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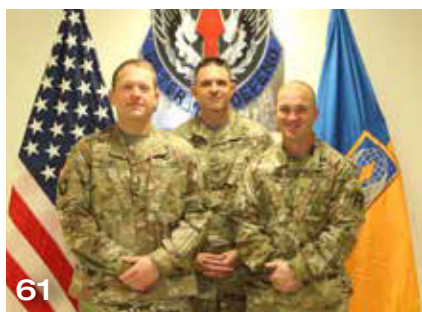
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ARMY AVIATION is the official journal of the Army Aviation Association of America (AAAA). The views expressed in this publication are those of the individual authors, not the Department of Defense or its elements. The content does not necessarily reflect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



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On The Cover

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Briefings ▶ Late Breaking News - Announcements

POTUS Nominates Shanahan as SECDEF



U.S. DEPARTMENT OF DEFENSE PHOTO

President Trump has nominated acting secretary of defense Patrick Shanahan to fill the position vacated by Jim Mattis in December 2018. Shanahan, 56, spent decades at Boeing before he was picked in April 2017 by Trump to serve as Mattis' deputy secretary of defense and has been acting secretary since January 2019. If confirmed by the Senate, he will be the 27th SECDEF.

McConville Confirmed as CSA



AP PHOTO BY RENEE BIEZ

On May 23rd, the Senate confirmed by unanimous consent the nomination of GEN James C. McConville to become the 40th Chief of Staff of the United States Army. He will succeed GEN Mark A. Milley who was nominated in April to be the 20th chairman of the Joint Chiefs of Staff.

Funk to Head TRADOC



U.S. ARMY PHOTO

LTG Paul Funk, currently the commanding general of III Corps and Fort Hood, Texas, was confirmed by the Senate on March 28 for a fourth star and appointment to lead the U.S. Army Training and Doctrine Command, at Joint Base Langley-Eustis. He will replace GEN Stephen Townsend who assumed command of TRADOC last March.

Hokanson Confirmed as ARNG Director



U.S. ARMY PHOTO

LTG Daniel R. Hokanson, United States Army National Guard, was confirmed by the Senate on March 28, 2019 for reappointment to the rank of lieutenant general and assignment as Director, Army National Guard, Arlington, VA. A Master Army Aviator, he is currently serving as Vice Chief of the National Guard Bureau, Arlington, VA.



U.S. ARMY PHOTO

Richardson to Command ARNORTH

LTG Laura J. Richardson, was confirmed by the Senate on May 23, 2019 for reappointment to the

rank of lieutenant general and assignment as commanding general, United States Army North/Fifth Army, Joint Base San Antonio, TX; she is currently serving as deputy commanding general/chief of staff of U.S. Army Forces Command, Ft. Bragg, NC.

Three Six-Pack Members Confirmed for MG

The Senate confirmed on May 23, 2019 the following officers for promotion to the rank of major general:



U.S. ARMY PHOTO

BG David J. Francis, enroute to Commanding General, United States Army Aviation Center of Excellence and Fort Rucker, Ft. Rucker, AL;



U.S. ARMY PHOTO

BG Kenneth T. Royar, enroute to Commanding General, United States Army Aviation and Missile Command, Redstone Arsenal, AL; and,



U.S. ARMY PHOTO

BG Thomas H. Todd III, Program Executive Officer, Aviation, Redstone Arsenal, Alabama.

CORRECTIONS:

On page 22 of the April/May 2019 issue, the co-author's name should be CPT Richard Nezat; and on page 21 of the March 31, 2019 issue, the photo is of SSG Matthew Ferguson – we apologize for the errors.

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Taking Off to Continue the Mission



AP PHOTO BY BILL HARRIS

I am honored to serve as the new AAAA President. I have been a member for almost four decades, and I believe our association provides a true service to our Army, Army Aviation, and our Soldiers and their families.

Representative Rosa DeLauro, addresses members of the Army Aviation Congressional Caucus during an AAAA-sponsored breakfast in Washington, DC, May 16, 2019. Also attending: (left to right) MG (Ret.) Jeff Schloesser, AAAA President; BG(P) Dave Francis, incoming U.S. Army Aviation Branch Chief; BG(P) Thomas Todd, PEO Aviation; BG Allan Pepin, Commanding General, U.S. Army Special Operations Aviation Command; Mr. William Marriott, Executive Director, U.S. Army Aviation and Missile Command; and Mr. Geoffrey Downer, Acting AMCOM Director, Special Programs.

I am committed to ensuring we support and provide a voice for our members and their families, while providing an important means for networking and both personal and unit level recognition.

I sincerely thank our previous president, BG (Ret.) Steve Mundt, for his two years of exceptional vision and leadership, which culminated in eight years of volunteer leadership within our AAAA National Executive Group. Steve has willingly accepted my request to continue to play a substantive role in AAAA, and so I expect you will see his face and name in our future activities.

I thank our Executive Director, Mr. Bill Harris, for his superb leadership of his talented AAAA professional team over the past year, culminating in our latest AAAA Army Aviation Mission Solutions Summit 14-16 April 2019. Bill and his team make this huge and

complex event look seamless, but it is in fact a highly complex orchestration of multiple near simultaneous events that benefit Army Aviation and our members, as well as our industry and media partners. This year's summit was a hit: with almost 7,500 attendees, and multiple professional forums capped by the Army's most senior aviator, Vice Chief of Staff General Jim McConville (who we also congratulate on his confirmation by the Senate as our Army's next Chief of Staff).

At the Summit, your National Executive Group (NEG) was elected: Senior Vice President MG (Ret.) Tim Crosby, Treasurer MG (Ret.) Walt Davis, Secretary MG (Ret.) "Wally" Golden, and me as your 34th President. My congratulations to Tim, Walt, and Wally, and my thanks for their selfless service to AAAA!

As part of the NEG, I am empowered to appoint Vice Presidents to serve in one-year capacities, and so reappoint MG (Ret.) Les Eisner as VP of National Guard and Reserve Affairs, LTC Jan Drabczuk (Ret.) VP of Chapters, and CW4 Becki Chambers as VP Membership. I thank them for their continued hard work!

As I look at Army Aviation, we are a strong, mature, and highly relevant branch. That said, we, like the rest of the Army, are at an inflection point. To borrow the Chief of Staff of the Army's phrase, and we must modernize our capabilities as the Army shifts to focus on peer to peer competition and deterrence, all the while maintaining a laser focus on current readiness. We at AAAA will seek to support our Army and our branch in this balancing act.

By the time you read this article, we will have hosted a forum between our elected leadership in Congress and Army Aviation Six-pack leaders for them to exchange viewpoints and learn from each other (the Army Aviation Caucus).

You can also expect to see in-depth articles in this magazine focused on Army Modernization, Future Vertical Lift, Peer to Peer competition and what that means for Army Aviation, and

practical/ tactical solutions for readiness challenges faced by our commanders, warrant officers and NCO leaders of our combat aviation formations. As you have come to expect, we will continue to give voice and focus to our total Army Aviation team of teams: Active, Reserve, National Guard, and Special Operations Aviation forces.

Congratulations to LTG Dan Hokanson on his confirmation as Director of the Army National Guard. As an Army Aviator, he brings a unique awareness to this critical position for the success of our Total Army Team.

This month our Army Aviation Branch Chief, MG Bill Gayler, relinquished command at Fort Rucker after 38 months in command. Bill has provided strong, passionate, and visionary leadership to our branch, and on behalf of our over 18,200 members of AAAA, we wish he and Michelle (a leader in her own right) a fond farewell and best wishes in their next posting in Europe. We also welcome BG (P) Dave Francis and his spouse Jodie back to Fort Rucker and offer our best wishes as Dave assumes command of our branch.

I also welcome our new AMCOM Commander, BG (P) Todd Royar back to Redstone Arsenal, and look forward

to working with him to provide focused attention on readiness and sustainment of our fleets. And, we likewise welcome BG Mac McCurry as the Director of Aviation at DAMO-AV and wish him well as he looks out for the Army Aviation Enterprise interests at HQDA.

As I look forward to AAAA events this year, we have the Luther G. Jones Army Aviation Depot Forum in Corpus Christi, August 20-21; our AAAA National Executive Board semi-annual meeting in Washington, DC, October 13; and in Huntsville, our Aircraft Survivability Symposium, November, 18-19 followed by the Joseph P. Cribbins Army Aviation Product Sustainment Symposium on Nov. 20-21. Additionally, we will be supporting many Chapter events this year with resources to lower costs and expand opportunities to our members and prospective members.

It is shaping up to be an exciting year for Army Aviation, and I look forward to providing proactive leadership of our great association!

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



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▶ ARSOAC Commander Update

Editor's Note: For this Special Operations Aviation focused issue, the branch chief, MG William K. Gayler, has coordinated having the commanding general of the U.S. Army Special Operations Aviation Command, BG Allan M. Pepin, his command chief warrant officer, and command sergeant major provide the lead, "To the Field," command group articles.

ARSOAC – A Ready and Lethal Command

By BG Allan M. Pepin



BG Pepin addresses Soldiers during a physical training session while visiting Fort Campbell, KY.

They often push themselves and their equipment to the upper limits of human ability and equipment capability. Amazingly and consistently, they do this +/- 30 seconds time on target. This unique ability is a result of a continued adaption and innovation since the early 1980s.

Today, the United States Army Special Operations Aviation Command (ARSOAC) continues to meet the current challenges, while pursuing modernization efforts to prepare for the next fight in Joint Multi-Domain Operations (JMDO). As the 160th Special Operations Aviation Regiment's and other unit's higher headquarters, ARSOAC has Title X responsibilities of manning, training, equipping and modernizing the operational units. While our people remain our most important resource, our modernization efforts focus on improving operator capabilities through evolutions in technology and capability. These advancements will increase readiness and lethality in the future peer adversarial environments, while enabling or removing humans, when and where able, with the evolution of artificial intelligence (AI).

Our sustainable readiness model (SRM) began well before 9/11 due to

the demand exceeding the supply of ARSOA units. The impact of nearly 18 years of sustained combat operations has placed increased requirements and demands for our force to remain ready and lethal. At the individual level, ARSOAC is enhancing unit programs aligned with USSOCOM's program focused on individual readiness and enhanced quality of life, called Preservation of the Force and Family (POTFF). The pillars of this program include: 1) Human Performance, physical rehabilitation, working memory, and cognitive load management; 2) Psychological Performance, 3) Social Performance, and 4) Spiritual Performance. These are designed to enhance human readiness, resiliency and life longevity. Individual readiness is a key component to remaining ready to deploy anywhere in the world, on short notice, to enable ground forces to fight and win.

Training

To ensure our battalions remain ready to deploy as an ARSOA Task Force, ARSOAC established an external evaluations (EXEVAL) process to validate battalion commanders and staffs (2-level

Since October 2001, the Army Special Operations Aviation (ARSOA) enterprise has continuously deployed globally in support of SOF ground forces. Executing dynamic missions in challenging environments without fail is the result of our brave men and women.

els down doctrinal process). To maximize the training opportunity, while minimizing increased perstempo, we overlap these EXEVALs in conjunction with battalion training exercises and regimental flight lead evaluations. These complex training exercises, which include a dedicated ground force to enable training objectives, as well external fixed and rotary wing support from Joint and other Components, support mission essential training list (METL) focused and training at echelon. We also generate ready forces through Joint and home station tough and realistic training. We can push crews past failure points through the innovative and integrated use of simulations and simulator training. Sustained readiness allows commanders at echelon to remain laser focused on adapting tactical, operational and strategic capabilities to preserve options for Department of Defense and Geographical Combatant Commanders in support of our National Defense Strategy.

Modernization

Our prioritized modernization efforts focus on providing enhanced combat power for the joint force in the demand-



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ing and diverse environmental conditions we will face. Maintaining a comparative advantage in shoot, move, communicate, survive, and sustain capabilities to meet current and future challenges requires an investment in modernization initiatives and continual refinement of tactics, techniques and procedures in Joint Force interoperability. We are actively pursuing the most practical and cost-effective equipment, while continuing to leverage technology to increase the survivability of our crews and ground force. This includes AI efforts to track and use data to support condition-based maintenance, which will decrease sustainment costs over time that will enable increased investments in other priorities. There are ongoing efforts to optimize our navigation, weapons, targeting, communications and mission command systems and architecture for interoperability and effectiveness in a cyber and electronic warfare (EW) contested environment. This is critical as JMDO will require the ability to operate within adversary domains using air, land, sea, space and cyber space domain systems adding to an already complex physical environment.

In partnership with Army Cross-Functional Team programs, ARSOAC seeks to invest in SOF-unique capabilities, and adapt to emerging technologies

and training in order to maintain readiness. Our efforts must encompass lethality, maneuverability, mission command, countering advanced air defense systems, and optimizing our sustainment of combat power. We anticipate the introduction of a longer-range precision munition as an alternative to the Hellfire for the AH-6, MH-60M and Gray Eagle, to allow us to engage targets at greater ranges to increase lethality. We are investing to upgrade our MH-47Gs to close the gap between SOF and Army platforms by providing commonality of parts, reduction of support costs, and cost sharing between Services; the Mission Enhanced Little Bird (MELB) to increase speed, payload, and maneuverability and closely monitoring and supporting the developments of the Future Vertical Lift (FVL) and Future Tactical Unmanned Aerial Systems (FTUAS) programs.

Before a person or platform departs home station, the ecosystem of ARSOA and SOF Acquisition is committed to producing the best capability in people and equipment. Due to the changing global environment and technological advancements, we must keep an eye on the horizon to set the conditions for future missions in a more complex environment. The reality is we will not always have the ability to pick and choose the

time and place of the next mission, and we will execute with the equipment we have, not always with what we wished we had. Therefore, as we modernize, we must continue the high level of training, leader development and adaption to new doctrine within our formations. Tough, realistic training that develops leaders and crews at echelon and our honest and professional candid AARs remains the bedrock of readiness.

It is an honor to be part of the great accomplishments of the Aviation community and its support to the ground forces we support. ARSOA cannot exist without the integration, collaboration and support of the rest of the Army Aviation community. We also realize we have the ability to enhance Army Aviation with an exchange of information on successful SOF expedited modernization efforts that enhance lethality and survivability. I remain humbled to serve with the men and women whose honorable and selfless service to our Nation, as well as the sacrifices of their families is inspirational. We are a team of teams and winning is the only acceptable outcome.

Volare Optimos! To fly the best!

BG Allan M. Pepin is the commander of U.S. Army Special Operations Aviation Command located at Fort Bragg, NC.



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Stay Army, Join Special Operations Aviation (SOA)

By CW5 David F. Greenwood

The United States Army Aviation Center of Excellence (USAACE) prepares the best aviators in the world for assignment to war-fighting units in our Army. "Above the Best" is a motto that every Army aviator knows.



A Green Platoon instructor from the Special Operations Aviation Training Battalion (SOATB) at Fort Campbell, Kentucky observes Night Stalker candidates during a timed road march. Green Platoon is the assessment and selection entry point for all enlisted, officer and warrant officer candidates to serve within Special Operations Aviation.

The United States Army Aviation Center of Excellence (USAACE) prepares the best aviators in the world for assignment to war-fighting units in our Army. "Above the Best" is a motto that every Army aviator knows. It is ingrained in our aviators' ethos that their task is to continually develop individual tactical & technical expertise in their craft to best inform and enable successful Army ground force missions. We exist to support the ground force.

The Aviation Warrant Officer (AvWO) is a critical component of our aviation force structure. Our nation's Army invests millions of dollars in the development and training of each AvWO during their first obligation of service and continue to invest throughout their careers. As the AvWO progresses up through the ranks, their roles become more important to our Army's ability to fight and win tonight. By design, the career status Chief Warrant Officers Two, Three, and Four are the Aviation Branch's

journeymen and masters who execute the commander's priorities and training guidance. They do this by assisting in the development and execution of their unit's training plans and equipment sustainment readiness. They are also force generators supporting the pipeline at the USAACE. If you are one of these journeymen/masters, our Army teammates need your continued commitment, mentorship, leadership, and professional example.

If you are looking for a new environment to challenge your unique skills, or are at a decision point to stay in or get out of the Army (but have plenty left in the tank), consider the opportunities that joining the Special Operations team may offer you and your family.

Do you remember the excitement you felt when you received word that you have been selected for Warrant Officer Flight Training (WOFT)? You didn't know what you didn't know, but you knew that you were

about to embark on something special. An opportunity that you may have wondered if you would succeed at, now that you were accepted. It was not just another PCS; all of your peers were impressed. You had quietly moved through the packet process and gained support of your company and battalion commanders. You reached out to a senior warrant officer for an interview, no idea how that process would go. You were internally optimistic, but the wait was grueling. Thinking back to this time, ask yourself if you would have regrets if you hadn't applied?

Not unlike the application process that feeds the Army Aviation enterprise, YOU must take the first step to join the SOA team. Fan the flame that burned within you when you applied for WOFT. You don't know what you don't know, but you have already proven to yourself that you have the guts to try. Similar to getting accepted into WOFT, the opportunities for you in SOA are exceptional as you apply

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160th Recruiting Schedule

FY19

Fort Rucker	8-12 JUL
Fort Bragg	15-19 JUL
Korea	20-27 JUL
Fort Drum	5-9 AUG
Fort Hood	19-23 AUG
Hunter AAF	3-6 SEP
JBLM	16-20 SEP

FY 20 (Proposed)

Fort Rucker	7-11 OCT
Hawaii	21-25 OCT
Fort Bliss	4-8 NOV
Fort Campbell	18-22 NOV
Fort Carson	9-14 DEC
Fort Bragg	6-10 JAN

and flexible individual schedule, allowing better balance between work and family.

