. There were 72 players from Ansbach, Wiesbaden, and Hohenfels representing 18 teams. BMW sponsored the event with prizes for the winning golf teams.

Keystone Chapter


CHAPTER COURTESY PHOTO

On August 25th, 2018 the AAAA Keystone Chapter participated in a community service project supporting Harrisburg Habitat for Humanity, the Global nonprofit housing organization. Soldiers volunteered during their off-duty hours and were assigned the task of siding homes that will later provide decent and affordable housing to those in need in our own community. The Soldiers are assigned to Joint Force Headquarters, Eastern Army Aviation Site (EAATS), Pennsylvania Army Aviation Support Facility #1 and the 28th Expeditionary Combat Aviation Brigade (ECAB) and are all members of the Keystone Chapter of AAAA. Pictured (l to r) are: Nate Smith, Mike Gross, Zach Krise, Shannon Cullen, Jess Hodson, Nick Davis, and Tara McConnell. Not pictured are Gregg Clark, Jess Hodson, Kevin Jordan, and Ken Smith.

Mid-Atlantic Chapter

CHAPTER PHOTO BY HEATHER GALLAGHER

Pictured are Chapter President, COL (Ret.) John Gallagher, Megan Ward, Aberdeen IronBirds "Fan Experience Specialist", and 29th ECAB commander, COL Mark Beckler at Leidos Field, Ripken Stadium, Aberdeen, MD, August 16, 2018. The Mid-Atlantic Chapter sponsored the 7th Annual Army Aviation Night with the Aberdeen IronBirds (minor league short season A classification affiliate of the Baltimore Orioles) and the homecoming/reunion of the 29th Expeditionary Combat Aviation Brigade Soldiers and their families after a year-long deployment to the Middle East. Partially subsidized by AAAA National, the chapter was able to have all E-6 and below Soldiers and family members attend the game and barbecue at no cost. During the event, COL Beckler (left) presented SFC Matt Gwin with the AAAA Mid-Atlantic Chapter NCO of the Year Award. A good time was had by all!

AAAA Family Forum

This year 1 in 59 children will be diagnosed with autism. I feel privileged to be able to share this personal and informative article from the daughter of a good friend. Laura's message brings hope to those who are currently experiencing or will be experiencing the autism spectrum in any form within their family or friends. Judy

Our Family's Journey Thru Autism

By Laura Townsend Kane

I have a child with autism. He is nine years old, completely nonverbal, and must be supervised at all times.

PERSONAL PHOTO BY LAURA KANE

Author Laura Kane's son Peter enjoying his time with a volunteer from "Autism on the Seas" on a December 2017 cruise with his family to include his grandparents, aunts, uncles and cousins. The program is in collaboration with major cruise lines and is offered at a very nominal fee above the cost of the actual cruise. It provides respite care and affords families the opportunity to really relax and enjoy their time.

Though I am not in a military family now, I grew up in one (my dad was career Army), so I have a good idea of how families are affected by the military lifestyle. We lived in many different cities and countries, moved every few years, and constantly faced new schools, new homes, new friends, new languages, and new cultures. The idea of raising a disabled child in such a fluctuating environment is daunting. For a child with autism, the element of change is a huge problem. How would a move every 2 years affect them? And what about the times when one spouse is on TDY and the other is essentially a single parent? I don't have all the answers. What I do have is nine years of experience with "the system" and a few thoughts that may help ease the burden and the fears.

Arm yourself with information. Do as much research as you can to become informed. If your child is not yet diagnosed, check out the CDC's "Autism Spectrum Disorders: Signs and Symptoms" site (*https://www.cdc.gov/ncbddd/autism/signs.html*).

Insist on a thorough screening. If your child has an autism diagnosis, learn all you can about the disorder from authoritative online sources such as Autism Speaks or Autism Society. Find out what therapies and treatments are recommended and push for those treatments for your child.

Never stop researching. You may stumble across a therapy or treatment that may work!

Don't live on an island. I mean this figuratively. Don't isolate yourself or you will drown in fear and frustration. You are not alone! Know that there are always families in the same situation. Seek them out and force yourself to socialize with those who have children with disabilities. You will be amazed with the valuable tips, tricks, and resources you will discover from each other! You can find these families through schools, churches, and social media organizations. Facebook has a group called "American Military Families Autism Support." Get involved with groups and organizations that will support you and give you a sense of community.

Know what resources are available to you. We are lucky to live in an age where information is readily available at our fingertips. There are many online resources for autism families. Start with Autism Speaks and take a look at their "Families" page. There are many avenues there for finding resources – even in your local area! Their "100 Day Kit: A Guide for Families After an Autism Diagnosis" is a great source of information. Contact their Autism Response Team if you have trouble finding anything.

Don't be afraid to fight. If you have a child with a disability, be prepared to fight. Fight for services, for funding, for inclusion, and for the right for your child to be respected and appreciated. It may sound daunting, but if you have followed the first three steps above, you will be ready. You will have your information, your community of supporters, and your knowledge of the resources that should be available to you. Put on your boxing gloves and be fearless for your child!

Ask for help. There will be times when you feel overwhelmed and helpless. This is completely normal, but you must have tools in place to help you through those tough times. For a long time, I hesitated to ask for help. I thought I could do everything myself, then felt like an inadequate parent when things went badly. I learned quickly that you NEED to ASK FOR HELP sometimes.

Form a network with other autism parents and let them know when you need help. Reach out to friends and family and ask for help with errands, housework, transportation, or babysitting. Find a way to get regular RESPITE, because you will need to take breaks from your child. There are local organizations that help with this (in South Carolina we have a Respite Coalition that actually give out grants to families to pay for respite!). There is no shame in asking for help, and you'd be surprised at how many people are eager to help.

Please check out my blog, "Perfectly Peter," *https://perfectlypeter.wordpress.com/*. There you will find helpful information that I've gathered during our family's journey through autism. Above all, please remember: you are not alone, and there will always be good days ahead!

Laura Townsend Kane is the assistant director of information studies at the School of Medicine Library, University of South Carolina. She and husband Patrick reside with their three sons in Columbia, SC.
Judy Konitzer is the family forum editor for ARMY AVIATION; questions and suggestions can be directed to her at judy@quad-a.org.

Thank You to Our Scholarship Fund Donors

*AAAA recognizes the generosity of the following individuals, chapters and organizations that have donated to the Scholarship Foundation in calendar year 2018 through September 30th. The list includes donations received for all scholarships, as well as the General Fund which provides funding to enable the chapter, corporate, heritage and individual matching fund programs as well as national grants and loans. Donors marked with an * are partially or totally donating to the Families of the Fallen Scholarship.* ***Every penny donated to the Scholarship Foundation goes directly to a grant or loan as a result of the Army Aviation Association of America subsidizing ALL administrative costs!***

AAAA 2018 Summit Speakers
COL (Ret.) Sidney Achee
AAAA Air Assault Chapter
Airbus Group
Anne Allison
AAAA Aloha Chapter
AmazonSmile
Apache Attack Helicopter Project Office
AAAA Arizona Chapter
Army Aviation Association of America
Army Aviation Center Federal Credit Union
Army Otter Caribou Association, Inc.
Mike & Daphne Arthur
John G. Asay
Aspen Consulting Group
AAAA Aviation Center Chapter
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Elisabetha Baugh
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COL (Ret.) Lewis J. & Betty L. McConnell
LTC (Ret.) Thomas J. McNamara
Dirk Megchelse
AAAA Mid-Atlantic Chapter
Raymond Milora
AAAA Minuteman Chapter
Don Munsch
Munsch & Co. Aeromechanics
Network for Good
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Vanguard Charitable
Vertol Systems Company, Inc.
Vietnam Helicopter Pilots Association
AAAA Voodoo Chapter
AAAA Washington Potomac Chapter
Christopher & Katherine White
AAAA Wright Bros. Chapter
COL (Ret.) Michelle Yarborough

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

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.