Imagine what you can accomplish with the synergy of highly modified mission design aircraft, well-resourced sustainment and modernization programs, working with like-minded motivated teammates. Are you an Aviation Warrant Officer with at least 50 hours Pilot in Command or 500 hours total flight time? The SOA community is interested in having your skills on the team. The Special Operations Recruiting Battalion (SORB) in concert with unit recruiting team(s) offer one-

on-one briefings to interested applicants and their families (see 160th Recruiting schedule in this article).

Want to know more? Contact a SORB recruiter today or attend a brief at your duty station.

Contact a recruiter today through our email: 160threcruiters@socom.mil or website: <https://goarmysof.com/160th/>

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CW5 David F. Greenwood is the fifth command chief warrant officer of the U.S. Army Special Operations Aviation Command (Airborne) at Fort Bragg, NC.



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THE ART OF EXCELLENCE



Organization of Standards

By CSM Billy D. Webb

The accomplishment of every Army Aviation mission is grounded in the strict adherence to a standard, carried out by disciplined and responsible Soldiers and leaders.

Through training and leadership, we deploy tight knit, cohesive teams that are highly capable, adaptable, agile, and effective that follow the standard. Army doctrine, Army regulations, unit regulations, programs of instruction, and unit standard operating procedures provide an understanding of the standard. It requires strong leadership to foster an environment where strict enforcement can be maintained and understood at all levels.

Regardless of the framework used, whether it's time-on-target plus or minus thirty seconds, the Army Special Operations Promise, or the imperatives contained within ARSOA 2028, maintaining a high level of proficiency requires more than strategy – it requires an organizational culture committed to doing what is “right” right the first time – STANDARDS. The end state results in a winning team ready to fight tonight and prepared for tomorrow's challenges.

In the special operations community, we have created a culture of standards by investing in human capital. One of the SOF Truths, “People are more important than hardware,” is our most important imperative, and it is constant in everything we do at the Army Special Operations Aviation Command (ARSOAC). Quality is more important than quantity, the success of any organization is dependent on training and developing Soldiers that possess the following characteristics: high degree of individual character; unwavering professionalism;



A crew chief from the 160th Special Operations Aviation Regiment (Airborne) conducts pre-flight inspections on an MH-47G Chinook helicopter.

adaptable, agile, mission-focused problem solver; team player; perseverance; operational aptitude; and exceptional leadership, judgment, and maturity.

Leaders within the ARSOAC understand that investing in Soldiers leads to mission success and readiness. We provide structured MOS progression, career professional development, talent management and tough demanding training that challenges our Force and our troop training procedures that drives bottom up innovation that evolves our capabilities which leads to success on the battlefield.

The Making of a SOF Aviation Soldier

One of the things that makes ARSOAC unique, is that every Soldier must reaffirm his or her ability to achieve the Army standard prior to being assigned to the organization. All members of ARSOAC are trained and tested in Combat Skills, formally known as “Green Platoon,” as part of their accession into the command. There are no “special” standards during Green Platoon training, simply a strict adherence to the Army standard. We aren't trying to exceed the Army standard, but we are trying to be the best at the Army standard. In this context ARSOAC Soldiers can instantly deploy as part of a highly

effective team capable of winning in volatile, uncertain, complex, ambiguous, and continually evolving environments.

Beyond Combat Skills

ARSOAC has dedicated training elements within the command, enabling us to maintain 32 in-house, dedicated Army approved Programs of Instructions (POI) that produce ARSOAC Basic Mission Qualified pilots, enlisted Non-Rated Crewmembers, Flight Instructors, UAS Operators, enlisted flight medics, enlisted aircraft maintainers and several other programs that enhance the capabilities of the organization. We invest in numerous low-density programs to professionally grow technically and tactically proficient Soldiers within their career fields. Our young Soldiers are subject to structured MOS progression programs that develop them within their specialty and as a valuable team member. The phrase “Never measure your importance by your proximity to the target” is never been truer and it's these Soldiers that make it happen every day.

Talent Management

The need for competent leaders who are empowered to make critical decisions at their level cannot be overstated when performing combat operations. Understanding that we need competent

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leaders is one thing; how we fill that need is a separate effort altogether. The Professional Ethic and the three pillars of Commitment, Competence and Character require that Soldiers are committed, competent at their job and that they possess values, ethics and morals which lead them to be successful. Early in an enlisted Soldier's assignment to the command, junior Soldiers are given a tremendous amount of responsibility to grow professionally as an individual, as a competent team member, and as subject matter expert within their field. Development models and leaders ensure the time and resources are structured to meet this important requirement. Professional Military Education, broadening opportunities, NCOIC duties of small teams and leadership assignments within the command provide the basis for the solid progression to a professional Soldier. Additionally, the command runs a comprehensive Talent Management program in conjunction with USASOC for all its senior NCOs. This process ensures that we are utilizing the "Talent" correctly across the command and the Army.

Mission Focused Training Model

Another SOF truth is "Special Operations Forces cannot be mass produced." This means that we will go to war with the Soldiers we have today and that makes training (Readiness) a priority within the command. In the next fight there will not be time to ramp up training and therefore we must be ready to meet our adversary with the most lethal force and equipment we have. Training is the cornerstone within our enterprise, with challenging and realistic training being the capstone to setting and maintaining high standards. This approach helped us transition from owning the night to owning the spectrum as we prepare for Multi Domain Operations (MDO). There are two unique characteristics that ARSOAC has when it comes to training. Its habitual relationship with our customers and how we regionally align the operational units allowing our units to capitalize on valuable training exercises around the world as well with the SOF forces assigned within that AOR. These training events not only provide valuable training venues, but they also educate Soldiers about the various AORs and the countries they work in.

The habitual relationship that AR-

Enlisted Aviation Soldier Spotlight

Each issue 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 2014 National winners were featured in the April/May AAAA Annual Summit issue.

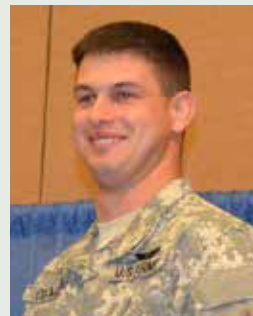
SPC Dolphise Colomb

Company A, Special Troops Battalion,
4th Brigade Combat Team, 1st Armored Division
Fort Bliss, TX

2013 Unmanned Aircraft Systems Soldier of the Year

Sponsored by General Atomics Aeronautical Systems, Inc.

Editor's Note: SPC Colomb had been promoted to SGT, E-5 before the award was presented.



ART FILE PHOTO

SPC Dolphise Colomb, Alpha Company, Special Troops Battalion, 4th Brigade Combat Team, 1st Armored Division, demonstrated superior knowledge, professionalism and leadership as a tactical unmanned aircraft systems (TUAS) instructor operator. He quickly rose to the role of subject matter expert, mentor and role model to junior and senior operators alike. Setting the standard for work ethic, he heeded the call of excellence by working long hours to ensure accomplishment of all tasks during system deployment operations. He has proved repeatedly that he is truly the backbone of the unit Tactical Unmanned Aircraft Systems operation. He excelled throughout the challenges of limited equipment, time and personnel. He constantly drives as a professional to perform every task and mission assigned well above the set standards. He meticulously trains and builds his 12 operators towards becoming fully readiness level progressed, totally mission ready and capable; all while maintaining a zero discrepancy and zero mishaps record as an instructor operator during this period. He motivates his subordinates by demonstrating genuine concern for their well-being, assisting them with solid solutions for personal problems.

SOAC has with its customer base is invaluable. When a unit has the ability to work with the supported customer throughout its combat development lifecycle, the training and the standards gleaned serve as combat multipliers that make both the customer and the ARSOA capability stronger. Although combat provides an excellent venue for refining the smallest details, the constant engagement during training in numerous environments and mission profiles serves as the placeholder for exacting standards.

Conclusion

Training and Soldier development programs within the ARSOAC help support the three main imperatives that we have outlined in our future operating concept, ARSOA 2028. In this document we've challenged ourselves to assess the current force, develop the future force, and generate the future force. Being part of a special culture that breeds success requires a significant investment into our training programs and human capital. This investment produces highly

competent, committed Soldiers that can be trusted to carry out tough missions around the world. It's these programs that foster an environment or culture of committed excellence towards mission accomplishment and teamwork. The "Love of the Job" is at the heart of every ARSOAC Soldier. So, we will continue to build a commitment to standards with a cohesive professional force focused on successful accomplishment of the mission and will remain postured and ready to execute precise, lethal, and complex mission profiles anytime, anywhere, time on target +/- 30 seconds. ARSOAC will continue to enforce strict military standards and build adaptive and innovative leaders that are creative problem solvers that answer the Nation's objectives in a volatile and uncertain global environment.

CSM Billy D. Webb is the command sergeant major of the U.S. Army Special Operations Aviation Command headquartered at Fort Bragg, NC.



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► Combat Readiness Center Update

Pilot-in-Command Judgment, Maturity and the Responsibility

By COL Christopher W. Waters

As part of the pilot in command (PC) designation process, a formal face-to-face counseling session or commander's board with the company- or battalion-level commander and other select leaders is an effective way to convey the commander's intent and expectations.

In Army Regulation 600-55, a commander is required to conduct face-to-face interviews with vehicle drivers and trainers. How much more critical is a face-to-face with PCs who will be commanding multimillion-dollar aircraft? Following are a few topic areas commanders can address during a PC counseling session or commander's board..

Expectations

Ultimately, serving as a PC is about decision-making, maturity and judgment. These attributes form the bedrock of the trust necessary to operate – trust from the commander in the PC's ability to employ the aircraft safely; trust from the aircrew and team; trust from the customers onboard; and trust from the supported ground forces. It is important to communicate to PCs that they have your complete trust and support to operate within the limitations of the aircraft, the approved risk assessment and the mission brief. You expect them to take charge when these constraints change and, as importantly, demonstrate sound judgment and maturity in the absence of updated mission intent and approvals.

Be a Leader

A PC is a designated formal leader and standard-bearer in the organization, representing the Army, the unit and the commander internally to the aircrew and team and outwardly to customers and supported forces. As the face of the organization, PCs lead from the cockpit and, in doing so, their words and actions speak on behalf of the commander and unit.

No Such Thing as a Standard Mission

Remind PCs there is no such thing as a routine mission. Every mission requires their best diligence and "game face" from the starter button until rotors stop. Expectations of PCs and their aircrews never waver, and complacency is the enemy of excellence.

When in Doubt – Stop

During mission analysis, address challenging decisions PCs may have to make throughout execution of the mission. If PCs



CW5 Teresa A. Domeier, Army National Guard Bureau (right), receives a capability briefing on the UH-72A Lakota Light Utility Helicopter from CW4 Jeff Caniglia, executive officer, 1st Battalion, 376th Aviation Regiment, Nebraska Army National Guard, at the Joint Multinational Readiness Center's Hohenfels Training Area, Hohenfels, Germany, July 31, 2018.

find their aircraft in a situation where the information available is not sufficient to make a real-time decision to carry on safely and successfully, then they should stop, reassess the situation and amend the mission. If necessary, this should include an updated risk assessment and/or a renewed mission approval.

Follow your Instincts

If something looks or feels wrong, it is probably an indicator that what you are doing is not right. Again, when in doubt, stop, reassess and seek guidance.

Counseling for Other Than First-Time PCs

The commander's counseling for all PCs should cover the same topics regardless of whether it is a first-time PC or the battalion standardization instructor pilot. Knowing your PCs is an important aspect of command and the aviation risk management/briefing process.

Make Counseling a Deliberate Process

The process of earning PC responsibility can be as rigorous as the commander chooses. However, it should culminate in some sort of formal board or counseling, during which the commander clearly articulates expectations for the PC. This reinforces the unit culture and ethos for other select leaders in the unit who observe and participate. Your PCs are the front-line leaders and purveyors of your expectations outwardly for your organization; as such, they should best appreciate and represent your intent and values during mission planning and execution.

Readiness Through Safety!

COL Christopher W. Waters is the deputy commander of the Combat Readiness Center at Fort Rucker, AL.

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► Reserve Components Aviation Update

Army National Guard (ARNG) Aviation: Changes in Leadership at the National Level

By BG J. Ray Davis

In November of 2018, I was honored and humbled to be selected as the first Assistant Director for Aviation and Safety.

The Chief National Guard Bureau (NGB) and the Director ARNG initiated a number of changes in the positioning and responsibilities of senior leaders on the NGB Staff, one of which was a new position for a General Officer Aviator. I want to take this opportunity to share with you some of the background of this change and the vision going forward.

A New Era

The position and assignment of an Assistant Director for Aviation and Safety marks a new era for not only ARNG Aviation but Army Aviation as a whole. Senior NGB leaders believed it was time to place a general officer on the ARNG Staff to represent the ARNG across the Aviation Enterprise. The Department of the Army, having established a general officer position (DAMO-AV) a number of years ago, identified the need for senior aviation leader management and oversight across the Army. Along those lines a General Officer Aviator as an Assistant Director will provide similar affects across the ARNG. Given the monetary investments in Aviation along with operational employment and the associated risks in Aviation proportional to the rest of the Army, establishing this general officer billet sets the conditions for not only ARNG success but Army success.

Although the ARNG had general officer aviation representation in the past, this position is now more formalized and embedded within the NGB staffing architecture. With the ARNG operating over 1,400 rotary/fixed wing aircraft and possessing a significant amount of the Total Army's aviation force structure, a senior ARNG Aviation General Officer can enable integration and synchronization of priorities for ARNG Aviation and provide input to better define end states across the Aviation Enterprise and amongst the three components. An Assistant Director has authorities to speak for and represent the Director and can ensure strategic and holistic approaches are occurring that address the most pressing and difficult matters for the ARNG. In addition to Aviation and Safety, this new position will also provide oversight and guidance to the ARNG G2, G6 and the Cyber Division.

The Aviation and Safety Division

Some might ask; how does this new position impact the Aviation and Safety Division? It won't. Over the last six months we have sorted out many of the lines of effort and responsibili-



Temple Army Readiness Center, Army National Guard, Arlington, VA.

ties and determined focused priorities. COL Joseph Bishop, as the division chief, executes the day to day operations of the Division within the ARNG Directorate. The Aviation and Safety Division Chief remains responsible for providing the resources, strategic guidance, policy, and staffing assistance to the States, and coordinating with Department of the Army, NGB, and other government agencies in support of the ARNG State and Federal mission.

COL Bishop came to the NGB Aviation and Safety Division from the North Carolina Army National Guard. His most recent assignment as commander of the 449th Aviation Brigade, which was recognized as the 2018 AAAA Outstanding Aviation Unit of the Year and the 449th's highly successful deployment adds tremendous value to the ARNG Aviation Team. Over the past several months Joe has picked up the reins and assumed the helm for tackling the diverse challenges facing ARNG Aviation across the 50 States, 3 Territories and the District of Columbia.

It is my intent to provide a consistent, enduring voice for ARNG Aviation as envisioned by Chief NGB, and the Director ARNG. I look forward to my continuing role for the Army National Guard in this new position and working with the leadership of the entire Army Aviation Enterprise as we rapidly approach the third decade of the 21st Century and lay the groundwork for significant Army Aviation changes in the future.

Fly Guard.

BG J. Ray Davis is the assistant director of the Army National Guard for Aviation and Safety located in Arlington, VA.



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T55 Engine Air Filtration Systems

By Mr. Toney Heathington

Military aircraft engines need clean air and lots of it. U.S. Army aircraft routinely operate from unimproved landing zones where the rotor systems stir up dirt and debris and the ingestion of sand and dust particles is a certainty in desert/arid environments.

Ingesting this debris has a very negative effect on engine serviceability. Sand ingestion not only abrades the compressor and turbine engine blades but degrades compressor and turbine liners. The extreme heat causes any fine sand/dust that gets into the cooling passages inside the turbine blades to melt and form glass, blocking the cooling airflow quickly leading to turbine degradation. The end result is loss of power, significant maintenance, and readiness impact for replacement or repair of an expensive engine.

To solve this problem, the U.S. Army developed an engine air particle separator system for the CH-47. This separator system uses hundreds of vortex tubes to swirl the incoming air, causing contaminants to separate from the air stream by centrifugal force. The core of clean air is ducted to the engine inlet plenum, while the heavier contaminant particles are slung to the outside of the tubes and discarded overboard by a scavenge fan. This system provides a significant reduction in wear to the engine.

Currently the MH-47 is operating without the benefit of an engine air filtration system. To prevent large pieces of debris that would physically damage the engine, a conical screen known as the All-Weather Screen (AWS) is installed on the engine inlet. While this prevents foreign object damage it does little to prevent sand ingestion issues. The U.S. Army has moved forward with a modern technology to help provide clean air to the engines as well as reduce the weight and performance impacts. The Engine Barrier Filter (EBF) system is a high efficiency filtration system that reduces the ingestion of AC Coarse and AC Fine specification sands (per SAE J726),

AWS VS EBF - % TORQUE IMPACT AT MRP			
Conditions	AWS	EBF	Delta
SL/SD Hover	124.4	123.3	1.1
SL/SD 140 Knots	122.6	120.9	1.7
4K/95 Hover	95.7	94.9	0.8
4K/95 140 Knots	93.3	91.9	1.4

Figure 1.



MH-47 with Engine Barrier Filter testing.

U.S. ARMY G3DC COMPOSITE PHOTO

vastly reducing damage to the T55-GA-714A engines used on the MH-47 Helicopter. This EBF is showing considerable promise in meeting the desired key performance parameters.

Restricting airflow comes with a cost. The EBF's impact on engine performance, in particular torque available, is determined by the total pressure recovery in the inlet. Total pressure recovery is defined as P_{T1}/P_{T0} where P_{T1} is the total pressure at the engine inlet and P_{T0} is the freestream total pressure. Pressure recovery is actually a combination of two physical phenomena: 1) The ram air that is recovered by the inlet and 2) The total pressure losses of the inlet. The inlet pressure losses are the result of turning air and friction, including the total pressure drop through porous media such as screens and filters. An "ideal" inlet would have a pressure recovery of 1.0. The pressure recovery typically decreases with increasing flight airspeed. In addition, the pressure loss tends to increase as airflow increases through the inlet. The impact on torque available based on the P_{T1}/P_{T0} of the clean EBF is less than 2% for almost the entire operating envelope and power spectrum and is summarized for Sea Level / Standard Day (SL/SD) and 4,000 feet / 95° F (4K/95) at Maximum Rated Power (MRP) in Figure 1.

A barrier filter system can be a maintenance challenge since the pressure recovery drops as the filters collect more dirt. When tested in the 'dirty' configuration the torque impact was as high as 6% @ SL/SD-140 Knots. However, a power management method is being developed that will allow an estimation of ~ 2% loss for mission planning purposes.

Qualification is nearly complete for the MH-47 EBF system and testing has proven it meets and/or exceeds the major program KPPs. The EBF has the future potential to provide copious clean air for MH-47 engines while providing exceptional dust, sand, and dirt separation efficiencies.

Mr. Toney Heathington is an aerospace engineer in the U.S. Army Combat Capabilities Development Command Aviation & Missile Center Aviation Engineering Directorate, Special Operations Aircraft Division at Redstone Arsenal, AL.

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How to Find Help: Accessing Behavioral Healthcare for Soldiers

By CPT Joseph R. Adams, DO and MAJ Ryan Green, PhD

Q: I'm a member of the National Guard and need help working through some personal problems. Who can I talk to?

FS: This is an excellent question, as accessing healthcare resources can be challenging for National Guard Soldiers. While access to care in a crisis is always available through the U.S. Department of Veterans Affairs (see contact information below), seeking care for a non-crisis related concern may seem daunting. Not all life events are easy to cope with and managing things on your own can be especially difficult. Realizing this early on and seeking assistance is key to preventing your concerns from snowballing.

Army Behavioral Health providers evaluate and treat Soldiers with many different needs including but not limited to marital issues, stress, trouble sleeping, substance use concerns, anger management difficulties, depression, anxiety, and post-traumatic stress disorder (PTSD). They are here to help get you feeling better and back in the fight. If you do not know who your unit Behavioral Health Officer is (usually a psychologist or social worker) and do not have access to a Military Treatment Facility, there are many people in your unit who can point you in the right direction including your chain of command. Of particular note is your unit Chaplain who can be an incredible resource to talk to as well as to assist you in seeking care.

The healthcare of Army Aircrew must involve an aeromedically-trained provider. That doesn't mean you can't be seen by providers who are not aeromedically-trained. Any healthcare specialist can work in coordination with an aeromedically-trained provider to make sure you receive the appropriate care.

Q: But if I seek help won't they ground me?

FS: This is a common concern that may keep Aircrew from seeking help.

However, the primary goal is to keep you flying as safely as possible. While it may be necessary to issue a temporary down-slip during the course of your evaluation and treatment, in the long run you will avoid more serious problems. When addressed early on, many common reasons for which Aircrew seek help are listed as "for information only" in the flight physical and do not require a waiver. When medications are necessary, a 4-month down-slip will be required to ensure correct dosing and to monitor for medication tolerance. Problems arise when Aircrew wait too long to seek help; early intervention is highly encouraged. Often a delay in reaching out for assistance can compound the problem resulting in a longer duration of grounding.

Q: How do I know if I have a problem?

FS: If you feel like things are becoming difficult to manage on your own, feel out of control, or feel like you are in a downward spiral you should seek help. You can also take a self-check quiz at <https://www.vetselfcheck.org/welcome.cfm> to help determine if behavioral health concerns may be affecting you. Here are some general signs and symptoms to look out for:

Depression

- Feeling or being told that you seem down or depressed
- Having less interest in doing things that you used to enjoy
- Unintentional weight loss or gain
- Eating too much or too little
- Sleeping too much or too little
- Lack of energy
- Poor self-esteem
- Difficulty concentrating and making decisions
- A sense of hopelessness

- Thoughts of suicide (If you are having thoughts of suicide call the crisis line (see contact info below).

Anxiety

- Feeling worried, restless, or on-edge
- Easy fatigability
- Having trouble concentrating
- Irritability
- Muscle tension
- Difficulty sleeping

Sleep Disorder

- Difficulty falling or staying asleep
- Being told that you stop breathing intermittently during sleep
- Feeling fatigued during the day
- Falling asleep unintentionally during the day

Substance Abuse

- Often taking larger amounts or over a longer period than was intended
- Feeling like you need to cut back
- Spending an unusual amount of effort in obtaining, using, or recovering from use
- Cravings
- Failures to fulfill obligations at home, school, or work resulting from use
- Continuing to use despite recurrent social or interpersonal problems
- Giving up important activities due to use
- Recurrent use in dangerous situations
- Experiencing tolerance to or withdrawal symptoms

Anger Management

- Failure to control aggressive impulses leading to verbal or physical outbursts
- Aggressive behavior that is out of proportion to the provocation
- The behavior causes you distress or results in difficulty in social situations

Any combination of the above symptoms that result in a negative impact in your work or personal life should be evaluated. Whatever component you are in, we encourage you to seek help for your concerns. You are not alone and help is available.

Contacts

U.S. Department of Veterans Affairs Crisis Line (available 24/7 365 days a year) Dial 1-800-273-8255 and Press 1

to talk to someone.
 Send a text message to 838255 to
 connect with a VA responder.
 Start a confidential online chat session
 at VeteransCrisisLine.net/Chat
 Take a self-check quiz at
VeteransCrisisLine.net/Quiz
 In Europe: Call 00800 1273 8255 or
 DSN 118
 In Korea: Call 0808 555 118 or
 DSN 118
 In Afghanistan: Call 00 1 800 273 8255
 or DSN 111

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
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 health issues.

The views and opinions offered are
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*CPT (Dr.) Joseph R. Adams is a flight
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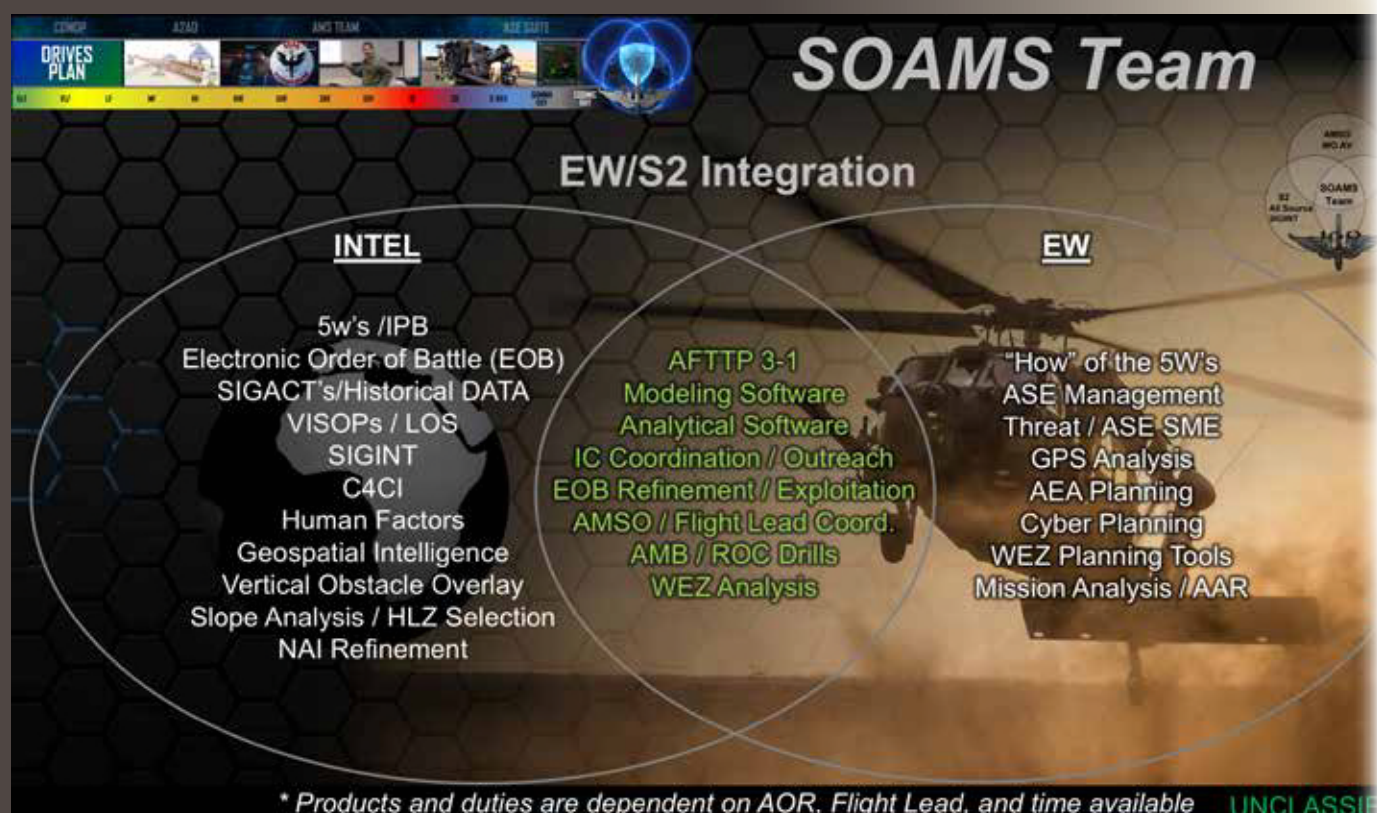
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Special Operations Aviation Mission Survivability Team –

Owning the Spectrum for Tomorrow's Fight

By MAJ Zachary Dadisman, MAJ Evan Westgate, CPT Brandon Jack and CW4 Thomas Schneider



The National Defense Strategy (NDS, 2018) and ADRP 3-0 (2017) serve as key policy and doctrinal sources for the Department of Defense's focus shift toward Great Power Competition preparedness. The United States Army Special Operations Command (USA-SOC) "USASOC 2035 Campaign Plan" (2017) further specifies requirements investment in "ARSOF rotary wing and unmanned platforms to penetrate integrated air defense systems." The 160th Special Operations Aviation Regiment (160th SOAR) is holistically invested in pursuing competitive advantages over the Nation's adversaries through a shift of focus from "owning the night" to "owning the spectrum."

Integrated Air Defense Systems (IADS) threats pose unique challenges to Army Aviation – challenges generally not encountered during the last 18 years of counterterrorism and counterinsurgency operations. Great power (peer, near-peer) adversaries will seek to employ anti-access and area-denial (A2/AD) capabilities to deny Army Aviation freedom of maneuver throughout the joint operations area (JOA). As Special Operations Forces shift focus, the 160th SOAR is adjusting to conduct operations in contested environments that operate robust, modern integrated air defense networks.

Deliberate, joint planning incorporating inter-service and cross-functional

Shared tasks between the 160th SOAR Electronic Warfare section and the Regiment Intelligence section during Denied Area Planning. The graphic was created by 160th SOAR (A) CEMA Cell and RS2.

expertise is crucial for successful course of action development in A2AD environments. The 160th SOAR employs Special Operations Aviation Mission Survivability (SOAMS) teams to leverage the subject matter expertise required to conduct detailed mission planning in order to avoid or mitigate detection in denied or semi-permissive environments where "high end" threat systems are employed. Composed of multi-discipline intelligence profes-

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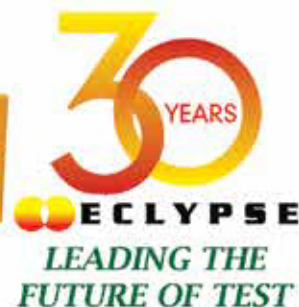
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sionals, cyber electromagnetic activities (CEMA) personnel, and aviation mission survivability officers (AMSO), the SOAMS team concept was first implemented and tested during the annual Special Operations Aviation Advanced Tactics Training (SOAATT). Each team member brings a unique skill set with them in a collaborative planning environment to solve the complex problem set of mitigating tactical risk during operations.

Army intelligence professionals, sensitized to the unique needs of SOAR aircrews and platforms, seek to develop a comprehensive understanding of the operational environment. Intelligence specialists from all disciplines must work together to provide a detailed characterization of the battlespace and the threat. With a detailed understanding of the unit's unique intelligence requirements, dedicated Signals Intelligence Analysts, Imagery Analysts, and All-source analysts collaborate with experienced operational planners to ensure they piece together the most accurate picture of the environment. Analysts conduct detailed multi-functional analysis to determine suitable air avenues of approach, mission support sites, and landing zones.

The latest enemy orders of battle are checked and updated to show enemy composition, disposition, and strength. All-source analysts assess the most likely and dangerous courses of action for all threat entities within the area of operations, to include police, paramilitary, and civilian populations. During this process, analysts continuously collaborate with other SOAMS team members and staff functional sections, creating a holistic understanding of the JOA.

CEMA is the bridge from intel analysis to tactics. CEMA NCOs at each battalion provide detailed and tailored electronic order of battle (EOB), threat, and route analysis products to 160th SOAR flight leads and planners. This is done by utilizing advanced mission planning tools, electromagnetic spectrum (EMS) analysis, and coordination with joint cyber, space, and electronic attack enablers. The construct of the small team enables flexibility and timely contributions to the aviation mission planning process. CEMA NCOs work together throughout the planning, execution, and post mission analysis with both 160TH SOAR intel personnel and AMSOs. A strong relationship among the SOAMS team members enables the

quick production of extremely detailed planning support products.

While the input of intelligence and CEMA subject matter experts is important, the AMSO is key in implementing the detailed products and recommendations from the intelligence and CEMA personnel. The AMSO assess these products through the lens of an experienced aviator, and selects the appropriate tactics, techniques and procedures (TTPs) necessary for success in contested environments. The close collaboration of all three disciplines (Intel, CEMA, and AMSO) promotes the detailed planning required to succeed in expected future missions.

Implementation

160th SOAR training focus has included denied airspace penetration since the unit's inception in the early 1980s. However, continuous operational deployments in support of the Global War on Terrorism since October 2001 increasingly steered exercise scenarios into the semi-permissive realm to replicate the missions being performed nightly in theater. In the 2015-2016 timeframe, leaders at the Regiment and battalion levels recognized and set



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out to address the near-peer training gap brought on by years of nearly singular focus on counterterrorism and counterinsurgency support in semi-permissive operating environments. Incidentally, 160th SOAR combat rotary wing mission tactical tasks at the target are generally the same regardless of the threat environment. Raids, for instance, require the same terminal area crewmember skills in both semi-permissive and highly contested RF threat environments. Altitude, LZ selection, weather, dust, fields of fire, etc. remain the primary considerations at the target irrespective of the threat or lack thereof between the intermediate staging base (ISB) and the target. By infusing en-route A2AD problems into training scenarios, 160th SOAR can sharpen skills in the electronically contested environment while sustaining combat power in the current fight.

Evidenced by countless tactical successes and feedback from SOF ground forces across the Joint Services, the traditional bottom-up driven 160th SOAR training model works. The challenge faced by the unit was to create a program to target senior trainers (instructor pilots and AMSOs) that it could overlay on the existing model without upending the training paradigm that has served the unit so well.

SOAATT, first executed in 2016, emerged as the capstone event for the 160th SOAR's effort to educate the force for fighting in an electronically contested environment, develop tactics, and test equipment and techniques against threats. It is a joint, inter-agency train-the-trainer (or *educate* the trainer) program designed to provide graduate level tactics experience to the unit's primary trainers, enabling them to carry lessons learned back to battalion level exercise scenarios for the broader force's exposure. Active throughout the year as a function of the Regiment Futures OPT (a standing OPLAN-focused team that maintains running estimates on 160th SOAR-apportioned plans) and as subject matter experts on other exercises, the SOAMS team serves as the centerpiece when staff and crews from all airframes across the Regiment come together annually for SOAATT. This builds familiarity with cross-functional capabilities among senior aircrews as participants and equipment are put to the test in the classrooms and simulators at Ft. Campbell during Weeks 1 and 2 and on the China Lake



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Naval Air Station ranges during the event's third week.

To reinvest the dividend from this high-end training, lessons learned from iterative flights on the EW range and culminating full mission profiles (FMP) are captured and carried back to the battalions by participants for implementation into company and battalion exercises. This directly addresses 160th SOAR's gap for being able to validate units in a near peer environment that existed in previous years. As the Army returns to decisive action (DA) scenarios with IADS at its Combat Training Centers (CTC), 160th SOAR will seek opportunities to support the special

operations forces (SOF) ground elements and integrate with conventional maneuver elements in the JOA.

MAJ Zachary Dadisman is the regiment operations officer (RS3), MAJ Evan Westgate is the regiment intelligence officer (RS2), CPT Brandon Jack is the regiment cyber and electronic warfare officer and CW4 Thomas Schneider is the regiment aviation mission survivability officer assigned to the 160th Special Operations Aviation Regiment (Airborne) at Ft. Campbell, KY.