Block 3 Chinook Time Lines

U.S. ARMY PHOTO BY CHRISTOPH KOPPERS

Boeing will begin development of a Block 3-standard Boeing CH/MH-47 Chinook transport and assault helicopter toward the end of the 2020s, ahead of fielding by the U.S. Army in the late 2030s/early 2040s. According to a briefing earlier this year by U.S. Special Operations Command's Technology Applications Program Office (TAPO) MH-47G product manager, LTC Robert Klarenbach, Block 3 technology development for both the CH-47F and MH-47G will run from about 2027 to 2040, with production immediately following. Boeing first offered the idea of a Block 3 upgrade to take the Chinook out to the 2060s in May 2017 and is currently in the early stages of the Block 2 upgrade for the U.S. Army's Chinook fleet. No details were released as to what a Block 3 upgrade might include.

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

Avox Systems Inc., Lancaster, NY, was awarded a $7,075,107 modification (P00008) to contract W911SR-15-C-0007 for Joint Service Aircrew Mask-Rotary Wing mask protective unit mask systems and spares; work will be performed in Lancaster, with an estimated completion date of Oct. 22, 2019.

CAE USA Inc., Tampa, FL, was awarded a $25,352,844 modification (P00022) to contract W911S0-15-C-0003 for fixed-wing courses, academic and flight simulator, flight training and support services; work will be performed in Dothan, AL, with an estimated completion date of March 9, 2024.

Erickson Helicopters Inc., Portland, OR, has been awarded a $28,447,076 fixed-price, indefinite-delivery/indefinite-quantity contract (HTC711-18-D-R023) providing dedicated rotary wing and fixed wing aircraft to the U.S. Pacific Command (USPACOM) area of responsibility (AOR); defined as, but not limited to, continental Asia, Philippine islands, and countries supporting operations in the Philippines; the base period of performance is from Sept. 28, 2018, to Sept. 27, 2019.

General Atomics, Poway, CA, was awarded a $441,634,278 cost-plus-fixed-fee contract for procurement of technical services for U.S. Army Gray Eagle Unmanned Aircraft Systems; work locations and funding will be determined with each order, with an estimated completion date of Sept. 30, 2023.

Rockwell Collins Inc., Cedar Rapids, IA, was awarded a $14,986,216 contract for procurement of Airborne Computer Equipment V Architecture Zero equipment for the RQ-7B Shadow Tactical Unmanned Aircraft System, production for software and hardware on the RQ-7B Shadow; work locations and funding will be determined with each order, with an estimated completion date of Sept. 27, 2021.

Sikorsky Aircraft Corp., Stratford, CT, was awarded a $60,947,957 firm-fixed-price contract for repair of the Utility Helicopter-60 Blackhawk transmission; work locations and funding will be determined with each order, with an estimated completion date of Sept. 24, 2023.

Spydercrane.com LLC,* Phoenix, AZ, was awarded a $34,557,260 firm-fixed-price contract for production of expeditionary cranes, field support package, stockage list, training and developing the associated technical publications for self-propelled crane aircraft maintenance and positioning increment II, type II expeditionary crane; work locations and funding will be determined with each order, with an estimated completion date of Aug. 30, 2023.

The Boeing Co., Philadelphia, PA, was awarded a $33,786,581 firm-fixed-price contract for cargo platform health environment kits for cargo helicopters; work locations and funding will be determined with each order, with an estimated completion date of Dec. 26, 2020.

The Boeing Co., Ridley Park, PA, was awarded a $198,927,812 firm-fixed-price contract for performance-based logistics support of the Chinook H-47 forward and aft rotor blades and associated containers; work locations and funding will be determined with each order, with an estimated completion date of Sept. 30, 2023.

Advertisers Index

AAAA **Legislative** Report

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

2006 What a Year

How many AAAA members remember 2006? Steelers won the Super Bowl that year, Cards won the Series, Mark Zuckerberg turned down $1B for Facebook (good decision), Whitney Houston and Bobby Brown broke up, and an even more useless factoid is the fact that the #1 song in Sept 2006 was Sexyback by Justin Timberlake! Now if none of these sparked your memory on significant events in 2006, here is the one that is germane and related to our incredibly divided political system. 2006 was the last year that Congress actually passed a budget on time (before end of month September). That was the last time we were not in a stop-gap funding situation called continuing resolution. 12 years ago… we have majors serving in our force that have never seen a defense budget on time. That's not quite as bad as West Point's 14-year drought against Navy in football but in many ways it's much worse.

The good news is that the budgetary losing streak is over. As we've articulated in past articles, the House passed their version of the defense appropriations bill for FY19 months ago and they've been negotiating with the Senate for months on the final numbers. On Sept. 18, the Senate voted 93-7 in favor of the 2019 budget that included the defense appropriations bill and on Sept. 28, President Trump signed it into law.

FY19 marks three straight years of robust defense spending and sets the conditions for improved readiness and modernization efforts that have been long overdue. I don't like to regurgitate budget numbers in this article but here are the highlights. Total for DoD is $674B in base funding and $68B in overseas contingency operations/global war on terror (OCO/GWOT) funding. $243B of the total goes to operations & maintenance (O&M) (e.g., readiness and flight hours), $96B for research and development (e.g., Future Vertical Lift (FVL), and $148B for modernization (e.g., new Black Hawks, Chinooks, and Apaches). The big winners within Army Aviation are Black Hawk and Apache, each receiving $1.2B for new aircraft. This is great news for our Army Aviation Enterprise and for national security. Military personnel did well too with funding that will result in a 16,400 personnel end-strength increase and $2.6% pay increase… nice.

Now What... Predictability Finally

Having a budget on time means so many things. As discussed in past articles, budget stop-gaps (continuing resolution) wreak havoc at all levels from operations to modernization. A budget, on-time, allows our operational folks to better schedule training and war time operations while our acquisition program managers can accurately execute modernization programs. Our industry teammates can accurately plan production and delivery schedules which equates to a more predictable and stable industrial base. You can see the magnitude of positives that come with an on-time defense appropriation.

Planning for the FY20 Cycle:

The other positive result of an on-time FY19 appropriation is that our executive leaders can focus this fall exclusively on preparation for the FY20 cycle that begins in February when the White House passes the FY20 defense budget over to congress for their annual adjustments. The new norm has been for our Aviation leaders to continue working a previous year budget request in the fall while at the same time planning for the next budget request… a huge and unnecessary distraction.

COURTESY PHOTO, CONGRESSWOMAN ROBY STAFF

Representative Martha Roby meets with DAMO-AV; (l to r) COL Whitney B. Gardner, Ch, Analysis Div.; BG David J. Francis, Dir. Army Aviation; and COL Phillip Ryan, XO.

FY20 will be another critical year in rebuilding readiness and modernization in Army Aviation. MG Gayler (Branch Chief), BG Francis (G3 Aviation Director), BG Rugan (FVL Cross-Functional Team CFT)), and BG Todd (PEO Aviation) have a tremendous task in the months ahead to set the conditions with key members of Congress and staff to ensure our budget request is supported when it hits the Hill in February. You guys and gals at the unit level who are living the life with generous funding for training and flying new and sophisticated aircraft have these gentlemen to thank because the flying they do happens throughout the halls on Capitol Hill to tell a coordinated story on Army Aviation and gain champions that will lead to positive results when it comes time for staffers to make their "takes and puts" into the budget request. BG Francis has already started our outreach for FY20 with office calls in September to include talking with Rep Martha Roby on our priorities and needs.