Bridging the Aviation CBRN Gap

By CPT Nickolas Nagel and MAJ Paul Neal



U.S. ARMY PHOTO BY CPT JEFFERY GILMER, 160TH SPECIAL AVIATION REGIMENT

In the past three years the U.S. military has increased its focus on high intensity conflicts in a near peer environment. This dynamic battlefield environment will pose new threats with old ones reemerging. Among those old threats is the combating of weapons of mass destruction and the potential for their use on the battlefield. In anticipation of this dynamic and complex threat the 160th Special Operations Aviation Regiment (Airborne) has placed special emphasis on training and refining its tactics, techniques and procedures as they pertain to chemical, biological, radiological, nuclear (CBRN) training, and equipment.

Realistic, Dynamic and Threat Focused Training

Facilitating training events and exercises that incorporate realistic CBRN scenarios is critical to achieving productive training. Too often, CBRN training is relegated to fulfilling the Level 10 tasks outlined in AR 350-1, which does not provide pilots and aircrews with a realistic and relatable training program. The threats in a CBRN environment are versatile and complex, a reality which the 160th seeks to replicate in its training program.

CBRN personnel from the 160th Special Operations Aviation Regiment (Airborne) perform aircraft and equipment decontamination on an MH-60M Black Hawk during a training exercise.

In order to achieve its CBRN proficiency the 160th has taken a phased approach beginning with individual training and culminating in 100% masked, multi-ship helicopter assault forces (HAFs) conducting full spectrum night vision goggle (NVG) flight operations. Training begins with CBRN academics which cover Level 10 tasks and discuss different ways aircrews can wear their personal protective equipment (PPE) dependent on airframes. Classes generate a broader understanding of the various CBRN threats that might be encountered and their implications.

Simultaneously, companies develop flight training programs to build and maintain flight proficiency through the “crawl, walk, run” method. Progression begins with less than 50% of the aircrew masked, conducting day only tasks then progresses to full aircraft crews operating masked.



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Once proficiency is gained as an aircrew in both day and NVG flight tasks, training is expanded to include multiple aircraft in mission oriented protective posture (MOPP) operating as a team in day then NVG profiles. Finally training progresses to a multi-ship HAF flying first in day profiles then under NVGs. During each phase of training, the rated crew member's proficiency is meticulously monitored and recorded by the standardization instructors. Using this phased approach, the 160th has safely progressed to battalion level exercises with 100% crew masked night operations that culminate with the establishment and utilization of personnel and aircraft decontamination sites.

Mission Planning

CBRN training should be approached with flexibility in the planning process. While doing so, CBRN subject matter experts (SME) should focus on guiding mission planners towards adhering to the CBRN principles of Avoidance, Protection, and Decontamination, in that order. A close integration of CBRN SMEs and planning cells is integral to facilitating a sustained CBRN training focus that does not overshadow the entire exercise if that is not the commander's intent. The CBRN SMEs conduct in-depth threat analysis and provide commanders and planners with options and guidance when conducting flight operations in a CBRN environment. Armed with detailed information, pilots are able to assess the best possible method for contamination avoidance. Integrating the CBRN SME into the process allows commanders to develop training events that can touch on various threats ranging from chemical to radiological without having a contamination event disrupt other training objectives.

Battalion commanders nonetheless must place emphasis on the development and sustainment of their organic operational decontamination capabilities. The U.S. Army's CBRN units are a limited asset and in accordance with ATP 3-11.32 operational decon should be conducted at the battalion level. Augmenting the decon team with maintenance and support personnel from across the battalion has proven to be a sustainable and effective concept. Integration of the medical section with the CBRN section is critical when it comes to the treatment of casualties on a contaminated battlefield. CBRN and medical considerations are both contingency scenarios that cannot be trained, planned and executed exclusively from one another.

Decon Equipment

The 160th utilizes Modified Table of Organization Equipment (MTOE) equipment and commercial off the shelf (COTS) items to develop and build its decon equipment package. The unit's standard package consists of a COTS Fogbooster apparatus through which GD-6 is applied to the aircraft interior in the form of a fine mist, so as not to cause water damage to critical interior components. For the aircraft exterior a Macaw backpack by Inteligard that produces compressed air foam in order to apply DF-200 decontaminant is used. The center piece of this package is the M26 JSTDm, which utilizes highly pressurized and heated water to wash the DF-200 decontaminant off the aircraft exterior. In order to provide the significant amount of water required for decon operations, a 500-gallon fuel blivet is employed. The utilization of this fuel blivet provides the battalion with more flexibility regarding where and how the decon site is established as well as integrating it

with forward area refueling point (FARP) operations. The Expedient Personnel Decontamination System (EPDS) has proven to be a reliable and expeditionary system for personnel decontamination. The system can be broken down into three duffel bags and weighs less than 150 pounds combined.

For detection of chemical warfare agents (CWA) and toxic industrial chemicals or materials (TIC/TIM) the M4 Joint Agent Chemical Detector (JCAD) is employed. This allows the decon team to verify that any contamination remaining on or inside the aircraft will cause no immediate danger to life or health. The shortcoming of this detector though is its ability for low threshold detection. Regarding radiological hazards such as beta and gamma radiation, the VDR-2 detector and UDR-13 dosimeters are utilized. For alpha particle radiation a PRD-77 radiac detector is employed.

Lessons Learned

Over the past year the 160th has pursued the ability to achieve a Thorough Decontamination capability. Before doing so it sought to determine a quantifiable definition of Thorough Decon for aircrews and pilots specifically. The U.S. Army Public Health Command's RD230, establishes that contamination must be reduced to a level below an Acute Exposure Guideline Level-1. Below this level the RD230 states that humans will no longer experience any form of miosis, nausea, or issues with depth perception. Achieving a level in which these possible symptoms have been eliminated will restore pilots' abilities to execute precision rotary wing assault and close air support tasks. Currently there are no metrics or reliable low threshold detection capabilities that will arm commanders with the necessary data to gauge the risk they may or may not be accepting in resuming flight operations in limited PPE.

The Joint Service Aircrew Mask (JSAM) is a "game changer" when it comes to the ability of aircrews to reduce time in mask but still react expeditiously if exposed to a CBRN threat. Not only has it shortened the time it takes to don one's mask, but it also increases aircrews' chances of survival in the event they are required to perform emergency egress procedures after ditching overwater. The JSAM's quick detachment face piece now gives the crew member the ability to access their Helicopter Emergency Egress Device System (HEEDS) without having to remove their flight helmet and doff their mask. The JSAM is also better designed to be worn under a flight helmet. The improved comfort is vital during extended missions.

The potential for conflict with near-peer adversaries in a CBRN environment is increasingly present. The 160th continues to pursue multiple avenues to ensure the force is prepared. Habitual interaction between commanders, air mission planners, and CBRN SMEs ensures complex, realistic CBRN training scenarios. While a deliberate, phased progression program gradually prepares aircrews to accomplish multi-ship HAF missions in full MOPP posture, under NVGs, with realistic decontamination procedures. Avoidance is always the goal in a CBRN environment, as with any fight, preparation and training is our best chance for success.

CPT Nickolas Nagel is the CBRN OIC and MAJ Paul Neal the executive officer Task Force 1-160 SOAR (A) at Fort Campbell, KY.



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Prepare for A2AD

By MAJ Chip Colgary and CW4 Dan Cosson

The 2018 National Defense Strategy (NDS), focuses on sharpening the American Military's competitive edge to compete, deter, and win in a more competitive and dangerous security environment than we have seen in generations. It prioritizes long-term competition with China and Russia, while also seeking to deter and counter rogue regimes such as North Korea and Iran. The NDS uses the terms anti-access/aerial denial (A2/AD), electromagnetic spectrum, and electronic warfare over two dozen times, in context alongside continuous references to the countries above; it is clear the Secretary of Defense fully understands the challenges our current force faces to fight and win against a near-peer military force.

ARSOA MH-47G accelerates to conduct CONUS training

While our military has been at war for nearly two decades, this is a new type of fight few of us have yet seen or imagined. A fight where flying at night will no longer be a cloak of protection and the greatest threat will not be small arms and rocket fire. It is also one where tactics employed by many aircrews over the last decade will get them killed, quickly. We need advanced aircraft systems, survivability equipment, and planning tools to gain a tactical advantage- all of which will be useless without greater access to information and using that information to reshape how we train.

Training for the New Fight

Indevelopingatrainingmethodology for this new fight, remember that the Army is not alone. Emphasis on the term “Joint” cannot be overstated. Just as an aviation mission survivability officer (AMSO) will not be expected to plan to penetrate a denied area in a bubble, Army Aviation branch will not fight and win in a denied area alone. For years, Army Special Operations Aviation (ARSOA) aircrews have participated in courses at the Marine Corps Weapons & Tactics Instructor (WTI) course, as well as the Air Force’s Weapons School, as both teachers and students. We also regularly participate in large scale joint exercises that support these schools such as the 14th Weapons Squadron. In any future conflict, whether on Day 0, or Day 45, Army Aviation will be expected to directly contribute, likely with portions of a robust enemy integrated air defense system (IADS) still in place. We will do so successfully by fighting with and alongside our sister services and leveraging joint capabilities.

A way our sister services addressed training deficiencies in this arena was with advanced tactics schools. Unfortunately, there is no Army Aviation equivalent to Top Gun, Weapons School, or WTI. We are also the only branch that doesn’t own its own electronic combat range (ECR). To be a “Patch” in the Air Force, a pilot must first be an experienced instructor pilot and apply to attend the arduous Weapons School. Upon graduation, they become a tactics instructor. The Chief of Tactics (always a “Patch”) assigned at various levels throughout the Air Force is the de facto expert in their field. All ARSOA’s battalion and higher AMSOs are also instructor pilots and most are flight lead qualified. This represents our first steps at mirroring the joint approach to developing Army Aviation tactics instructors.

The Army TACOPS course is not intended or designed to be a graduate level course like the schools mentioned above. To build on that foundation, after attending the TACOPS course, ARSOA AMSOs attend a variety of other joint services schools. To bridge the gap between schooling and practical experience ARSOA developed Special Operations Aviation Advanced

Tactics and Training (SOA-ATT). Over the course of a month, experienced ARSOA aviators are exposed to graduate level denied area simulations, academics, and mission planning scenarios. Members of the National Intelligence Community (NIC) give classes on pertinent subject matter, alongside vendors and engineers who support our aircraft survivability equipment. The event culminates with a full mission profile event executed on an electronic combat range with joint assets.

Simulation

While simulation has a pivotal role to play in training for denied areas, it is not a replacement for a live ECR. For a Commander to place his forces in harm’s way, he must be able to adequately assess the level of risk he is being asked to accept. Such determinations cannot be made based on experience gained solely in a simulator. Tactics can’t be developed solely in a simulator, nor can aircrew proficiency and confidence truly be measured and built in one.

Once tactics are fully tested and evaluated on live ranges, simulation absolutely should play a key role in aircrew proficiency training. Even if the Army builds a range tomorrow, not everyone will be able to fly on it regularly enough to build true proficiency. Simulation is perfect for that, while a live range should be thought of as the equivalent to a combat training center (CTC) rotation where the years’ worth of training and preparation are validated.

Proficiency in Old and New Tactics

We must also be open to learning new tactics and relearning some old ones. For many sound reasons, flying at high (above ground level) altitudes is the only way of doing business many in our community have ever known. Low level flight is a lost skill, and one that must be mastered again. Our ability to fly low is one of the single greatest advantages helicopters have in denied areas. The low-level environment (less than 100’ AGL, sometimes much less) greatly mitigates many risks, but does uncover other challenges that require thorough planning, training, and experience to surmount. Waiting for the war to start, where low level flight is the only option, is not the time to start re-learning these skills.

Equipment

While experienced and knowledgeable crews will always provide the decisive advantage in conflict, some equipment considerations cannot be ignored. The radar warning receiver (RWR) is the cornerstone of any aircraft survivability equipment (ASE) suite and is foundational to any serious attempt to trespass into a denied area. Beyond providing a strictly operational capability, ARSOA’s advanced RWR incorporates a training mode that allows AMSOs to program threats to appear on the display during flight at pre-determined locations. The threat displays like a live threat would and an aviator can be evaluated on their reaction to contact. That means we don’t have to rely on limited ECR opportunities or simulators. We can, and do, accomplish ASE phase progression training, in our assigned aircraft, utilizing this capability. We have also utilized this capability, along with supporting intelligence and electronic warfare products, to create multi-week long, multi-ship battalion situational training exercises. We can effectively recreate real world orders of battle in our local flying area and train to specific scenarios. This has greatly increased the number of denied area training reps our crews get throughout the year.

The fight of the future has become the fight of today; the 2018 NDS makes that clear. We must begin reprioritizing efforts away from counterinsurgency (COIN) and place greater emphasis on A2AD. That means we need better training for AMSOs and to develop cross functional teams of subject matter experts that can leverage the capabilities of the NIC. We need modern aircraft survivability equipment that provides increased operational capability in combat and can be used during training at home station. Finally, and most importantly, we need to develop better base tactics and capitalize on opportunities to train those skills at dedicated Army ranges.

MAJ Chip Colgary is the operations officer and CW4 Dan Cosson the aviation mission survivability officer for 3rd Battalion, 160th Special Operations Aviation Regiment (Airborne) at Hunter Army Airfield, GA.



ARSOA & AFSOC: Leverage Training Opportunities with a Focus on Near-Peer Threats

By MAJ David Aamidor and Maj. Ryan Taylor (USAF)

It is possible to imagine a future conflict where the United States military does not enjoy the technological advantage we have come to expect over the past two decades. Our nation's competitors and adversaries have witnessed our military in action, and they have evaluated our strengths and weaknesses, developing weapons to exploit our real and perceived vulnerabilities. Our relative technological overmatch has been undermined by the development and proliferation of advanced weapon systems designed to prevent our military's access of territory or encumber our ability to traverse the land, air, or sea. These anti-access/area denial (A2AD) weapons will certainly play an important role during conflicts in the future and are already present in close proximity to our allies and deployed forces. Furthermore, according to a 2017 RAND study, adversarial nations, such as Russia and Iran will continue to increase their A2AD capabilities, further diminishing our relative advantage.

Army Aviation may be uniquely vulnerable and exposed to these threats and must therefore focus our training and technological resources towards survivability and lethality in these environments. Required by design to penetrate and transit denied areas, potentially prior to the establishment of air supe-

riority, Army Special Operations Aviation (ARSOA) cannot underestimate our adversaries' capabilities. While these challenges continue to be addressed and evaluated, preparing for these types of conflicts is resource intensive and must include the actual simulation of operations within denied areas.

As an added challenge we must continue to support ground forces in deployed areas while also preparing our aircrews to fight against adversaries with distinctly different capabilities than we have witnessed during the previous two decades. While no branch within the military is immune to these threats, ARSOA must strike a balance between preparing aircrews for the present fight and preparing for the future; finding training environments where both can be accomplished is imperative.

Bilateral Training

Since 2016, 4th Battalion, 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) and the U.S. Air Force 14th Weapons Squadron have conducted bilateral training centered on the Weapons School Integration (WSINT) exercises. WSINT is the capstone of the six-month Weapons Officer Instructor Course consisting of large force exercises, which provide a unique and training rich environment focused

on preparing forces to fight and win against near-peer competitors. Air Force weapons officers are tactical experts that specialize in integrating combat capability across the military domains and services to help win America's next war. Located at Nellis Air Force Base in Nevada, WSINT provides air crews with access to environments which not only simulate harsh desert and mountainous environments (where crews regularly operate overseas) but as importantly, an area well suited for advanced aircraft survivability training focused on future threats. Beyond the unique ranges and environments present around Nellis AFB, WSINT brings together platforms with diverse capabilities including Intelligence, Surveillance, Reconnaissance (ISR), Suppression of Enemy Air Defense (SEAD), Strike, Electronic Warfare (EW), Space, and Cyber from all branches of the military. Participants





Two MH-47Gs conduct ASE training.

U.S. ARMY PHOTO BY CMT BRAD PALM

in the WSINT exercise are presented with challenging scenarios, simulating contemporary threats, and must plan collaboratively to ensure survivability and lethality. A detailed understanding of the enemy's strengths, weakness, and vulnerabilities is presented allowing participants to employ the right assets at the right time in order to achieve desired effects.

ARSOA crews and aircraft have been an integral part in many of these training scenarios during WSINT, conducting for example direct action infiltrations which are reliant upon both onboard survivability equipment and Joint enablers for survivability and success. While such scenarios during WSINT resemble missions regularly conducted in our contemporary conflicts, incorporating denied-area planning and execution adds an additional level of complexity which is focused on

future threats and A2AD challenges. Furthermore, the WSINT environment allows crews to improve their tactics and procedures. During after action reviews and debriefs crews can access data and evaluate their performance for, among other factors, survivability. This facilitates the refinement of tactics in a manner that could only otherwise be accomplished during a real-world deployment.

The collaboration during WSINT between ARSOA crews, the 14th Weapons Squadron, USAF Weapons School, and joint partners at large has resulted in an assessed increased level of readiness for the planning and execution of operations in denied areas. A2AD threats present a unique challenge for our military and addressing these threats with both technology and training is essential. Leveraging expertise and initiatives present within the entire de-

fense apparatus is imperative if we wish to maintain our competitive advantage. Finally, we cannot prepare to fight the last war, however, we must maintain a high-level readiness for our current conflicts. Therefore, we must develop training that allows our aircrews to refine the skills they need to maintain readiness for the fights we face today, while also addressing future A2AD threats.