I sat with BG Francis recently to discuss just this and his thoughts were that "Army Aviation has benefited from solid and transparent relationships with lawmakers in recent years and we continue to build and strengthen those relationships. Without the trust and confidence in what we are doing with taxpayer dollars, we would not be successful at the unit level." He's right; anyone can watch the news and see how difficult trust is to gain when dealing with Congress. This is also why the industrial portion of our enterprise must be sensitive of their efforts when lobbying Congress. The more we work together, the better the outcome for the whole of the Army Aviation Enterprise!

AAAA **Awards**

Order of St. Michael Recipients

Gold
BG Benjamin F. Adams III

Silver
LTC Louis J. Karnes
COL Duane B. Bergevin, Ret.
CW5 Curtis R. Phipps

Bronze
CW4 Peter R. Jesse
CW4 Jeffery C. Duncan
CW4 Phillip B. Kincaid
CW3 Rebecca L. Pinckney
Patricia J. Durham
CW4 R. Brian Ozgowicz
CW3 Michael A. Cifers
COL Albert J. Ricci, Sr., Ret.
CW5 Michael W. Johnson
CW5 Mark E. Shumway
MAJ Paul Bailie
LTC Prescott R. Farris
CW5 Daniel R. Curry, Ret.
LTC Amanda MacWhirter
CW4 Kevin M. Hogue
CW3 Joshua M. White
CSM Thomas E. Hughes
CW3 Karl B. Gawron
1SG Stewart I. Williams
David Bowering
CW4 Patrick D. Braman
CW4 Christopher M. Peters
CW4 Robert E. Epting II
MAJ Scott D. Gale
CW4 Hector M. Torres
1SG Edwin R. Tate
1SG Michael E. Riedel
MAJ Sean A. Merritt
CW2 Mark A. Rhoads
SFC Danny L. Maugans
CPT Stefan J. Cormier
1SG Les Morrison
SGM Christopher R. Marshall
CW5 Jim M. Sandberg
CW5 Paul W. Jenschke
MAJ Yonatan Abebie
LTC Ian J. Feyk
CW4 Brian E. Smith
SFC Samuel Bingham
SFC Eric Teschner
SFC Marvin Whitney
CW4 John M. O'Mary
CW3 Shane L. Beld
1SG Christopher R. Stewart
MSG Charles McCoy
CW5 David L. Clark
CPT Sean T. Summerall
CW3 Michael D. Shoup
MAJ Daniel M. Goldssmith
MAJ Elizabeth C. McNamara
CW2 Felicia Smith
CSM John Hicks
CW4 Jerry Steber
CW5 Gino Spescia
MAJ Brian C. Schlesier
CSM John H. DuVall, Jr.

Honorable Knight Recipients

MG Michael E. Kurilla
LTC Michael V. Stewart

Our Lady of Loreto Recipients

Alicia D. Surrey

Soldier of the Month

LTC Janes A Sink
Arizona Chapter
June 2018

NCO of the Month

SFC Dustin A, esenwein
High Desert Chapter
September 2018

SGT Brent Parrymarini
Oregon Trail Chapter
September 2018

SFC Robert E. McCree
Oregon Trail Chapter
August 2018

SFC Major J,. Wilburn
High Desert Chapter
August 2018

Award Nominations Are Open NOW!

Recognize Our Soldiers !

Awards To Be Presented at the Annual Army Aviation Mission Solutions Summit:

- Joseph P. Cribbins Department of the Army Civilian of the Year
- James H. McClellan Aviation Safety
- Henry Q. Dunn Crew Chief of the Year
- Army Aviation Soldier of the Year
- Rodney J.T. Yano NCO of the Year
- Michael J. Novosel Army Aviator of the Year
- Robert M. Leich Award
- Army Reserve Aviation Unit of the Year
- John J. Stanko Army National Guard Aviation Unit of the Year
- Active Army Aviation Unit of the Year
- Outstanding Army Aviation Unit of the Year
- Top AAAA Chapter of the Year
- Top Senior Chapter of the Year
- Top Master Chapter of the Year
- Top Super Chapter of the Year

Due: January 1, 2019

Remember to Send in Your Nominations Today!

UPCOMING EVENTS

NOVEMBER 2018

13-14 AAAA Joseph P. Cribbins Aviation Product Sustainment Symposium, Huntsville, AL

15-16 AAAA Aircraft Survivability Equipment Symposium, Huntsville, AL

27-29 Association of Old Crows, 55th Annual Intnl Symposium & Convention, Washington, DC

DECEMBER 2018

8 The Army-Navy Game, Lincoln Financial Field, Philadelphia, PA

People On The Move

Aviation General Officer Retirement

U.S. ARMY NATIONAL GUARD PHOTO BY SSG BEN CRANE

Master Army Aviator BG Benjamin F. Adams III was inducted into the Gold Honorable Order of St. Michael by AAAA National Secretary, MG (Ret.) W. Tim Crosby, at the Army Aviation Support Facility, Boone National Guard Center in Frankfort, KY on Sep. 8, 2018. Adams, who piloted a UH-60 on his final flight to the ceremony, retired as the Assistant Adjutant General for the Kentucky Army National Guard after 40 years of service. He was recognized for his life-long contributions to Army Aviation, including his dual-hatted assignment as the Deputy Commanding General-Army National Guard, U.S. Army Aviation Center of Excellence at Ft. Rucker, AL. Adams was an organizer and the inaugural president of the AAAA Bluegrass Chapter and will continue serving in a non-military role as Commissioner of the Kentucky Department of Veterans Affairs.

Changes of Command/ Responsibility

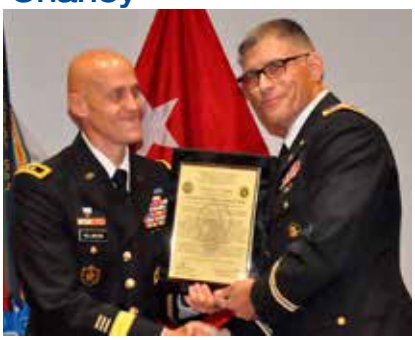
Weinshel Takes Over at 101st CAB

U.S. ARMY PHOTO BY CPT KRISTOFFER SIBBALUCA, 101ST CBT. AVN. BDE. PAO

COL Craig J. Alia officially relinquishes command of the 101st Cbt. Avn. Bde. while passing the brigade colors to MG Andrew P. Poppas, 101st Abn. Div. (AASLT) commander and Resolute Support deputy chief of staff for operations, during a change of command ceremony held at Bagram Airfield, Afghanistan, Aug. 25. Poppas then charged COL Matthew R. Weinshel (back to camera) with the responsibility of commanding Task Force Destiny and the aviation brigade of the world's only air assault division. Alia moves to Redstone Arsenal, AL and assumes responsibilities as the chief of staff for the Future Vertical Lift Cross-Functional Team.

Change of Charter

PM ASE Welcomes Chaney

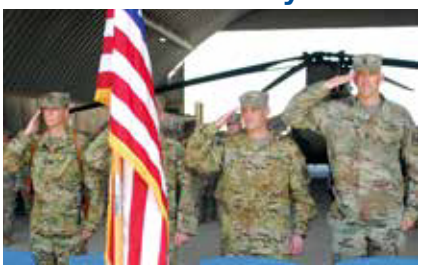


U.S. ARMY PHOTO BY SHERRY DORNER

MG Kirk F. Vollmecke, Program Executive Officer for Intelligence, Electronic Warfare, and Sensors (PEO IEW&S) presents the Project Office Aircraft Survivability Equipment organizational charter to COL Kevin S. Chaney, signifying the assumption of his role and responsibilities as the new project manager during a ceremony on Sept. 6, 2018 at Redstone Arsenal, AL. Chaney assumes the charter from COL Jong Lee who is retiring.