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Analog Processes in a Digital Army: Human Expertise Supporting Digital Complexity

By CW3 Bruce Silva and SSG Kyle Gardner



Above: CH-47D Cockpit



Right: CH-47F Cockpit

In today's world of sophisticated aircraft avionics systems, using a simple multi-meter with steam-gauge era schematics will not provide the level of fidelity needed to troubleshoot complicated systems and identify intermittent faults. Today's technicians require testing equipment as sophisticated as the systems being tested and the technical data that is needed to train Soldiers to levels beyond "box swapping." Aircraft mission equipment continues to develop at a rapid pace, bringing high-tech capabilities to Army aviators supporting demanding ground force commanders. As these aircraft systems evolve and become artificially intelligent enough to "tell" the technicians when they fail, our efforts to work smarter generally result in cheating the technician of the intricacies and technical nuances required to understand the basic principles of electronics. We think we are working smarter, but in actuality we are potentially driving unrealistic costs into our fiscally constrained flying hour budgets. Many times paying

the original equipment manufacturer (OEM) to repair components that could have easily been identified and repaired by our Soldiers; this robs maintainers of the critical experience needed to effectively operate away from home station. Skill is built from repetitions at task; by giving these repetitions away, we are giving away valuable opportunities to learn and grow into master technicians.

Advanced Equipment

Aircraft troubleshooting has rapidly declined with reliance on "smart" systems. The question of "why" the component failed has almost been completely removed from the vocabulary of the current generation built on principles of 2 level maintenance and lack of technical data. Asking "why" is the first step toward becoming a technician and not a "box swapper." Currently, our technical manuals are written to address problems in a step-by-step process with little to no understanding of the logical steps of the process. When

there is a problem, the maintainers are left relying on a system that tells them what Line Replaceable Unit (LRU) to remove without considering other issues that could be systemic or problematic, including things such as wiring faults or faults induced by non-related systems. As an Army enterprise we are losing the understanding of avionics systems; this understanding is vital to our technicians' professional development.

Building systems that self-report failures is perceived to be forward thinking, but this form of condition-based maintenance often leads to incorrect fault detection at the LRU level and results in "box swapping." The LRUs identified as faulty are being sent back to the vendors for testing and are then returned to the government as Could Not Duplicate (CND) or No Evidence of Fault Found (NEOFF). These CNDs or NEOFFs are a direct result of the lack of maintainer technical expertise. This "box swapping" method of troubleshooting is costly and has a significant impact on readiness and logistical footprint.

New and advanced forms of data wiring including the 1553 Data Bus, microwave, fiber optic, and other complex wiring systems, bring their own challenges that the maintainer may not understand. For example, wiring can initially seem to be operational when tested using available means such as a multi-meter, but are often times degraded and not readily apparent to the maintainer. These systems require specialized tools and training in order to effectively test, diagnose, and repair them. Acquiring these special tools is often expensive and comes with its own set of challenges, such as increasing your operational footprint, developing a sustainment plan, training to operate the equipment, and an increase in maintenance man-hours performed on a given task. These challenges are often what drives the desire for systems that self-diagnose.

Systems that have self-reporting functions are not bad, in fact, they have proven to help in most cases. However, we often depend too much on this mechanism in an effort to get the aircraft back into the fight without having a holistic picture of what the root cause was. These faults are sometimes rectified, but typically re-manifest due to an underlying issue that self-reporting systems lack the capability to identify.

Getting the new capability to the warfighter is the top priority, but we leave our maintainers struggling to sustain technical relevance on constantly evolving systems. Formal maintenance training and programs of instruction take significant time to develop and implement and are often executed a year or more after the system is already in the field. Having the most advanced systems will not provide any benefit if the people that maintain them do not have that same level of technical expertise, the required equipment, and the source data to keep it operational.

Limited Technology Data Packages

Technical capability of our maintainers often must rely on the OEM and field service representatives (FSR) for support. Many new systems being fielded have propriety technology, and cost restrictions limit our program managers from buying enough technical data packages to adequately generate troubleshooting manuals. Because of this, we have little to no ability to test

the LRU beyond what the system tells us. Army Special Operations Aviation Command and Army Aviation can overcome some of these issues by including the need for technical data rights on systems procured or developed for use on our aircraft. These rights allow us to better troubleshoot on wing, correctly identify faults the first time, and develop test equipment to reduce occurrences of CNDs. The lack of technical data rights drives up sustainment costs, logistics footprints, and degrades Soldier skill sets. The Special Operations Aviation Regiment has proven that this initial upfront cost does provide a positive return on investment while reducing aircraft downtime. With the use of approved system mockups, the ability to crack open an LRU and repair and test to manufacturer's standards, significantly reduces the overall cost of repair, while increasing the amount of serviceable assets available to the fleet. The FSR does play a useful role when it comes to new systems, but long-term dependence due to proprietary rights takes away from the Soldier's ability to acquire in-depth knowledge of the system.

Precision Maintenance with Blunt Resourcing

The overarching issue is that maintainers need detailed manuals and technical training as advanced as the mission equipment they are supporting. As an enterprise, we need to empower our maintainers and arm them with the best equipment and technical expertise possible. This small investment in "human" capital provides a huge return on investment in our "readiness" capital and is in keeping with our SOF Truth "Humans are more important than Hardware." The bottom line is that a multi-meter and a continuity check with steam-gauge era schematics does not cut it in today's world of sophisticated avionics aircraft systems.

CW3 Bruce Silva is the mission equipment officer in charge, and SSG Kyle Gardner the mission equipment noncommissioned officer in charge, with the United States Army Special Operations Aviation Command (Airborne) Aviation Maintenance Support Office located at Fort Campbell, KY.



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Owning the Environment – DVEPS

By CW4 Michael Pounds and MAJ Jeff Timmons



Through the last 30 years, the United States military has dominated combat operations in low-light visibility conditions with its superior use of night vision devices (NVDs). However, recent years have shown that not only do America's peer and near-peer adversaries possess similar capabilities, but anyone from organized crime and terror networks to lone-wolf hostiles can affordably purchase their own NVGs¹. Ever seeking complete capability overmatch, United States Army Special Operations Aviation (ARSOA) is taking the steps to expand from not only "owning the night," but also to dominating operations in the degraded visual environment (DVE). We want to give our customers aircraft that can takeoff, negotiate obstacles enroute, and deliver combat operators to the "X" in fog, blowing sand, and snow. ARSOA's DVE Pilotage System (DVEPS) is breaking new ground in development and integration to meet

our customers' needs.

ARSOA is solving the DVE problem based on three attributes: cueing, imagery, and flight controls. Cueing provides the aircrew with color contrasted symbology that directs flight control inputs to stay on course, avoid obstacles, or maintain position. To date, this has proven the least developmentally challenging attribute; however, it is rendered ineffective if the state data driving the cueing is less than accurate. To overcome those inaccuracies, imagery is generated with *a priori* data, e.g., digital terrain elevation data (DTED), and/or learned through in-flight sensor gathering. Multiple sensors add weight while data fusion creates software complexity making imagery the next most challenging attribute. Finally, the perfect DVE solution includes an autopilot driven sophisticated flight control system capable of interpreting fused data and associated cueing. The autopilot drives the controls as directed by cueing, flying the aircraft

through DVE, accomplishing the mission. In seeking a true DVE pilotage solution, autonomous flight control is the most complex endeavor.

Safety Standards

Such a system requires significant safety standards be met. Testing is rigorous and only grows more restrictive over time as we learn more about the risks versus capacity of the system. If DVEPS is to achieve a full pilotage, "heads-up, eyes-out" solution, an incremental approach is necessary. The first increment in this process is to achieve a fielded situational awareness (SA) enhancing solution, specifically, to aid aircrews during terminal brownout landing conditions.

Through the early part of the wars in Afghanistan and Iraq, brownouts at takeoff or landing proved to be the cause for nearly 75% of accidents². Yet, this is not a 21st Century problem. Studies conducted between 1984 and 1996 showed that over 70% of all NVD related accidents



160TH SOAR COURTESY PHOTO

An MH-60M Black Hawk helicopter crew from the 160th Special Operations Aviation Regiment conducts a dust landing during a desert training exercise. Aviators with the 160th SOAR regularly conduct operations in low visibility situations and austere weather conditions.

occurred due to the pilot's inability to perceive visually the flight environment³. These data points inspired DVEPS' initial step of pilot SA prior to tackling full pilotage. While not all controlled flight into terrain (CFIT) incidents are catastrophic, they can be costly by damaging aircraft landing gear and other airframe components. Many factors contribute to CFIT including unexpected brownout, unrecognized sloping terrain, and aircraft failing to land at assigned location. In nearly every incident, the pilot realizes something is wrong, creates an unusual attitude through overcorrection, and then mishandles the aircraft termi-

nally. Worse yet, when the pilot fails to notice the issue and simply lands badly with an unrecognized drift. Other factors may include unseen obstacles such as towers or wires that are obscured in the brownout. Without knowing or having a system aiding the final seconds of a landing, even a highly proficient crew can find itself disoriented.

System Equipment

DVEPS integrates multiple pieces of mission equipment in order to allow aircrews to maintain situational awareness despite the loss of visual cues. DVEPS uses Long Wave IR, Light Detection and Ranging (LIDAR), Synthetic Vision Avionics Backbone (SVAB), *a priori* data (DTED), and in-flight remembered DTED updates. It's the blend and fusion of all these data that creates the magic and displays the synthetic imagery to the aircrews on multi-functional display paneling or future head mounted systems. This is a "see and remember system" that views the landing zone (LZ) and creates a sensor fused high resolution image. The LIDAR 3D point cloud is fused onto *a priori* data. This image is used as a secondary aid with hover symbology. The aircrew receives hover and approach cues while the image behind the cues gives the aircrew confidence that landing to the LZ is safe and suitable. Therefore, DVEPS will mitigate risk to the aircrew and customers when operating in more austere and visually limited environments, specifically those leading to brownout conditions.

DVEPS also has the ability to use high resolution remembered data that can be loaded pre-mission. This results in a completely passive capability that uses high resolution data complete with updated towers, wires, and other obstacles. The system already knows the ground plane through DTED. Any variation from DTED with the remembered data fused (the towers, wires, etc. mentioned previously) would be declared as obstacles by both audio and color cues. Think of a radar altitude turned ninety degrees in front of you. Setting the obstacle alert audio is based on time to criticality. This is similar to how low altitude audio is set by radar altitude based on set parameters.

As DVEPS flies and gains a level of pedigree through operational effectiveness, this will inform what is necessary to get to a qualified pilotage system. As mentioned before, the path is not paved

in gold. It is wrought with challenges that require sophisticated and rigorous testing. Great strides over a decade in development and cue tuning have brought us to current developmental flight tests. These tests are cracking the code that creates predictable and repeatable combat approaches in DVE conditions. As ARSOA moves forward, future considerations include introduction of "heads-up, eyes-out" helmet mounted displays and the fusion of radar capability into DVEPS cueing and imagery before completing the steps necessary for autonomous flight control integration.

Clearly, just as the rain falls on the just and unjust alike, so does the degraded visual environment interrupt the time sensitive missions of special operations forces as well as conventional. Efforts in recent years have sought to mitigate the risks of flying in DVE. The goal of ARSOA includes mitigation but extends to exploitation. We want to not only control the fight in darkness as we have done expertly for so many years, but now we must also own the environment to end our enemies' sanctuary and give them no quarter.

Notes:

¹https://www.amazon.com/Night-Optics-USA-PVS-7-3AG-Generation/dp/B0086Y03S6/ref=sr_1_13?crd=1KPC9WL VQ4NOU&keywords=night+vision+goggles+military&qid=1552078418&s=gateway&sprefix=night+vision+goo%2Caps%2C320&sr=8-13

² Johnson, Chris W., Ph.D. (2007). *Interactions Between Night Vision and Brownout Accidents: The Loss of a UK RAF Puma Helicopter on Operational Duty in Iraq*. Department of Computing Science, University of Glasgow, Scotland. Retrieved from <https://pdfs.semanticscholar.org/ab49/4b4e6a9971568025d0eb5dcc47363464d19d.pdf>.

³ Bachelder, Edward N. (2000). *Perception-Based Synthetic Cueing for Night-Vision Device Rotorcraft Hover Operations* (Doctoral dissertation). Department of Aeronautics and Astronautics, Massachusetts Institute of Technology. Retrieved from <https://www.researchgate.net/publication/328736870>

CW4 Michael G. Pounds is the chief of the Sensors, Navigation, and Weapons Branch, and MAJ Jeff Timmons is the systems integration officer, for the Systems Integration Management Office (SIMO) of the Army Special Operations Aviation Command. Both are assigned to Ft. Campbell, KY.



PM JAMS Update – Special Operations Support

By Mr. Todd L. Gangl



JAGM Engagement Before and After – Successful engagement of a Ford Raptor traveling at 77 mph and still accelerating. Test executed to stress the dual mode seeker performance and validate the pilot vehicle interface on the Apache.

The Program Management Office Joint Attack Munitions (PM JAMS) is the home of the combat proven HELLFIRE missile, the Joint Air-to-Ground Missile (JAGM), which successfully entered their production and deployment (P&D) phase in 2018, the Aviation Precision Kill Weapon System (APKWS) and the Hydra-70mm family of rockets as well as their associated launchers, including the M299 HELLFIRE missile launcher. As the program office for these air-to-ground missile systems and launchers, PM JAMS enjoys a dynamic, on-going relationship with the United States Special Operations Command (SOCOM), equipping their aviation assets with highly reliable missile and launcher systems and providing engineering expertise in the area of platform integration.

This vital mission of supplying and supporting these key systems also extends beyond the SOCOM community, into the Army family. Over the course of the past year, PM JAMS has worked hand-in-hand within the SOCOM community specifically the 160th Special Operations Aviation Regiment (Airborne)(SOAR(A)) on many of their aviation platforms to include the Gray Eagle Unmanned Aircraft System (UAS), the MH-60M Defensive Armed Penetrator (DAP), and the AH-6M Mission Enhanced Little Bird (MELB). Each of these efforts enhanced the current capabilities of these platforms in relation to operational effectiveness against targets as well as overall platform endurance. At the same time, PM JAMS delivered greater munitions capabilities to the Army community through enhancements to the precision guided munitions Aviation Precision Kill Weapons System

(APKWS), increasing its lethality against a greater range of hardened armor targets.

HELLFIRE

Over the course of the past year, the HELLFIRE Product Office worked to bring full Romeo missile capabilities to the 160th SOAR AH-6M MELB and greater munitions and endurance capability to the Gray Eagle UAS. These full Romeo capabilities include both increased target selection and weapons system engagement zones through the inclusion of a multi-purpose warhead and enhancements to the missile Inertial Measurement Unit (IMU). Giving full Romeo capabilities to the MELB platform includes ensuring all possible missile warhead suite and delay combinations are now available maximizing possible engagement opportunities. As part of this effort, PM JAMS HELLFIRE product office will complete new platform and launcher software testing to allow both Romeo and R2 missile systems to be fired from the AH-6M platform. This enhanced capability will be verified and validated over the summer with live missile shots from the MELB platform.

In addition to extending the capabilities of the MELB platform, the HELLFIRE product office has also worked to increase endurance time and munitions loads on the 160th SOAR Gray Eagle UAS. This work has included validating interfaces between the platform and a new launcher, captive carry flights, and live missile shots to validate the platform improvements with the HELLFIRE Romeo missile system.

JAGM

The Joint Air-to-Ground Missile (JAGM) continues to integrate its capability onto objective platforms as it nears full rate production in mid-2020. JAGM currently fires from its threshold platforms, the AH-64E Apache and AH-1Z Viper, along with several other manned and unmanned platforms. The 160th SOAR MH-60M DAP platform, which can currently engage targets with the HELLFIRE missile, plans to test full JAGM interoperability with test shots in early 2020. JAGM integration will give special operators an improved precision point and fire-and-forget capability on a single munition that can destroy heavily armored, fast moving and stationary targets within a countermeasure rich or adverse weather environment.



Hydra-70 M274 Smoke Signature-Practice Rocket being fired from M260 Rocket Launcher at Rocket Alley firing position at Yuma Test Center, AZ.

The MH-60M DAP fired the JAGM in August 2018. Engagements included stationary and moving targets that provided confidence in the ability to fire JAGM in multiple modes. This early demonstration provided data to continue the integration process to bring JAGM capability to MH-60M DAP's worldwide mission. The JAGM program is currently procuring low-rate initial production missiles with joint interest from the U.S. Navy, Marine Corps, and Air Force.

ARSGM

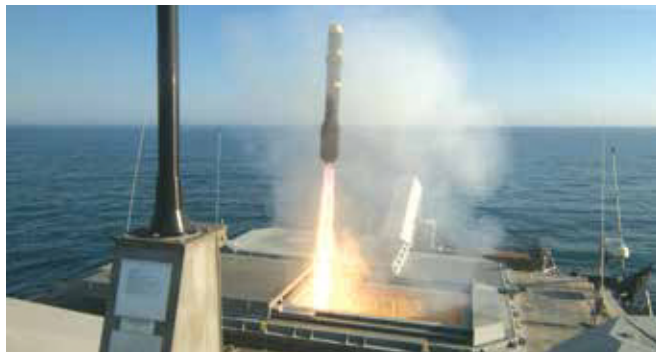
The Aviation Rockets and Small Guided Munitions (ARSGM) product office successfully completed two flight testing events in 2018 of the APKWS guided rocket with an M282 High Explosive Incendiary Penetrating warhead. This new guidance section and warhead combination will allow for precision targeting of more heavily armored target sets, expanding the capability of ARSGM's weapons portfolio for all Army platforms. The first functional and performance flight testing of the M282-APKWS guided rocket was conducted successfully last August at the Yuma Test Center utilizing an AH-64D Apache helicopter. This Apache fired 16, M282-APKWS guided rockets at plywood, bunker, stationary up-armored, and moving up-armored targets from 16 different test points.