Transfer of Authority

449th and 35th CABs Transfer Authority



U.S. ARMY PHOTO BY SSG LETICIA SAMUELS, 449TH CBT. AVN. BDE.

Command teams for the 449th Cbt. Avn. Bde. and the 35th CAB render a salute as the National Anthem plays during a transfer of authority ceremony Aug 28, 2018 at Camp Taji Military Complex, Iraq. The ceremony marked the successful completion of the 449th CAB's nine-month deployment and assumption of authority by the 35th CAB.

Flight School Graduates

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

22 Officers, August 2
Commissioned Officers
2LT Jordan Edwards – DG
2LT Devin Borland
2LT Kurtis Hilton
2LT Skyler Podesek
2LT Keith Sneed
2LT Lyndsie Taylor
Warrant Officers
WO1 Karissa Larkey – DG
WO1 Dennis Wimmer – HG
WO1 Christopher Cook
WO1 Lea Cuatt
WO1 Logan Featherston
WO1 Matthew Fisher
WO1 Erik Fortney
WO1 Erin Gooch
WO1 Zachary Huffman
WO1 Chase Mahan
CW2 Samuel Mock
WO1 Pedro Monzon Echeverria
WO1 Chikaobi Reid
WO1 John Svancarek
WO1 Christian Veale
WO1 Tyler Whittaker

49 Officers, August 16
Commissioned Officers
2LT McNicholas, Samantha L. – DG
2LT Decapua, Samantha R. – HG
2LT Kebert, Camden G. – HG
2LT Backstrom, Quentin J.
2LT Bentley, James T.
2LT Danning, Travis J.
2LT Downs, Andrew M.
2LT Howell, Martin R.
2LT Kiefer, Brent S.
2LT McWhirter, Robert B.
2LT Miller, Jared L.
1LT Moore, Christopher L.
2LT Morrison, Reneillio R.
2LT Nolan, Cody A.
2LT Plumlee, Printer Z.

2LT Potter, Zachary T.
2LT Rodriguez, Brandon J.
Warrant Officers
WO1 Town, Nathan A. – DG
WO1 Kean, Dustin K. – HG
WO1 Burroughs, Henri Z. – HG
WO1 Arcand, Michael M.
WO1 Barnes, Justin L.
WO1 Bissette, Frank R.
WO1 Callahan, Michael R.
WO1 Canotapia, Lorenzo A.
WO1 Collins, Keith R.
WO1 Criss, Tristan M.
WO1 Doebler, Jeffrey T.
WO1 Drever, Bryan P.
WO1 Faile, Ryan T.
WO1 Gillespie, Zeffery C.
WO1 Howard, Michael A.
WO1 Ingoglia, John C.
WO1 Jakubowski, Tyler J.
WO1 Koontz, Wade P.
WO1 Martinez, Mark A.
WO1 McCarthy, Robert P.
WO1 Moncada, Jose
WO1 Piner, Jacob T.
WO1 Raby, David A.
WO1 Radcliff, Andrew S.
WO1 Robinson, Kenneth

People On The Move

WO1 Rogers, Kyle A.
WO1 Ruiz, Antonio
WO1 Savage, Ryan J.
WO1 Self, Ryan A.
WO1 Syverson, Jaden R.
WO1 Tirol, Daniel A.
WO1 Whatley, Blake N.

53 Officers, August 30

Commissioned Officers

2LT Schwenzfeier, Alexandra A. – DG
2LT Hamilton, Joshua A. – HG
2LT Heard, Zachary M. – HG
2LT McEvoy, Kieran P. – HG
2LT Pool, Michael D. – HG
2LT Alfonso, Nathan M.
2LT Bassett, Olivia G.
2LT Baur, Benjamin R.
2LT Braman, William C.
2LT Camenzind, Joshua P.
2LT Cihak, Andrew P.
2LT Dardon, Jeremy E.
1LT Ennis, Patrick C.
2LT Goode, Margaret F.
2LT Hamilton, Cole D.
1LT Herbert-Burns, Zachary H.
2LT Lazzizzera, Marco Antonio
2LT Machina, Brian W.
2LT McCarver, Galen M.
2LT Monlux, William Michael M.
2LT Peal, Hollianne M.
2LT Powell, Lawton M.
2LT Relin, Edward L.
2LT Rice, Amy K.
2LT Shurden, Benjamin M.
2LT Slocum, Kelly R.
2LT Stueber, Chase L.
2LT Van Holland, Ryan N.

Warrant Officers

WO1 Richey, Evan T. – DG
WO1 George, Nicholas J. – HG
WO1 Gonnion, Levi M. – HG
WO1 Manning, Robert J. – HG
WO1 Townsend, John A. – HG
WO1 Alvey, James E.
WO1 Connel, Daniel R.
WO1 Diaz, Edward D.
WO1 Eliot, Ryan M.
WO1 Fleser, Craig M.
WO1 Fuchigami, Kirk T.
WO1 Hoggatt, Matthew J.
WO1 Howard, David N.
WO1 Kenney, Matthew D.
WO1 Long, Andrew S.
WO1 Lopez, Jeramey R.
WO1 Marin Acevedo, Nestor J.
WO1 Marson, Taylor M.
WO1 Mefford, Christopher T.
WO1 Perron, Christopher M.
WO1 Richichi, John A.
WO1 Rios, Jonathon A.
WO1 Rivers, Nathan T.
WO1 Sanchez, Alexander
WO1 Schrum, Brian S.

36 Officers, September 13

Commissioned Officers

2LT Bartlett, Craig S. – DG
2LT Frabott, Nathan L. – HG
2LT Willis, Scott C. – HG
2LT Alderete, Alejandro M.
2LT Bode, Gregory L.
2LT Delima, Edward Y.
2LT Ede, Michael J.
2LT Hannon, Francis M.
2LT Isely, Matthew A.
2LT Kerney, Jessica B.
2LT Lademan, David R.
2LT Murray, Sean S.
2LT Piatt, David C.
2LT Todd, Samantha L.
2LT Weber, Justin B.

Warrant Officers

WO1 Phillips, John S. – DG
WO1 Fuchs, Christopher J. – HG
WO1 Myers, Jonathan T. – HG
WO1 Pion, Jean P. – HG
WO1 Bennett, Christopher K.
WO1 Chambers, Ryan W.
WO1 Coonradt, Craig N.
WO1 Cunningham, Owen M.
WO1 Fuller, Bradley R.
WO1 Green, Cornelius
WO1 Greene, Lamar M.
WO1 Holmes, Jesse L.
WO1 Jenson, Nicholas L.
WO1 Keeton, Michael P.
WO1 Meyers, Andrew B.
WO1 O'Neill, Daniel M.
WO1 Schremser, Daniel J.
WO1 Sims, Giovanni R.
WO1 Snead, Jarrod S.
WO1 Twigg, Travis S.
WO1 Vining, Isaac M.