The second testing event was conducted successfully at Eglin Air Force Base in December utilizing an AH-64E Apache helicopter piloted by two Redstone Test Center (RTC) experimental test pilots. This Apache fired eight M282-APKWS guided rockets with M282 telemetry warheads at stationary plywood targets from eight different test points achieving all test objectives. The testing efforts will support a 3QFY19 Airworthiness Release, the subsequent

issuance of an Urgent Material Release, and assist in further refining the integrated flight simulation for the M282-APKWS guided rocket.

LT/S

The Launcher and Test Sets L/TS product office serves as the executive procurement agent for the M299 HELLFIRE missile launcher for the Army, sister services and coalition partners. The M299 HELLFIRE Missile Launcher (HML) is a stalwart for Army Aviation the past 19 years. The reputation of the system is proven through countless flight hours, missile shots and its demand across 29 different platforms - both Aviation and Ground. It's a versatile system. A key challenge of providing full up HELLFIRE and JAGM capability to the



HELLFIRE Longbow Littoral Combat Ship Qualification Engagement

platforms often requires significant modifications to the four-rail variant of the launcher. Even today, there are emerging integration requirements for modified M299s in support of strategic initiatives. This presents a myriad of challenges across the programmatic spectrum. Each platform that requires modified M299's is unique. Such challenges include but are not limited to unique designs and software, logistics support and protracted production requirements.

Moving forward, L/TS is charged to lead the "Tiger Team" that will develop the munitions/ALE launcher for FARA-CP- currently named the Integrated Munitions Launcher (IML). The intent is to leverage the lessons learned from the M299 history. The IML will be a modular open systems architecture solution that will facilitate rapid munitions and ALE integration. IML key attributes include standardized functional, mechanical and electrical solutions. These solutions will be the baseline for weaponized future aviation platforms.

The close cooperation between PM JAMS and the Special Operations community was recently highlighted with the David Packard Excellence in Acquisition Award being presented to the Stand-Off Precision Guided Munition (SOPGM) team. This award was presented in part for the rapid delivery of a HELLFIRE missile platform for use against high-value targets and capable of nearly zero collateral damage, a capability which was not resident in any service's inventory.

Mr. Todd L. Gangl is the Hellfire Program Integrator for the Joint Attack Munition Systems Project Management Office located at Redstone Arsenal, AL.





AAAA PHOTOS BY PENE BOEZ AND MICHAEL JULLERY

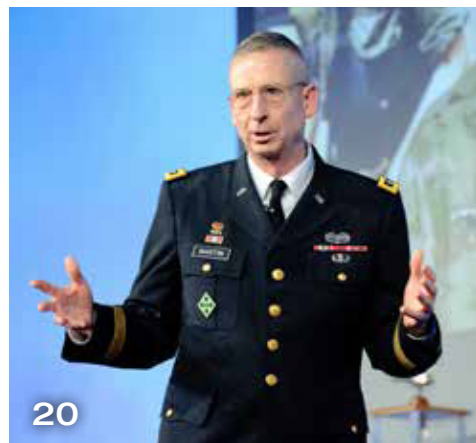
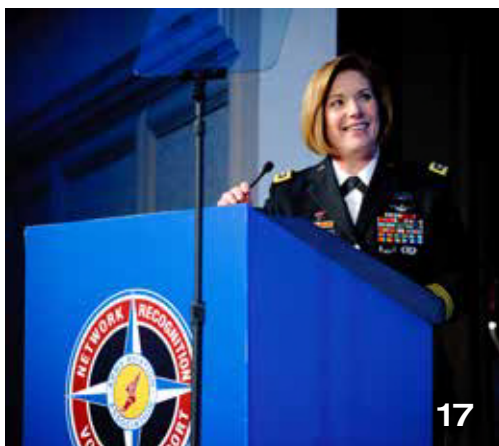
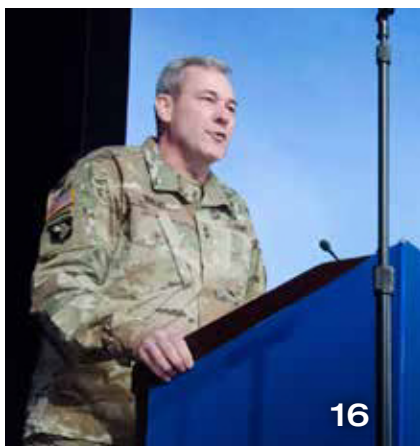




01 – More than 340 companies and organizations filled the exhibit hall's 280,000+ square feet to display their products/services. 02 – Over 7,200 participants took the opportunity to renew old acquaintances and make new ones during the two days of professional sessions and social events. 03 – FORSCOM Deputy Commanding General and Chief of Staff, LTG Laura Richardson (center), officially opens the Exhibit Hall with the assistance of (l to r) MG (Ret.) Tim Crosby, AAAA Secretary; MG (Ret.) Jeffrey Schloesser, AAAA Senior Vice President; Mr. Bill Harris, AAAA Executive Director; BG(P) Dave Francis, HQDA Director of Aviation and incoming Aviation Branch Chief; AAAA President, BG (Ret.) Steve Mundt; Richardson; MG William Gayler, Aviation Branch Chief and U.S. Army Aviation Center of Excellence

commanding general; CSM Brian Hauke, USAACE command sergeant major; CW5 Joseph Roland, Chief Warrant Officer of the Aviation Branch; LTC (Ret.) Jan Drabczuk, AAAA VP Chapters; and MG (Ret.) Walter Davis, AAAA Treasurer 04 – AAAA National President and Senior VP, BG (Ret.) Mundt & MG (Ret.) Schloesser, address members of the NATO Helicopter Inter-Service Working Group (HISWG) which annually conducts one of their sessions in conjunction with the Summit. 05 – Outgoing Scholarship Foundation President, BG (Ret.) Tom Konitzer (left), receives a memento from newly elected SFI President, COL (Ret.) Lou Bonham. 06 – Members of one of the newest chapters, the Johnny O Cluster Chapter, Nashville, TN, pose for photo during the Summit.

07 – COL (Ret.) Sid Achee, one of 9 remaining members of the "Originals", a.k.a. "The Cub Club," continues their tradition of collecting donations in their hats at the Scholarship Luncheon door. 08 – LTC (Ret.) Jan Drabczuk (standing), AAAA VP Chapters, guides discussions on chapter operations with attendees at the chapter workshops. 09 – Donors to the U.S. Army Museum Foundation pose with Foundation Vice President, and Ozark Mayor, Bob Bunting (third from right), at the Scholarship and Museum Foundations donor luncheon at the Summit. 10 – AAAA Scholarship Foundation President, COL (Ret.) Lou Bonam (left, kneeling) poses with Foundation donors following the luncheon at the Summit.





11 – It was standing room only for the opening of the 2019 AAAA Army Aviation Mission Solutions Summit at the Opryland Hotel, Nashville, TN, April 15.

12 – AAAA President, BG (Ret.) Steve Mundt talks with LTG Neil Thurgood (right), Director for Hypersonics, Directed Energy, Space and Rapid Acquisition, Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology); and MG Troy Kok, commanding general of the U.S. Army Reserve Accessions Task Force.

13 – The 101st Combat Aviation Brigade honor guard presents the colors at the Summit opening ceremony.

14 – AAAA National President, BG (Ret.) Steve Mundt, opens the 2019 Summit.

15 – AAAA Executive Director, Bill Harris, introduces the AAAA National President.

16 – MG Brian Winski, commanding general of the 101st Airborne Division (Air Assault) welcomes Summit attendees to Nashville, TN.

17 – LTG Laura Richardson delivers the Summit keynote address.

18 – Jeff White, the Principal Deputy Assistant Secretary of the Army for Acquisition, Logistics and Technology, and retired Army Aviator, provided an acquisition update at the opening session.

19 – MG William K. Gayler, Aviation Branch Chief and Commanding General, U.S. Army Aviation Center of Excellence and Ft. Rucker, gave his final branch update before changing command. At the conclusion, he was inducted into the Gold Honorable Order of St. Michael by BG (Ret.) Steve Mundt with wife, Michelle, by his side.

20 – LTG Ted Martin, Training and Doctrine Command Deputy Commanding General, speaks to opening session attendees.

21 – The AAAA Outstanding Army Aviation Unit of the Year is 449th Theater Aviation Brigade; pictured (l to r) LTC Mark Pickett; CSM Matthew Shorter, senior NCO; commander, COL Joseph W. Bishop; command chief warrant officer, CW5 Carnadose Bauknight; and LTC Charles Lampe.

22 – John F. “Rick” Lunnemann celebrates the Joseph P. Cribbins Department of the Army Civilian of the Year award for CY 2018 with wife, Becky.

23 – CW3 Nickolas F. Sciacca, is congratulated on receiving the AAAA James H. McClellan Aviation Safety Award by (l to r) BG Timothy Daugherty, LTG Richardson, and BG (Ret.) Mundt.

24 – The AAAA Henry Q. Dunn Crew Chief of the Year, SGT Jack A. Brook, shows off his award with (l to r) wife, Jennifer; brother, Roy; mother and father, Wanda and Robert.



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25 – SFC Jesse R. Jernigan celebrates his AAAA Rodney J.T. Yano Noncommissioned Officer of the Year award with some of the members of his unit, A/1-101st Avn., Task Force Shadow.

26 – The AAAA Army Aviation Soldier of the Year, SGT Bradley C. Galloway, displays his award together with his wife, Kathleen, and 5-week old daughter, Isabella.

27 – The AAAA Active Army Aviation Unit of the Year is 2nd Battalion, 160th Special Operations Aviation Regiment (Airborne) – commander, LTC Michael Athanasakis (left); Senior Warrant Officer, CW5 Benjamin Arps (center); and senior NCO, CSM Paul Hutchings.

28 – The AAAA John J. Stanko Army National Guard Aviation Unit of the Year 1st Battalion, 151st Aviation Regiment commander, LTC Brian Pipkin (right holding trophy), and senior NCO, CSM Charles Hancock Jr. (left of trophy) accept the award on behalf of unit Soldiers and are congratulated by (l to r) CSM Hauke, CW5 Roland, MG Gayler, BG J. Ray Davis, LTG Laura Richardson and BG (Ret.) Mundt.

29 – The AAAA Michael J. Novosel Aviator of the Year Award winner, CW3 Patrick W. Fleming, celebrates his award by taking a selfie with the trophy and his wife, Isabella.

30 – The UH-60V Product Office is the winner of the AAAA Robert M. Leich Award; Product Manager, LTC Andrew Duus, accepts the trophy on behalf of the office with the congratulations of (l to r) CSM Hauke, CW5 Roland, MG Gayler, LTG Laura Richardson, and BG (Ret.) Mundt.

31– The AAAA U.S. Army Reserve Aviation Unit of the Year 5th Battalion, 159th Aviation Regiment commander, LTC Matthew Hill (right), and senior NCO, CSM Charles A. Booth, receive their award for the second consecutive year on behalf of the unit and were



congratulated by BG Jamie Shawley (left of Booth), commanding general of the U.S. Army Reserve Aviation Command and USARC CSM Judd Mooso.

32 – Mr. John Shipley was presented the AAAA President's Award for a lifetime of dedicated service to Army Aviation before the Summit because he was unable to travel to Nashville. A short video of the presentation was shown following the National Award presentations.

33 – The Army Vice Chief of Staff, GEN James C. McConville, a Master Army Aviator, awarded the Silver Star to two Soldiers from the 6th Battalion, 101st Combat Aviation Brigade; SGT Armando Yanez and SGT Emmanuel Bynum.



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34 – Working groups such as the Aviation Warrant Officer Readiness Review provided diversified information from across the Aviation Enterprise.

35 – Soldiers were able to view the future development in Army Aviation at the various exhibitor displays.

36 – The International Aviation Leaders panel – (l to r) MG (Ret.) Jeff Schloesser, moderator; BG Mac McCurry, 2ID (ROK); BG John Novalis, DCS-Ops, Multinational Corps NE, NATO; AirCdre. Alastair Smith, British Army; BG Jean-Yves Bouillaud, French Army; and Brig. John Fenwick, Australian Army.

37 – MG (Ret.) Tim Crosby, AAAAA National Secretary, moderates an industry leaders forum in the Aviation Warfighter Theater.

38 – The Veterans' History Project of the Library of Congress conducted interviews each day.

39 – The Soldier Café provided a venue for Active, ARNG, and USAR Soldiers and family members to relax and obtain refreshments and affordable meals.

40 – MG (Ret.) Walt Davis, left, AAAAA Treasurer, moderates leadership discussions such as the Requirements Development and Determination with Army Futures Command and TRADOC key leaders.

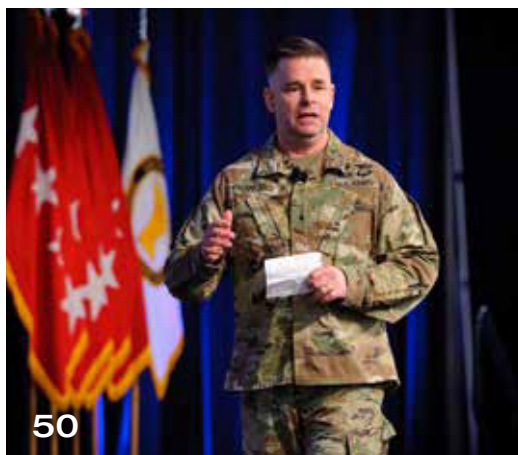
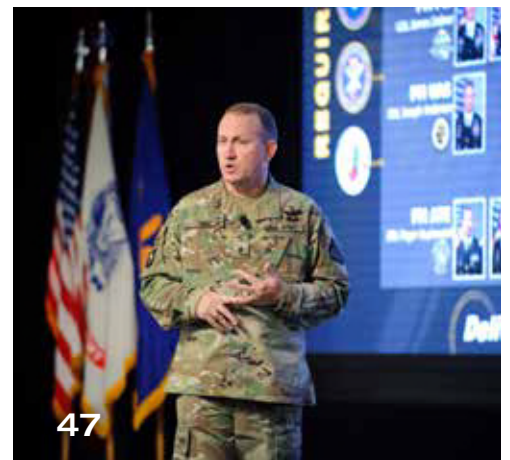
41 – MG (Ret.) Lester D. Eisner, left, AAAAA VP Guard/Reserve Rel., moderates the Aviation Accessions Panel; with MG Frank Muth, CG USAREC; MG Troy Kok, CG

USAR Accessions Task Force; and MG John Evans, CG, Cadet Cmd. 42 – COL (Ret.) Jeffrey N. Williams stands next to his portrait with his wife, Anne-Marie, and grandson, Braeden Williams following his induction into the Army Aviation Hall of Fame.

43 – CW4 (Ret.) Robert J. Monette is congratulated by MG William Gayler, Aviation Branch Chief, upon his induction into the Army Aviation Hall of Fame.

44 – The Army Aviation Hall of Fame Induction Banquet was held April 16th, during the Summit.

45 – LTG (Ret.) Kevin Mangum stands next to his portrait with his escort, CSM (Ret.) Buford Thomas following his induction into the Army Aviation Hall of Fame.





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46 – Attendees entering the Exhibit Hall.

47 – BG(P) Thomas H. Todd III, the Army Program Executive Officer, Aviation, updates attendees on the Aviation portfolio during the Friday morning professional session.

48 – Army Vice Chief of Staff, GEN James C. McConville, in the new Army Green uniform, delivers the second day's keynote address in the Aviation Warfighter Theater.

49 – Director of Army Safety and commanding general of the U.S. Army Combat Readiness Center, BG Timothy Daugherty, discusses trends and programs in the world of Aviation safety.

50 – BG(P) Dave Francis, HQDA director of Army Aviation and incoming Aviation Branch Chief gives an update on Tuesday afternoon.

51 – MG William Gayler, Army Aviation Branch Chief, seated next to former Army Vice Chief of Staff GEN Dick Cody, asks a question during a leadership briefing.

52 – MG Erik Peterson (center), CG, First Army Div. West, moderates a Total

Team Army Aviation discussion with (l to r) COL Joe Bishop, ARNG Avn. & Safety; BG J.Ray Davis, Asst. Dir. ARNG; Peterson; BG Jami Shawley, CG, USAR Avn. Cmd.; and COL Ron Ellis, Cdr. 166th Avn. Bde.

53 – Professional sessions on Tuesday were conducted in the new, 800-seat Aviation Warfighter Theater located in the Exhibit Hall.

54 – Attendees in the exhibit hall on Tuesday.

55 – LTG James Richardson, deputy commanding general of the new Army Futures Command headquartered in Austin, TX, provides an update on AFC's mission and organization.

56 – BG Jami Shawley (2nd from left) reacts to a comment by MG Frank Muth during a question and answer session in the Aviation Warfighter Theater.

57 – Gaylord Executive Chef Matt Foreman and staff provided a tour for spouses of how the facility prepares various cuisine for events.

58 – CW5 Doug Englen with the Chief of Staff Army Talent Management Team fields questions.