DG = Distinguished Graduate
HG = Honor Graduate
* = AAAA Member
\+ = Life Member

ADVANCED INDIVIDUAL TRAINING (AIT) GRADUATIONS

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

AH-64 Attack Helicopter Repairer (15R)

Class 020-18

SPC Lloyd Lamar Clemons
PV2 Billy Ray Coffey III
PV2 Kyran Collier
PFC Tayler Duane Doty
SPC Austen Erdene
PV2 Michael Anthony Gambardella
PV2 Aaron Garcia
PV2 Dillon Liam Harris
PV2 Clifford Isaiah Howard
PV2 Alexa Gianna Labarbera
SPC Jesse Solomon Mcalpin

Class 021-18

PV2 Dustin Damian Young * – DG
PV2 Wesley Brian Campbell Jr.
PV2 Devin Michael Creech
PV2 Andres Gonzalez
PV2 Saul Fabian Gonzalez
PV2 Lopez Walter Lua
SPC Isaac Justin Martinez Jr.
PV2 Eanis Adrian Olmos
PV2 Rodriguez Bryan Rosario
PV2 Xered Elric Throssel
PV2 Colton Bryce Webb

Class 022-18

SPC William James Bechtold
PV2 Samuel Joaquin Bermudez
PV2 Robert James Carver
PV2 Trey Edward Duncan
PV2 Tre Dalton Geraurd
PV2 Shawn William Nagy
PV2 Brandon Matthew Villaverde
PV2 Robert Roy Womack

Class 023-18

PFC Lukman Adinafah
SPC Dustin Tremain Conner
PV2 John Darren Dees II
PV2 Gavin James Ely
SPC Michael Patrick Gallagher
SPC Brandon Raymond Hartman
PV2 Christopher Labasbas Lee Jr
SPC Michael Ray Laningham
SPC Junior A. Marcial Espinosa
SPC Kiel Alan Messersmith
PV2 Felipe Rolando Moreno Jr.
SPC Oluwatosin Peter Moses

Class 509-18

PV2 Jessica Danielle Day – DG
SPC Brooke Jordan Alvey
SPC Joseph Michael Clark
SPC Alec Mckinize Murray
SPC Karson Leigh Notestine
SGT Neiro Fernely Rico
PV2 Arron Micheal Schubert
SPC Lane Joseph Smith
PV2 James Pedro Studebaker II

UH-60 Helicopter Repairer (15T)

Class 041-18

PV2 Chevis Braden Sing - DG
SPC Melvin Javier Colonserrano
PV2 Tiffany Ann Fouste
PFC Kristin Marie Herold
Cpl Brian Scott Holland
SGT Brian William Kirsch
PFC Mikaylah Minhuieli Loveless
SSG Wei-Cheng Lu
SGT Maximino Romero
PVT Zachary Kent Shuttleworth
PV2 Eric Chance Sopp
PV2 Donald Bronislaw Tulodieski

Class 042-18

PV2 Weston Gene Kania * – DG
PV2 Christopher Jude Blumrich
PV2 Matthew Joseph Brin
PV2 Michael Caleb Brooks
PV2 Taylor Nathan Copling
PFC Kidd Mcrae Hamilton
PV2 Kenneth Bridge Harrison
PV2 Kevin Paul Moskvin
PV2 Roberto Padillaornelas
PV2 Jonathan Tyler Price
PFC Alex Matthew Richards
PV2 Kenneth Lee Torgerson

Class 507-18

SPC Geoffrey Mashburn * – DG
PVT Kevin Michael Arinder
PFC Zackery Wade Cooksey
PFC Jonathan David Gilliam
PV2 Covey Joseph Hunter
PV2 Christopher Robin Miller, Jr
PV2 Alec Brayden Parker
PV2 Oscar Pulido
PV2 Evan Corey Roberts
PV2 Don Louis Romero, II
PV2 Emmanuel Rosariocalderon
PFC Christian Joseph Smith

Class 043-18

PV2 Benjamin G.Guggeis * – DG
PV2 Brendan Francis Bolger
PV2 Kaitlyn Ann Busch
PV2 Kevin Raleigh Hood
SSG Miao-Ke Hsiao
PFC Michael Aaron Jerkins
PFC Ann Yun Krepfle
SPC Paul Johann Martin
SPC Richard Ray Mata
SPC Carl Herman Mueller
SGT Justin Carl Rhodes
SFC Peter Rogos

Class 044-18

PV2 Shaun M. Warman * – DG
PV2 Treven Michael Brackin
PV2 Clayton Alan Bryant
PV2 Dylan Matthew Davis
PV2 Michael Andrew Fleming
PV2 Jerad Kyle Haarmeyer
PV2 David Lam Ngo
PFC Jakob Ronald Schultz
PFC Colin Tim Severio
PV2 Joshua Steven Steinmann
PFC Kenneth Mathew Vandeputte
PFC Patrick Stephen Yates

Class 508-18

PFC Jack Edward Conlon * – DG
PV2 Mason Oliver Ballard
PV2 Devyn John Barnett
PV2 Austin Cooper Bradshaw
PV2 Austin Lee Briggs
PV2 Brandon Retes Covey
PV2 Nicholas Kaine Day
PFC Derek Manuel Deates
PV2 Alec Taylor Hoekema
PV2 Donovan Chase Jensen
PV2 Devin Christopher Lambert

Class 045-18

PFC Giuseppe Oscar Cruz * – DG
PV2 Christopher Robe Chatterley
PV2 Kyli Jerrard Dean
PV2 Codysterling Foley
PV2 Brandon Michael Kleinfelder
PFC Jonathan Joseph Kuhn
PV2 Jacob William Laubach
PV2 Hannah Nicole Pack
SPC Jacob Joseph Rennier
SPC Jason Alexander Sheldrick
PV2 Savannah Arriona Sullivan

Class 046-18

PV2 Hunter Lynn Bates * – DG
PV2 David Ray Arnold, Jr
SPC Ridwan Olawale Azeez
PV2 Matthew Clayton George
PV2 Justin Lyrick Hash
PV2 Johnny Hau
PV2 Kervin Kernizant
PV2 Joshua Paul Outlaw
PV2 Anthony Richard Scirrotto
PFC Bryce Tyler Solomon
PV2 Milton Sutherland

Class 509-18

PV2 Christopher J. Russo * – DG
PV2 Sean Michael Clark
PV2 Victor Cordero, Jr
SPC Jacob Allen Hicks
PFC Joseph Travis Perry
PFC Taylor James Reha
PV2 Tommy Clinton Smith
PVT Riley Adam Sutton
PV2 Riley Dale Syra
SPC Daniel Truesdale, III
PV2 Jose Valerio

Class 047-18

PFC Trevor Lynn Carson * – DG
PV2 Zachary Allen Brashers
PV2 Anthony Thomas Chambliss
PV2 Michael Andrew Colby
PV2 Trevor Gage Comeaux
PFC Isaak William Cooper
PV2 Pedro Gabriel Dejesus
PV2 Joseph Michael Esthay
PV2 Nicholas Daniel Frontuto
SPC Dakota Vincent Gallagher *
SPC Hector Perezreye
SGT Simone Hillary Turnbull

Class 048-18

PV2 William Karl Gardner * – DG
PV2 Tyler Joseph Bailey
PV2 Eldon Westley Birdsong
PV2 Caleb Joseph Bowman
PFC Collin Christopher Gregory
PV2 Britain Darcy Hamilton
PV2 Brandon Mark Hudson
PV2 Arik Lee Hurst
PV2 Andrew Michael Jakubac
PV2 Thomas Robert Paterson
PFC Hunter Dean Peck

Class 510-18

PV2 Remus John Velez – DG
PV2 Benjamin Jose Perezcavo
PV2 Jesus Jovani Rivasdelao
PV2 Martinez Anthony Serrato
PV2 John Wesley Thomas Taylor
PV2 Samuel Parker Taylor
PV2 John Travis Williams, Jr
PFC Noah Malone Willis
PV2 Ryan Michael Louis Woods

Class 049-18

PFC Tristan Mathew Brant * – DG
SPC Dahlton Robert Fillipi
PFC Megan Marie Hearn
SPC Kristian Edward Rivard

Class 511-18

PV2 Cody Keith Barton * – DG
PV2 Isaac Ethan Butler
PV2 Dillon Mathew Carr
PV2 Coleton Nicholas Clavijo
PV2 Georgie Cruz, Jr
PV2 Christopher Lee Daugherty
PFC Kristoff St Patrick Davis
PV2 Shawn Michael Davis
PV2 Daniel Ivan Durst
PV2 Nicholas Henry Fantauzzi
PV2 Dawson Everett Holden

Class 512-18

PV2 Bryan Patrick Joyce * – DG
PV2 Graham Cole Humphries
PV2 Travis Scott Kirk
PV2 Christopher Barry Martin
PV2 Jonathan Ricardo Martinez
PFC Nathan Douglas Mcleod
PV2 Ottis Williams Mears
PV2 Leonard Michael Odell
PFC Aaron Taylor Randall
PV2 Ahmani Bryan Ross
SPC Tyler Ausust Schertz
PV2 Carl Timothy Shands, Jr

CH-47 Medium Helicopter Repairer (15U)

Class 015-18

PV2 Dakota Richard Potter * – DG
SPC David Edward Bartels
PV2 Bradley John Coburn
PV2 Benjamin Peter Eunson
PV2 Jakari Tyress Jones
PV2 Stephen Mikel Kline
PV2 Brody Chase Welker

Class 016-18

PV2 Jedidiah B. Gaddie * – DG
SPC Josue Alvarado
PV2 Jaron Macale Brown
PV2 Tristan Robert Creamer
PV2 Mark Taylor Darnell
PV2 Caleb Zachary Large
PV2 Joseph Henry Miles
SPC Lameck Onyandia Onduso

People On The Move

PV2 Orlando Ruiz
SPC Justin David Lampinen
Class 017-18
PV2 Dalton Edward Wall * – DG
SPC David Franklin Bird, Jr
PV2 Bradley John Coburn
SPC William Michael Griffin
PV2 Saucedo Javier Ibarez
PV2 Harlie Benjamin Kennell
PFC Benjamin John Malczewski
PV2 Guillermo Luis Saez-Rivera
PV2 Melvin Henry Santos
PFC Jennifer Marie Shaffer
PV2 James David Smout
SPC Alan Guo Wang
Class 018-18
PV2 Marcus F. Anderson * – DG
PV2 Bradley John Coburn
PV2 Shaden Jace Fernandez
SGT Ross Earl Godfrey
PV2 Brandon Isaiah Greene
PV2 Mason Tyler Holmes
SPC Caleb Michael Hosey
PV2 Zachary Paul Kilgore
PV2 Kenyon John Terry *
PV2 Mark Anthony Torres, Jr
Class 019-18
SPC Stephanie M. Grover * – DG
SPC Eric Daniel Buck
PV2 Kamille M. De Jesus Delgadillo
PV2 Conner Aaron Erben
PV2 Dillon Wayne Montgomery
SPC Remington Brady Stephens

Aircraft Powerplant Repairer (15B)
Class 006-18
PV2 Jesus Calvin Escudero – DG
PV2 Spenceer Alan Bond
SPC Kelly Sue Juge
SGT Thomas Lee Knudsen
Class 504-18
PFC Carter Jack Toth * – DG
SPC Adler Chavez
PV2 Tyler Raushaud Malveaux
PV2 Nicholas Alexander Munoz
PV2 William Spencer Pilkington
PV2 Corey Michael Prenall
PV2 John Robert Thomas
SPC Jason Hunter Whatcott
Class 007-18
PFC Jerry Cole Hawthorne * – DG
SGT Andy Josef Cobb
SPC Christopher Luis Hansen
PFC Natthachak Kingnoi
PFC Matthew Garrett Stanley
PV2 Virgillo Jose Vega
PV2 Nathan Thomas Zayas

Aircraft Powertrain Repairer (15D)
Class 006-18
PV2 Keaton Scott Kilhoffer * – DG
PV2 Shawn Kenneth Armstrong
PFC Joey Michael Bruch
PV2 Lawrence T. Buczakowski Jr.
PV2 Tobias Astarte Calerna
SGT Randy Calantoc Fiesta
PV2 Keeton Sterling Green
PFC Elizabeth Horan
PV2 Jeffrey Allen Lemons
PV2 Michael John Lopez
PV2 Michael Robert Macdonald
PV2 Alexis Santiagoleon
PV2 Matthews David Sweeting
PV2 Landon Craig Vaughn
PV2 Jared Thomas Welsh

Aircraft Electrician (15F)
Class 009-18
PFC Wesley Avery Cook Jr. + – DG
PV2 Stephanie Lee Elkins
PFC Jacoby Ray Mccormick
PV2 John Patrick Mocha
PFC Spencer Lee Scheafnocker
PFC Spencer Trenton Vasquez
Class 010-18
PV2 Michael Paul Lee * – DG
SPC Cesar Antonio Galindo Jr.
PV2 George Edward Kulkusky
PV2 Dustin Rio Vara
PV2 Ashlyn Michael Wetzel
PV2 Ruichuan Wu
Class 011-18
PV2 Andrew David Roof * – DG
SPC Christine Favis Concepcion
SPC Michael Andrew Hall
PV2 Gabriel Jace Randolph
PFC Landon Reed Weatherholtz
PV2 Isaiah David Westrick
Class 012-18
PV2 Christopher M. Pitts * – DG
PV2 Donald Njogu Kariuki
PV2 Bryan Kay Lunsford
PV2 James Junior Rengifo
PV2 Brayten Riley Riter

Aircraft Structural Repairer (15G)
Class 006-18
PFC Maurkee Maximus Ragin – DG
SGT Philip Matthew Buettner
PFC Alexandert Carina Collins
PV2 Agustin Lopez Galvez
PFC Cameron James Gilbert
PFC Samuel Thomas Holstein
PV2 Josh Demitrius Koon
PV2 Ryan Heath Miskelley
PV2 Austin Patrick Pacheco
PV2 Steven Raymond Wisniewski

Aircraft Pneudraulics Repairer (15H)
Class 007-17
SGT David William Demmy
SPC Stephen Michael Mcmanus
SPC Matthew Alexander Porter

Avionics Mechanic (15N)
Class 007-18
PV2 Nicole Mae Baker
PV2 Kclynn Taisacan Barcnas
PV2 Armando De Jesus Hernandez
PFC Christopher Allen Johnson
PV2 Michael Warren Parker
PV2 Dylan Julius Peck
Class 008-18
PV2 Valentine M. Pedroza * – DG
PV2 Rayjon Jeffrey Bobo
SPC Benjamin Jesse Groover
SSG David Brandt Hesse
PV2 Samuel Jakob Jones
PV2 Alex Paul Knudson
PFC Luis Antonio Torres
Class 201-18
PV2 Juan Hernandez Jr. * – DG
PFC Krishtofer Andrew Van Daniker
PV2 Khari Nathaniel Wilder
PV2 Dohnovan Cordelle Reed
PV2 Charlie Sanchez
PV2 Lorne Renaldo Tabb Jr.
PV2 Gage Nicholas Wilson

Aviation Operations Specialist (15P)
Class 18-032P
SPC Christian Perez
SPC Joccelyne Soto
PFC Brent Davis
PFC Dalton Fast
PFC Emily Ford
PFC Roy Jenkins
PFC Cory Kennedy
PFC Cameron Sandell
PFC Cody Wright
PV2 La'kiya Clark
PV2 Dequin Huff
Class 18-034P
PFC Jacquelyn Trujillo – DHG
PFC Samuel Aponte – HG
SPC Cheng Chen
SPC Ian Sokol
PFC Julia Miller
PFC Nolan Russell
PFC Cameron Schlegel
PVT Fernando Alamo Pena
PVT Mariah Servance
PVT Arturo Terrasa
Class 18-035P
PFC Jacob Blair – DHG
PFC Dominic Hadowanetz – HG
SPC Thomas Treusch
PFC Edward Bittinger
PFC Kameron Courtney
PFC Akerria Linton
PFC Logan Payne
PV2 LeAnn Lawer
PV2 Devon Wandersee
PVT Abigail Ferreira
PVT Summer Moore
PVT David Zuniga
Class 18-036P
PFC Kelly Sendek – DHG
PFC Dearon Almeida
PFC Edward Barton
PFC Bailey Foust
PFC John Holsman
PFC Hunter Knight
PFC Veronica Medina
PV2 Tyler Conover
PV2 Isidoro Mendez
PVT Nicholas Binkowski
PVT Cory Hunter
PVT Sebastian Mesa
Class 18-038P
SPC John Fadus
PFC Zakary London
PFC Luis Lugo
PFC Angelo Migliore
PFC Robert Wardwell
PVT Tomas Juanez