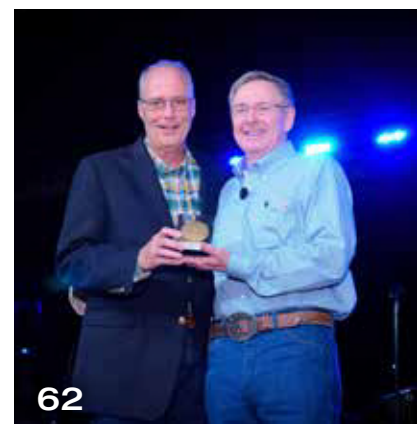
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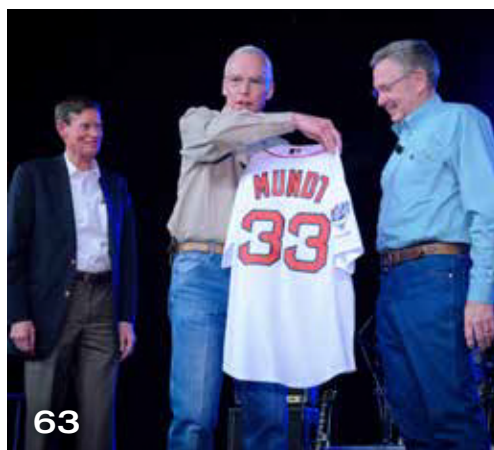
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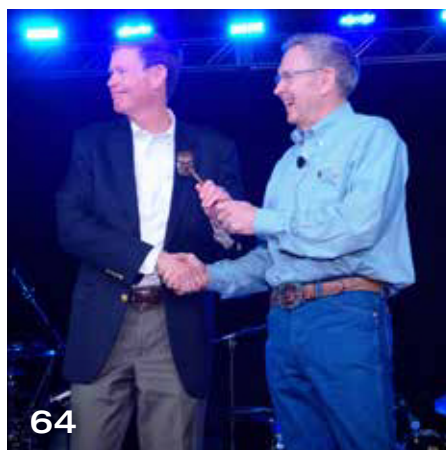
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59 – Country music's Lee Brice headlined the entertainment at the Soldier Appreciation Concert on Tuesday night.
 60 – Janis Arena with the National AAAA Office received the AAAA Founders Award from AAAA President BG (Ret.) Steve Mundt and Executive Director Bill Harris, for her longstanding support of AAAA, and especially her personal efforts toward awardees and their families.
 61 – Top chapters for 2018 were recognized at the annual meeting portion of the dinner/concert. Pictured from left with AAAA President, BG (Ret.) Steve Mundt (3rd from right) are: (l to r) CW5 (Ret.) Bob Huffman (Air Assault Chapter/Super/3rd consecutive win); COL (Ret.) Kevin Vizzarri (Central Florida Chapter/Master); COL David Hall (Grizzly Chapter/AAAA); and COL (Ret.) Dave Brostrom (Aloha Chapter/Senior).

62 – Phil Harpel receives the Outstanding Soldier & Family Support Award on behalf of himself and his twin brother, Bill, from AAAA National President BG (Ret.) Steve Mundt for their long-standing support of Army Aviation Soldiers and Families at Fort Campbell, KY.
 63 – AAAA Executive Director Bill Harris, presents outgoing president, BG (Ret.) Steve Mundt, with his own personalized Boston Red Sox shirt.
 64 – MG (Ret.) Jeff Schloesser accepts the gavel from outgoing AAAA President, BG (Ret.) Steve Mundt during the Annual Meeting on April 16, 2019, at the Opryland Hotel, Nashville, TN.
 65 – Former Black Hawk pilot and country music entertainer, Ryan Weaver, performs as the opening act for the Soldier Appreciation Concert.

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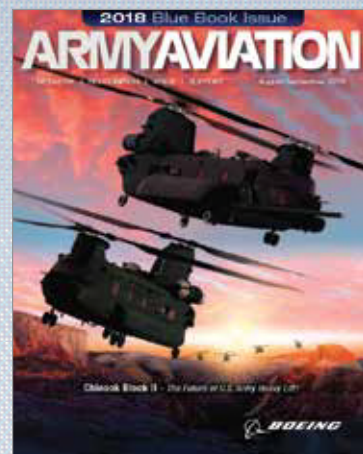
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FORSCOM Aviation: Supporting the Aviation Warfighter

By LTC Michael Charnley



U.S. Army Forces Command Headquarters, Fort Bragg, NC.

Undoubtedly, a majority of you who read *Army Aviation* are familiar with Forces Command (FORSCOM), most likely through the recurring visits of FORSCOM's Aviation Resource Management Team (ARMS) to your units over the years. However, most of you may not realize the extent to which FORSCOM represents our Aviation branch at the Joint Staff, Department of the Army, major army command, and echelons throughout the Army and Aviation Enterprise.

Due to its unique characteristics, both complex and expensive, all Aviation equities in the headquarters are addressed by a former combat aviation brigade commander (CAB) within the FORSCOM headquarters. The G37 Aviation Directorate represents the interests of the operational Aviation force to the Department of the Army Staff (DAMO-AV), the National Guard Bureau (NGB), the United States Army Reserve Command (USARC), and the United States Army Aviation Center of Excellence (USAACE). The Aviation Director oversees the ARMS Branch, a Programs Branch, and an Operations Branch. These branches work in unison to effectively manage the operational demands combatant commanders have for conventional Aviation capabilities.

As the Army's conventional Force Provider, FORSCOM synchronizes high Aviation unit demands, having supported prolonged combat operations in multiple theaters, for almost two decades. We also provide Aviation support for Defense Support to Civilian Agencies (DCSA) in CONUS. The current operational tempo for our rotary wing units and unmanned aircraft systems, particularly in CH-47, AH-64, MEDEVAC, and MQ-1C Gray Eagle units, cannot adequately meet combatant command (CCMD) demands. To mitigate the potential impacts of these shortfalls, the production of sound staff work and expert advice on the employment of our formations remains critical.

The Mission

Our primary mission in FORSCOM Aviation is to provide the commanding general with sound expertise and staff work on all aspects of Army Aviation, as it pertains to wartime readiness. Most noticeably we do this through our ARMS visits; however, the bulk of our work lies in staff officer analysis in the G3 and G4, as well as in program management. Our staff work typically consists of research, analysis and foundational work providing recommendations for our Army's senior leaders. This enables them to make doctrinally sound, informed decisions with operational and strategic-level impacts. These decisions often guide, shape, and posture our Aviation force for the current generation and beyond. Due to the high-level decisions on subjects we have equities in, we always look for sound, critical thinkers to serve on the staff. Individuals with the ability and the fortitude to work above the tactical level, who possess the desire to have a voice in the employment and shaping of the Aviation enterprise, are always welcome.

The composition of the staff highlights one unique aspect of FORSCOM Aviation. Naturally, at a higher-level headquarters you will tend to find more senior individuals (officer, warrant officer and enlisted), along with civilians and contractors critical to our operations. The significant number of COMPO 2/3 Soldiers on staff here is also unique to FORSCOM. They are crucial to providing the command with the holistic staff work required above the tactical level. They are also vital to effectively resolving any issues or questions that arise when attending the numerous and almost-daily working groups and operational planning teams (OPT). We do not directly resolve problems, but rather provide the expertise to bring together the various staffs, both internal and external, to address any issues that arise. During a typical week, our staff engages in force structure planning, decisions concerning operational deployment of the force, combat training center (CTC) rotational

News Spotlight ►

Despite Age and Rank, Three 166th Aviation Brigade Warrant Officers Graduate Air Assault School

By SSG(P) Monica F. Mims

Age is just a number! That's the indirect message CW4 Jerry Spears (38), CW4 Ryan Mahany (39) and CW4 Steve Frazee (36), gave by completing three weeks of rigorous air assault training.

The course consists of three phases -- air assault, slingload and rappel. In the first phase, students learn air assault and pathfinder operations as well as aircraft familiarization and safety considerations. The second phase, slingload phase, requires students to prepare loads for aerial delivery using slings and cargo bags. This phase is considered mentally demanding, as everything must be committed to memory, such as the tensile strength of equipment used in slingload operations, lift capabilities of supporting aircraft, and rigging and inspecting prepared loads. The third phase includes applying basic rappelling knowledge to drop from a 50-foot rappel tower and later an Army helicopter hovering 80 feet above ground. "I definitely recommend training hard beforehand," Spears said.

Although not considered a phase, graduation day provides perhaps the most intimidating challenge to the prospective Air Assault Soldiers, the silent beast, the 12-mile road march.

Training hard for several months before the course, these three CW4s set the standard for all members of the brigade. It was a major accomplishment for not only the Soldiers and their families, but for 166th Aviation Brigade as well.

"Show me another Aviation brigade whose Master Gunner, SIP, and Safety Officer all successfully completed Air Assault School as CW4s, and I will show you a commander as proud as I am," said COL Ron Ells, 166th Aviation Brigade Commander. "I'm proud of all three of you for tackling this grueling course and am honored to be able to call myself your commander. Air Assault! Archangels! Army Strong!"

SSG(P) Monica F. Mims is the public affairs NCOIC for the 166th Aviation Brigade at Fort Hood, TX.



Left to right: CW4 Frazee, CW4 Spears and CW4 Mahany

planning, personnel recovery (PR) issues, Reserve Component mobilizations, and modernization initiatives. Our directorate provides the subject matter expertise that allows our leadership to effectively engage senior leaders on decisions important to the Aviation operational force.

MAAR

With the significant majority of our Aviation force committed to the ongoing theater requirements mentioned earlier, restrictions on dwell-time and ever-increasing home station tasks, we must remain efficient and engage non-Aviation leadership to meet our readiness objectives. One method of engagement to achieve this is the Monthly Aviation Readiness Review (MAAR), chaired by the FORSCOM Deputy Commanding General. This was instituted to effectively involve senior leadership at the Corps and Division levels. Each month, senior leadership of corps, divisions, DRUs, and CTCs participate in the MAAR in order to update FORSCOM senior leadership on Aviation readiness. This enables focused discussion among non-Aviation commanders and staffs concerning issues and

challenges facing CABs, CTC Aviation elements, and brigade combat teams' (BCT) Unmanned Aircraft Systems (UAS) platoons. The goal: continually identify where FORSCOM and members of the Aviation Enterprise can assist in helping subordinate commands build and maintain Aviation readiness.

With generating ready forces at the forefront of all we do, FORSCOM Aviation applies the harsh wire-brush of reality to the emerging "good" ideas coming from in and around the Aviation Enterprise. We maintain the obligation of providing the Combatant Commanders with a trained, relevant, and ready force. For this reason, FORSCOM Aviation always fights to preserve the readiness of our Aviation brigades, so that when our units are allocated to an operation, the combatant commander has confidence in our Aviation formations to fight, and win, on the battlefield.

LTC Michael Charnley recently served as the Operations Branch Deputy in the G37 Aviation Directorate in FORSCOM at Fort Bragg, North Carolina.

Call for Assistance

By Mark Albertson

We need the assistance of those in the Army Aviation family ... the stories and experiences of those who have served and those who still do ... from the end of the Korean War to the present.



WIKIPEDIA: COMMONS PHOTO

Jean Marie Coutelle, led the French Company of Aeronauts during the French Revolutionary Wars.



ARMY AVIATION HALL OF FAME PHOTO

William Wallace Ford, first Director of Air Training for the Army Ground Forces' Air Observation Post.

Whether a pilot, mechanic or infantryman, officer or enlisted, man or woman is irrelevant; we want whatever you are willing to share and provide.

I am creating Volume 2, *Sky Soldiers: The Saga of Army Aviation, 1954 to the Present*. Volume 1 is written and covers the timeframe 1794-1953, including the advent of aerial observation, beginning with the *Compagnie d'Aerostiers* or Company of Aeronauts¹ during the French Revolutionary Wars to Army Aviation during the Korean conflict. Of course, the availability of participants here to interview was limited; not so from 1953 till now.

What I require for Volume 2 are stories from the immediate post-Korean War period, Vietnam conflict, post-Vietnam era, branch-hood, Grenada, Desert Shield/Storm, the Balkans, Afghanistan, Iraq, and beyond.

Such stories and information those participants are willing to share will help to chart the maturation of Army Aviation for the time frame in question; which spans the end of the Industrial Revolution, from which the Air Observation Post concept led by William Wallace Ford actually emerged, to the Technology Revolution which Army Aviation is in.

Obviously, I will not be able to use all that is provided. But that does not mean that such data cannot be used in other stories in the magazine or in future projects. For in the end, whether you flew in combat, turned wrenches or peeled potatoes, you served ... and that is what matters.

Please feel free to contact me at:

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Endnote: 1 – The Compagnie d'Aerostiers was a forerunner of the Union Army Balloon Corps; and, is considered the world's first air force. It had the world's first academy for aviation, at Chalais-Meudon, in 1794.

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AAAA Chapter Affairs By LTC (Ret.) Jan Drabczuk

Over the Top

AAAA broke its record again this year with the largest ever AAAA Summit. Over 8,000 people and more than 330 industry exhibitor firms attend this great networking event!

At the summit, the association rose over \$70K for scholarships, recognized 11 outstanding individuals and units through the National Awards Program and inducted three people into the AAAA Hall of Fame at the AAAA Hall of Fame Induction Banquet. Seventy-five of our chapters had chapter members that attended the Summit, we also signed up 74 new members. One third of our chapters also sponsored a Soldier to attend the event at no cost! What a great success!



APR PHOTO BY REINE BRIZ

Incoming AAAA National President, MG (Ret.) Jeff Schloesser, answers questions at the Chapter Officers Workshop during the 2019 AAAA Army Aviation Mission Solution Summit.

Top Chapters Recognized

Four of our Chapters were recognized at the Soldier Appreciation Concert. Chapters achieving Top Chapter of the Year status for 2018 were the Air Assault chapter as the Top Super Chapter (over 500 members), the Central Florida Chapter as the Top Master Chapter (200-499 members), the Aloha Chapter as the Top Senior Chapter (75-199 members) and the Grizzly Chapter as the Top AAAA Chapter (75 members and below). Competition was even tighter this year with more Chapter metrics evaluated. Chapters are more alive now than ever. Glad to recognize our above the best Chapters. Get out there and make yours a 2019 Top Chapter Winner!

Attendance at Our Chapter Workshop

Our Chapter workshop continues to attract Chapter officers. All AAAA Chapters were invited to attend the Chapter workshop, with AAAA National providing financial assistance for Chapters to attend. We had 30 Chapters represented and 45 Chapter officers in attendance. Individual Chapter discussions were quite robust and informative. The half day workshop focused on how to improve the quality of programs and national support that our Chapters bring to our membership. The sessions included highlights on chapter metrics, national office support, Chapter fiscal operations, local and national award procedures, scholarship procedures and membership engagements. Workshop read ahead and briefing slides can be found under the Chapter Tab on the AAAA website. Reminder, AAAA funds travel and housing for one Chapter officer to attend. Start planning now, it would be great to see more Chapters attending in 2020!

Chapter Highlights

We presently have 79 Active Chapters in 4 categories. 325 Chapter events were submitted to AAAA National in 2018. On top of quarterly refunds, the NEG directly funded an additional \$154,000 to support 85 events for 43 Chapters. Events have been grouped into six categories: Quarterly, Sporting, So-

cial, Fundraising, Organization Days and Community Action. For this year through the end of April, the NEG has already funded \$53,475 to support 19 events for 18 Chapters. Events have been the driving force to grow Chapters with over 65 percent maintaining or growing membership. We continue to recognize our members. Last year 49 Chapters submitted 630 OSM/Knight/OLL awards. Scholarships still are a big push at the Chapter level, 39 Chapters helped keep our scholarship program alive and well. Their support helped AAAA achieve a record year awarding \$503,500 to a total of 310 scholarship participants.

Looking Forward to Next Year

The Nashville Gaylord Opryland seems like Fort AAAA. There was a great professional agenda coupled with fun events on the social agenda. Next year we are back in Nashville, 22-24 April, starting on a Wednesday. Check out the AAAA website to see new benefits available to our membership. Our Chapters are growing in numbers, improving in quality and member programs continue to improve. Our Association is strong, none of this happens without great National and Local Chapter leadership. We should all be proud that we all support Army Aviation, the Soldier, military families and the local community.

Chapter Support

Feel free to contact me if you need help for your chapter, Executive Board support, would like your Chapter featured in the AAAA magazine, or to obtain clarification of National procedures. Also, I would like to hear from any members that feel they need their Chapter revitalized or who would like to start a new Chapter. I can be reached at jan.drabczuk@quad-a.org. I am looking forward to working with you and supporting our great association.

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

AAAA Chapter News

Air Assault Chapter Golf Tourney

Air Assault Chapter hosted a chapter social and membership meeting on Friday evening, April 12th at the Gaylord Springs Golf Links Club House in Nashville, TN. Three individuals were inducted into the Silver Honorable Order of St. Michael: **LTC Michael J. Mannion, CW5 Douglas A. DeBoer and CSM James D. Wilson.**



CHAPTER COURTESY PHOTOS



At the same event, Chapter President, COL (Ret.) Hawk Ruth (center) also recognized the chapter team for orchestrating the meeting and the tournament: (l to r) CW5 (Ret.) Robert L. Huffman, Treasurer; CW5 (Ret.) George C. Arzente, Treasurer; COL (Ret.) Stephen C. Smith, Sr. VP; and SFC (Ret.) Andrew J. McClure, VP Enlisted Affairs.



The following morning, the chapter launched a full flight of 144 golfers to support the chapter Scholarship Fund and AAAA Scholarship Foundation.

Aloha Chapter



CHAPTER COURTESY PHOTO

Members and guests of the Aloha Chapter gather for a group photo during the Thirsty Third Thursday general membership meeting at Wheeler Army Airfield, HI on April 18, 2019. Approximately 40 individuals participated in the event during which 5 new members were recruited. This was the fifth event of its kind with many more to come!