Air Traffic Control Operators (15Q)
Class 18-015Q
SGT Marchaun Mclee
SPC Brad Mcalister
SPC Harrison Ysbrand
PFC Todd Johnson
PV2 Jean Paul Cazayoux
PV2 Justin Mabry
PV2 Autumn Stansell
PV2 Matthew Welsh
PVT Carlos Vigil Harrison
Class 18-018Q
PFC Jordan Johnson
PFC Sara Joiner
PV2 Matthew Caldwell
PV2 Logan Cox – DHG
PV2 Aaron Leinen
PV2 John Mercado
PV2 Jay Gomez
Class 18-020Q
SPC Alejandro Leyva
SPC Joseph Salas – DHG
PFC Madison Oettinger
PV2 Connor Cozine
PV2 Calen Faircloth
PV2 Brooke Smith – HG
PVT Andrew Benslay
PVT Aaron Bibbins
PVT Dakotah Reed
PVT Angel Shuford

AH-64D Armament/Electrical/ Avionics Repairer (15Y)
Class 011-18
SGT Sultan Sulaiman B. Al Balawi
PV2 Brendan Michael Anderson
SGT Anas M.A. Banjar
PV2 Blake Allen Brossette
PV2 Johnathan Marhomer Burton
SPC Justin Taylor Clark
PV2 Adham Uriah Din
PV2 Steven Millard Dunnick II
SPC William Garreth Fuqua
PV2 Korbin Dewayne Gibson
PV2 Noah Michael Handy
PV2 Brian Ray Jackson
Class 012-18
PV2 John Richard Jones * – DG
PV2 Joseph Daniel Martinez
PV2 Javier Jesus Morales
PFC Mark Andrew Nagel
PV2 Timothy Baotrong Nguyen
PV2 Dakota Douglas Oneill
PFC Gregory Matthew Robinson
PFC Zachery Lee Taylor *
PV2 Preston Allen Thornton

UNMANNED AIRCRAFT SYSTEMS (UAS) GRADUATIONS

WARRANT OFFICER

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

TUAS Operations Warrant Officer Technician Course
7 Graduates, 17 August
WO1 Georgina F. Kaster – DHG
WO1 Akaninyene J. Udoeyop – HG
CW2 Ann E. Mulrooney
WO1 Christopher M. Bulen
WO1 Jamal K. Dewar
WO1 Jeremiah S. Farmer
WO1 Felix A. Rosado Jr

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
23 Graduates, 25 July
SGT Cody D. Griffiths
SGT Jesse J. Wilcox
SPC Damarus A. Brown
SPC Samuel R. Kellerfeathers
SPC Terry S. Lingle
SPC Mark E. Maguire Jr.
SPC Derek C. Phagan
SPC Stanley W. Quire IV
SPC Marcus W. Robertson
SPC Jesus E. Rosalez
PFC William F. Deyoung
PV2 Matthew K. Bandy
PV2 Kyle W. Cosens
PV2 Kyler T. Dunn
PV2 Anthony R. Ector
PV2 Jose A. Ortiz
PVT Austyn P. Landry
PVT Adam M. Rynes
PVT Katie N. Schelnick
PVT Dakota S. Scott
PVT Michael A. Sheriff
PVT Stephen P. Spalding
PVT Austin S. Weaver
11 Graduates, 8 August
PFC Kevin B. Balluch – DHG
PV2 Montana J. Maniscalco – HG
SPC Wesley C. Allensworth
PV2 Tyler R. Cordero
PV2 Nathan P. De Heij
PV2 Richard A. Larue
PV2 Ryan M. Longnecker
PV2 Shaun D. Makse
PV2 Nicholas Mercado
PVT Adam J. Johnson
PVT Christofer B. Pearson
PVT Luke A. Underwood
8 Graduates, 22 August
SPC Christopher S. Stevick
SPC Darrell Singh
PV2 Anthony J. Algarin-Negron
PV2 Einreb D. Bismanos
PV2 Jonathan R. Hernandez
PV2 Joshua C. Hudson
PV2 Joshua N. Jackson
PV2 Noah D. Westergaard
16 Graduates, 6 September
SPC Tyler L. Kendell – DHG
SPC Cameron E. Littleson – HG
SPC Ryan R. Black
SPC Jacob J. Elftman
SPC Alex W. Francis
SPC Dakota R. Guidry
PFC Cody A. Eden
PFC Richard K. Peterson
PFC Andrew P. Theis
PV2 Edmond B. Burnsed
PV2 Constance G. Davenport
PV2 Spencer T. Owens
PV2 Edward W. Prather
PVT Phillip C. Capps
PVT Ivan Hernandez
PVT Nicholas G. Jones
13 Graduates, 20 September
SSG Anthony M. Lowery – DHG
SGT Casey R. Golden – HG
SPC Ronald R. Lopez-Lopez
SPC Raymond E. Schafer
PV2 Jonathan F. Amos
PV2 Jeremiah S. Casey
PV2 Justin E. Flesher
PV2 Garett C. Kemp
PV2 Jerry A. Nino
PV2 Seth M. Rebeck
PV2 Zackary J. Vick
PV2 Stephen A. Villa
PV2 Kemonte L. Williams

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
33 Graduates, 9 August
SGT Joshua D. Matteson – DHG
SPC Frank S. Schimpf – HG
SGT Alberto A. Miranda
SPC William J. Beistel
SPC James L. Davis
SPC Tre W. Jones
SPC Jamal A. Ramsey
SPC Trey R. Ripley
PFC Logan J. Eggers
PFC Vincent C. Estus
PFC Anthony M. Gattone
PFC Edwin Pacheco JR
PV2 Caitlin D. Adams
PV2 Cody A. Connors
PV2 Antonieo M. Dominguez
PV2 Brandon D. Enos
PV2 David Gomez-Arizmendi
PV2 Arthur Goncalves-Carvalho
PV2 Chelsie M. Harmon
PV2 Joseph G. Hodges
PV2 Bryce T. Langford
PV2 Dartagnan K. Meek
PV2 James B. Outland
PV2 Keonte K. Trabue-Percival
PV2 Kendall A. Wiesner
PVT Alexander W. Arndt
PVT Camron A. Chandlee
PVT Monte D. Dirickson
PVT Michael M. Marshall
PVT Carl A. Moss
PVT Brandon A. Oldham
PVT Hunter M. Seaborg
PVT Justin L. Stocks
28 Graduates, 7 September
PFC Christopher S. Fecso – DHG
PFC Dalton E. Hatt – HG
SGT Frank A. Bonafe
SPC Stephen F. Cafirma
SPC Bryce C. Hinson
PFC Casey E. Desmond
PFC Dalton M. Grammer
PFC Prescott C. Mckenzie
PFC Jacob D. Raab
PV2 Brandon B. Blackmon
PV2 David M. Cox
PV2 Christopher J. Gaiser
PV2 Zachary R. Gendreau
PV2 Sandro M. Holguin
PV2 Manuel F. Lara
PV2 Ryan J. Leach
PV2 Trevor J. Maloy
PV2 Erick Morua
PV2 Wesley C. Nuchols
PV2 Zackery W. Rice
PV2 Marty A. Rosettasuina
PVT Brittney M. Ewell
PVT Zachary T. Geier
PVT Javaughn S. Harrison
PVT Thanhtanhat Ho
PVT Marco A. Olaya
PVT Brendan J. Rigney
PVT Phillip Xiong

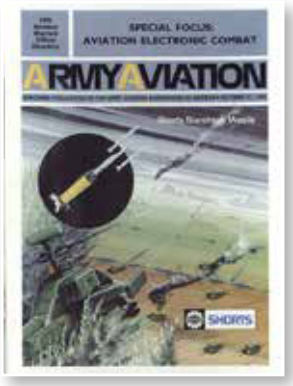
Gray Eagle UAS Operator Course
25 Graduates, 13 August
PFC Alexis J. Clark – DHG
PV2 James D. Crandell – HG
SGT Koudjo S. Nuasi
SPC Raeann E. Lacombe
SPC Kareem A. Stowe
PFC Ali D. Lopez
PFC Coreena C. Palfreeman
PFC Madeline C. Puerto
PFC Ryan D. Shemwell
PFC Alexander R. Smythe
PFC Benjamin L. Vargas
PV2 Aurelio M. Barron
PV2 Elisha A. Bearfield
PV2 Dakota W. Brunson
PV2 Jeffrey L. Buck
PV2 Clayton J. Congleton
PV2 Rene Garduno-Loa
PV2 Zackary N. Horne
PV2 Bryan D. Lackey
PV2 Jaterrius T. Rivera
PV2 Rylie S. Sullivan
PV2 David J. Wilson
PVT Sammael M. Montenegro
PVT Michael J. Piekarz
PVT Jason C. Quitugua

DHG – Distinguished Honor Graduate
DG – Distinguished Graduate
HG – Honor Graduate
* = AAAA Member
+ = Life Member

Art's Attic

By Mark Albertson

Art's Attic is a look back each month 25 years ago and 50 years ago to see what was going on in ARMY AVIATION Magazine. Art Kesten was our founder and first publisher from 1953 to 1987. He was also the founder of the AAAA in 1957 and served as its Executive Vice President. Each month contributing editor Mark Albertson selects a few key items from each historic issue. The cartoon, right, was done 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
October 31, 1993

Briefings

September 25, 1993, Somalia: Three soldiers were killed when their UH-60A was downed by a rocket-propelled grenade. Sergeant Eugene Williams, 26, 9th Battalion, 101st Aviation Regiment, Fort Campbell, KY; PFC Matthew K. Anderson, 21, of the same unit and Sergeant Ferdinan C. Richardson, 27, an intelligence analyst with the 10th Aviation Brigade, 10th Mountain Division, Fort Drum, NY, all were killed. CW2 Perry W. Alliman, 32, 9th Battalion, 101st Aviation Regiment and CW2 Granville D. Shrader, 29, 5th Battalion, 101st Aviation Regiment, survived the crash.

Briefings

Captain Ed Gutierrez, A Company, 1st Battalion, 145th Aviation Regiment, Fort Rucker Alabama, beat all comers for a gold medal as a member of the Army team competing in the Armed Forces Skeet Shooting Championships held in San Antonio, Texas. The AAAA Army Aviation Center Chapter and the Association of the U.S. Army sponsored Captain Gutierrez.

Colonel Stanko Honored

MG George W. Putnam (left) and MG Gerald J. Sajer (center), Pennsylvania Adjutant General, present Colonel John J. Stanko (Ret.) (right) with an Order of St. Michael Gold Award on July 23rd during Colonel Stanko's retirement party. Colonel Stanko has been a member of the Army National Guard since 1952; and, served as the Director, Army Aviation and Safety Directorate, National Guard Bureau, since it began in 1976.

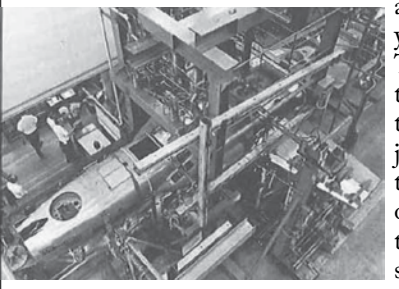
50 Years Ago
January 24, 1967

General Hamilton H. Howze, AAAA National President, on the Tenth Annual Meeting, October 30-November 12, 1968, Washington, D.C.

"To all present, I extend my warmest greetings and best wishes on this tenth national assembly. Those charged with the direction of this meeting indicate that our technical sessions will be most informative. My personal check with the chairman of various social activities was unnecessary – our aviation people, both military and industry, know the meaning of good fellowship and need little encouragement."

Copter Torture Rack

An airframe for an AH-56A Cheyenne is locked in an aerospace torture rack, ready to be subjected to stresses and strains noticeably more punishing than flight during the "static ultimate" test at the Lockheed Rye Canyon Research Laboratory. These critical load conditions are applied to the entire airframe with hydraulic jacks and fixtures over a three-month period. Various components and systems are given other intensive tests at the laboratory.



Under Test

MG Richard J. Seitz, (left) CG of the 82nd Airborne Division, accepts the Third Army Aviation Safety Award from LTG John J. Tolson, XVIII Airborne Corps Commander, during ceremonies at Corps Headquarters in early October. The plaque was awarded for safe flight operations during FY 1968. Two men who deserve credit for the award are (center) LTC Roger J. Shields, division aviation officer, and LTC Robert E. Lay, CO, 1st Squadron, 17th Cavalry. The division's aircraft and helicopters enjoyed a ZERO accident rate during the aforementioned period.

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 2020 induction is June 1, 2019

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

CW4 Billy J. Fulbright

Army Aviation Hall of Fame 2001 Induction

CW4 Billy J. Fulbright completed flight training in one of the early warrant officer candidate classes at Fort Sill, Okla. Shortly thereafter he was assigned to and became instructor pilot in the H-21 transition school at Fort Riley. Dozens of his students, well trained and experienced CH-21 pilots, manned the first five cargo helicopter companies sent to Vietnam in 1961-62. He was next assigned as standardization instructor pilot in the 8th Transportation Company in Vietnam training replacement pilots in combat mission flying. Leading by example he flew many helicopter medevac missions and fixed wing recon missions in the L-19.

In 1963 he was instrumental in forming a Caribou Transition Course at Fort Benning, GA and transitioned pilots in both fixed and rotary wing aircraft for the 11th Air Assault Division Tests. In 1967 he was selected for training in the Navy P-2V Neptune patrol bomber. He supervised bringing six of these four engine (two reciprocating and two jet) P-2Vs out of storage to install top-secret radio research equipment. He then became the standardization instructor pilot for this newly formed 1st Aviation Radio Research Company and deployed with it to Vietnam. His responsibilities included training pilots in all maneuvers to include emergency procedures and for the continuous 10 to 12 hour mission profile of the Neptune.

After a tour in Hawaii as instrument flight examiner and U-21 instructor pilot, he attended the first Aviation Warrant Officer Advanced Career Course and was subsequently assigned to the Federal Aviation Agency as Army Aviation Coordinator for five southwestern states.

This outstanding master Army aviator retired in 1975 with over 30 years of service, more than 8,700 flight hours (of which 1250 were combat) and more that 1,000 in the P-2V. He was qualified in 25 aircraft types.

Readiness is 100 million flight hours of experience.

A test cell is not a combat mission. In combat, there is no time for an unproven design. With more than 100 million flight hours of Apache and Black Hawk experience, proven 21st century technologies, and a fully-tested T901 prototype engine, GE is ready to deliver. The T901 is ready.

Readiness is the metric that matters.

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