Order of St. Michael and Our Lady of Loreto Inductees

PEO IEW&S Inducted



U.S. ARMY PEO IEW&S PHOTO

AAAA President, MG (Ret.) Jeff Schloesser (left) and AAAA immediate past president, BG (Ret.) Steve Mundt induct **MG Kirk F. Vollmecke** as a Knight of the Honorable Order of St. Michael on May 2, 2019 at Aberdeen Proving Ground, MD. Vollmecke was recognized in conjunction with his change of charter for his continuous and

UPCOMING EVENTS

JULY 2019

1 Submission Deadline – ASE, AMSO, Avionics, and Donald F. Luce Depot Maintenance Artisan Awards

19 Blue Book Updates Submission Deadline

22-28 EAA AirVenture, Oshkosh, WI

AUGUST 2019

1 Award Submission Deadline – Logistics Support Unit of the Year; Materiel Readiness Awards; Fixed Wing Unit of the Year; UAS Soldier and Unit of the Year

20-21 AAAA Luther G. Jones Army Aviation Depot Forum, Corpus Christi, TX

24-27 NGAUS 140th General Conference & Exhibition, New Orleans, LA

significant contributions to Army Aviation throughout his acquisition career, and most notably during his tenure as Program Executive Officer, Intelligence, Electronic Warfare and Sensors (PEO IEW&S). He has retired and remains in the local area.

CWOB Inducted Into GOSM



U.S. ARMY AVIATION CENTER OF EXCELLENCE COURTESY PHOTO

CW5 Joseph Roland, outgoing chief warrant officer of the Aviation Branch, is inducted into the Gold Honorable Order of St. Michael by AAAA National Vice President for Membership, CW4 Becki Chambers, during an awards ceremony on May 3, 2019 at the

Continued on page 67



AAAA Membership Update By CW4 Becki Chambers

The Membership Corner

Summertime is upon us, which also means that PCS season is ramping up. PLEASE – do not forget to update AAAA with your new contact information, both mail and email. We want to make sure your ARMY AVIATION magazine moves with you, and that your new local Chapter can contact you.

Great news from the Summit! With the help of some amazing volunteers, we were able to process 74 new members, setting an all-time record for new memberships during Summit! So many people helped to make this happen. Students from The McGavock Raiders Chapter headed by Derek Rowe worked all three days at both the exhibit hall booth and in the Soldier Café. Brian Fields, Lisa Wilson, TJ Webb, Dylan Chambers, Shannon Kirkpatrick, Brian Sabourin, and Dave Cooper helped out at the exhibit hall booth, together with Latny & Jon Salt, Jackie Gordon, and John Maez from the Old Tucson Chapter. Lisa Rotte spent several hours each morning at the booth in the Soldier Café, signing up several new members.

Last, but certainly not least, I need to give a special shout-out to CSM (Ret.) Leon Hite. Leon has volunteered at Summit year after year, with both Membership and as the point-of-contact for the Sponsored Soldiers. Leon's assistance was invaluable, and I cannot thank him enough. Thank you, Leon, for all your help at Summit, and for everything you have done and continue to do for this organization.

Summit also gave us the chance to recognize our top recruiters for the year. In 5th place, with 31 new members, is CW2 Brian Gage of the Thunderbird Chapter. Our 4th place winner who enrolled 79 new members is SSG Stephen Gifford, Jr. from the Voodoo Chapter. In 3rd place with 89 new members enrolled is CSM Mark Baker from the Washington-Potomac Chapter. In 2nd place, with 98 new members, is Ingrid Strange from the Aviation Center Chapter. And in 1st place, with 107 new members, the winner of the MSG John Bae Top Gun award, is CW5 John McConnell with the Volunteer Chapter. Congratulations to all of you and thank you for your hard work.

A new face this year with AAAA is Laura Arena. Her official title is Director of Member Engagement, which has her working on both chapter and membership issues. Laura



AAAA VP Membership, CW4 Becki Chambers (2nd from right) with some of the many volunteers who assisted at the 2019 Summit. Pictured are (left to right): from the McGavock Raiders Chapter, Derek Rowe, R.J. Hill, and Brianna Mason; Becki; and CSM (Ret.) Leon Hite.

brings a wealth of knowledge from her previous job and she has quickly become indispensable to both Jan Drabczuk and myself. This year was Laura's first Summit and I'm not sure if she was aware of what she had gotten herself into! Laura was instrumental in the implementation of our new member benefits package, is working to expand our member engagement, and is actively helping Jan establish new chapters. Thank you, Laura, for all your hard work!

Sarah Beyer is another new person up at AAAA headquarters. Sarah is tasked with working on awards and can help you find out if a member has ever received an Order of St. Michael or Our Lady of Loreto. Sarah was another first time Summit attendee this year and worked very hard helping Jenn Chittem, our Marking Communications and Sponsorships director. Both Jenn and Sarah did a fabulous job with logos, banners, branding, and articles.

Laura and Sarah were both so impressed with Summit, thoroughly enjoyed themselves, and are looking forward to next year!

By the time you read this, we will be at the end of our Spring Fever campaign. I look forward to seeing which chapters end up being the winners. All your efforts will be helping us reach our goal of 20K by 20 Summit. We are so close! We have been over 20,000 before and I know we can do it again. Remember, we just need each member to bring in one new member and we can well exceed our goal.

CW4 Becki Chambers
AAAA Vice President for Membership



New AAAA Life Members

CW3 Michael S. Harris
LTC Clinton Underwood
CW5 Jimmie D. Brooks
Gary Spooner
John Esposito
MG Troy D. Kok
MAJ Brian Haas
CW4 Jonathan Hulse
CW3 Robert Smith
CSM Bradford Lee Smith
LTC Michael T. Girvin
LtCol William Krouse, Ret.
CW2 Zachary Koehn
SFC Brandon Casey
David Park
CPT Michael D. Kromenacker
John B. Bequette
Douglas Thrush
Richard Wright

New AAAA Members

Air Assault Chapter
SGT Bradley C. Galloway
1LT Lila Garner
John R. Lunnemann
CPT Kyle Millard
Jack B. Roberts
SFC Brandon B. Vilt
Aloha Chapter
SGT Donald Grey
Arizona Chapter
MAJ Michael A. Mignano
Aviation Center Chapter
Thomas L. Carr III
Badger Chapter
PV2 Kalem G. Stapelmann
Bluegrass Chapter
PFC Andrew W. Poole
Central Florida Chapter
PV2 Thomas B. Childress
Colonial Virginia Chapter
CW3 Charles Barrier Sr.
PFC Antonio L. Pina
Connecticut Chapter
PV2 Jonathan Alvarez-Rivera
PFC Joshua T. Cardinal
PV2 Brandon T. Pulford
PV2 Ian L. Tourtelotte
Corpus Christi Chapter
PV2 Noe I. Deleon
PV2 Joseph A. Muzquiz
Delaware Valley Chapter
PV2 Nicholas C. Sammartino
Follow Me Chapter
SPC Marvin C. Coleman
CW3 Leslie E. Digman, Ret.
PV2 Ryan Entreklin
Great Lakes Chapter
PV2 Wyatt T. Alleshouse
PFC Steely S. Carter
PFC Kameron J. Peterson
PFC Maximillian Richardson
Griffin Chapter
MSG Daniel m. Evans
CW3 Shane M. Palmer
1LT Emily C. Renzi
CPT Nicholas J. Schaefer
CW3 Chris Thorn

Grizzly Chapter

PFC Bryonn N. Anderson
SGT Michael M. Bobbitt
PV2 Zachary T. Brishaber
SPC Brandon J. Johnson
SPC Manuel H. Romero
SGT Lena I. Zagaris
Idaho Snake River Chapter
PV2 Matthew T. Arndt
PV2 Gayle A. Philip
Keystone Chapter
PV2 Wendell J. Woods
Lonestar Chapter
PV2 Natalie Jasso
PV2 Noah A. Young
MacArthur Chapter
SPC Oludotun O. Odunmbaku
PV2 Josue N. Remy
Magnolia Chapter
PFC Justin T. Gates
Mid-Atlantic Chapter
SGT Kevin A. Fields
SGT Gordon D. George
SGT Melissa L. Green
SPC Shaun E. Haines
PV2 Harrison M. Kluge
Minuteman Chapter
PFC Ryan J. Fitzpatrick
PV2 Jonathan T. Murray
Mohawk Chapter
PFC Mattea L. Taylor
Morning Calm Chapter
CPT Edmund Lee
1LT Ronald Palma
Mount Rainier Chapter
PV2 Matthew E. Kline
PV2 Sloan T. Kraus
CW4 Curtis Manning Long
SFC William D. McCumbers
SSG Ryan Kris McLellan
North Star Chapter
SFC Joseph Conlin
PFC Eric Hatfull
North Texas Chapter
SPC Damian A. Alvarez
PFC Jeremy W. Lance
Northern Lights Chapter
PV2 John Woyak
Old Tuscan Chapter
PV2 Amado Alvarez-Carrillo
Oregon Trail Chapter
Don Anderson
SPC Justin C. Lambert
PVT Walker J. Paullus
CPT David Sous
Pikes Peak Chapter
PFC Levi C. Mair
CPT Ethan Muhs
PV2 Sean N. Tam
CPT Justin Volk
Ragin' Cajun Chapter
SPC Ronald A. Duran
Rio Grande Chapter
SPC Ricardo R. Aguirre
CW2 Eric D. Allen
CW2 Lauren Anderson
CW2 James L. Andreasen
1LT Guillermo Balderaz
SFC Jared E. Barnard
SPC Bradley C. Barr
2LT Jennifer T. Barrantes
CPT Thomas Barth
1LT Patrick M. Brito

CPT Chris M. Broderick
PFC Tobias A. Calerna
SPC Nicholas A. Carriere
SPC Giovany Ceballos
SPC Adam S. Channels
CW2 Ralph E. Collins
PFC Alton K. Conery
SPC Mitchell H. Coulter
1LT Guillermo J. Diaz-Carrion
SPC Marcel C. Dixon
SSG Salvador A. Esposito
SPC Eli T. Farmer
MAJ Robbie L. Flouess
SPC Alexis N. Foster
SPC Patrick J. Franklin
SSG Christopher E. Frost
SPC JasenAdrian R. Garcia
CW2 Michael Gelsamino
SGT Dave A. Glover
SPC Roberto Gomez
1SG James B. Graves
CPL Traci J. Guinyard
SSG Aledander Guterrez
MAJ Dave W. Hanson
SPC Sammy C. Hayek
SGT Vincent T. Henchcliffe
SGT Adam S. Hill
SGT Aaron N. Hutchins
SGT Oluwatsin O. Jamiu
PFC Travis J. Kerr
SPC KC R. King
PV2 Brandon M. Kleinfelder
CW4 Davis J. Kushel
LTC Michael Lanzafama
CSM David E. Lee
SSG Kayla L. Lee
SGT Gustavo A. Lopez
SFC Teddy J. Lopez
SGT Aramis E. Lugo
SPC Drew M. Magill
CPT Ryan C. Martin
1LT Daniel L. McNeese
SPC Krista S. Mendez
PFC Nicholas J. Mendez
SPC Luis J. Miranda
SSG Johnny L. Mooror
PFC Roberto Morfin
CPT Andrew C. Muilenburg
SSG Henry C. Nanez
SGT Steven Nelson
SGT Job O. Ojo
SPC Mcraylee N. Omelau
SPC Jeremiah N. Osborn
SPC John A. Otero
1LT Ralph R. Padilla
SGT Jerylee J. Papatsoris
PFC Dina M. Poole
SSG Samantha M. Recker
CSM Michael J. Resmondo
1LT Jonathan Rivera-Mann
1LT Jonathan Rivera-Marin
PFC Michael D. Roberts
CPT Matthew P. Robertson
SGT Richard G. Robinson
SPC Abel I. Rodriguez
SSG Alexis Santos
CW2 Andrew J. Sines
SPC Joshua Smith
CPT Jacqueline R. Solis
SSG Allan L. Styers
CPT Dillon M. Svoboda
1SG Adam S. Trammell
SGT Ryan L. Travers
SGT Ryan A. Ulving

1LT Dylan B. Varrato
SGT Roberto L. Vazquez
CPL Samuel C. Walker
PFC Dennis A. Wilson
SGT Tyler F. Wilson
SPC Brevin J. Yellowhair
PFC Austin C. Zahara
1LT Christopher R. Zeigler
Rising Sun Chapter
SGM Kyle Patrick Clutter
MAJ Brian Smith
Savannah Chapter
PV2 Josiah Wagner
Sinai Chapter
SGT Ellen Hickman
SGT Raul Preciado
SSG JohnPaul P. Rodriguez
Southern California Chapter
PFC Steve G. Beniga
Tarheel Chapter
SFC Carlos A. Campos
Tennessee Valley Chapter
Anthony Dupree
Bonnie Octavia Flores
Thunderbird Chapter
Judy M. Rau
Utah Chapter
PFC Zachery T. Buck
PFC Benjamin C. Curtis
PFC Quentel M. Moore
PFC Jordan M. Powell
Voodoo Chapter
SPC Drew Romero
Washington-Potomac Chapter
Jacob G. Adams
SPC ZKyle E. Voeltz
Winged Warriors Chapter
SPC Aneesa Ali
SPC Christopher Carlos
SGT Cody Commons
SGT Asia Dickerson
SGT Stephanie Nakamoto
Wright Brothers Chapter
PV2 Owen C. Bame
PV2 Hunter J. Doss
PV2 Philippe M. Grand
PV2 Jaleel Q. Ranson
PV2 Jordon M. Smyers
Zia Chapter
PV2 Noah K. Lucero
No Chapter Affiliation
PFC Jeremy A. Arthur
PV2 William A. Bennnett
SPC Luis A. Cervantes
PV2 Nathan S. Chavez
PV2 David A. Cox
SPC Ge Dai
PFC Cory J. Dean
PV2 Ryan A. Donoghue
SPC Bradley J. Dougherty
PV2 Gaven M. Doyle
PV2 Richard L. Everett Jr.
PV2 Felix Flores
SSG Erich Fouke
PV2 Devon S. Frank
PV2 Jordan T. Franklin
PV2 Hakeem O. Harris
SPC Sung Chan Kang
Ms. Jan Knowles
PV2 Gabrielle A. Kornish
PV2 Noah G. Kruse
PV2 Dylan R. Manzanares

PV2 Austin C. Maroney
PV2 Asa G. Matthews
PV2 Angel G. Moreno
PV2 Felix J. Ortega
SPC Haley M. Porter
PV2 Christyan M. Prince
SPC Ricardo J. Rivera-Rios
PV2 Kingsley Rodriguez-Tuttle
PFC Alex Santaliz-Gonzalez
SPC Kyle R. Shoults
PV2 Chrystien J. Southwick
PFC Dylan S. St. John
PV2 Cody A. Stokes
PV2 Kavonn D. Thomas
PV2 Robert L. Trytten

Lost Members

Help AAAA locate a member on this list and receive a FREE one month extension to your membership!

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



AAAA

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AAAA Family Forum By Judy Konitzer



Celebrating the Month of the Military Child



The Department of Defense has designated April as the Month of The Military Child (MOMC) continuing the initiative established by Defense Secretary Casper Weinberger in 1986 to recognize and honor our military youth.

The entire family serves when a military member serves, but military youth make unique contributions and sacrifices on behalf of our country. They deal with separations, deployments, frequent moves, and even parent's injuries as part of a life they were born into or entered into with their families. During MOMC, units and installations around the globe honor them with a variety of events geared especially for them. I am pleased to share some photos of activities which took place before and during Month of the Military Child's 33rd Anniversary.

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

Top middle: Colonel Steven Pierce - USAG Ansbach Garrison Commander with his two daughters Mary Catherine and Elise. PHOTO: CHRISTIE DANIELS

Top Right: Everyone who has been to Fort Rucker, Alabama recognizes the infamous SGT. Ted E. Bear who received a new paint job on April 1, 2019

to initiate Month of the Military Child. Fort Rucker children added their handprints to also observe National Child Abuse Prevention Month with connected activities. PHOTO: JIM HUGHES

Middle Left: Children play with bubbles before a homecoming ceremony for the 4th Combat Aviation Brigade, 4th Infantry Division, at the William "Bill" Reed Special Event Center, Fort Carson, CO, Feb. 24, 2019. PHOTO: SGT. ELIZABETH HARRIS

Middle: Children enjoying the activities while Spouses from the 82nd Combat Aviation Brigade and 3rd Brigade Combat Team, 82nd Airborne Division earned their spurs during the Annual Spouse Spur Ride on April 18, 2019 at Fort Bragg, North Carolina. PHOTO: SGT. STEVEN GALIMORE

Lower Left: Raul Santiago holds up a sign greeting his father, Spc. Raul Santiago, during a homecoming ceremony at the William "Bill" Reed Special Event Center, Fort Carson, Colo., Feb. 24, 2019. PHOTO: SGT. ELIZABETH HARRIS

Lower Middle: Fort Campbell-MOMC Kids Fest-27Apr19. PHOTO: AIMEE CLACK

Lower Right: StoryBook Sprint held on April 6, 2019 at Fort Campbell, Kentucky was one of many events that took place during the Month of the Military Child. It was a free 5K (untimed) and 1 mile fun run in which families were encouraged to wear costumes and participate together. PHOTO: DONALD GROVES



Order of St. Michael and Our Lady of Loreto Inductees

continued from page 65

U.S. Army Aviation Museum, Ft. Rucker, AL. Roland was recognized on the occasion of his change of responsibility for his dedicated career-long support of Army Aviation. He will take command of the U.S. Military Academy flight detachment at West Point, NY.

Air Assault Chapter



CHAPTER COURTESY PHOTO

Former command sergeant major of the 101st Airborne Division (Air Assault), **CSM Todd Sims**, is inducted as a Knight of the Honorable Order of St. Michael by Air Assault Chapter president, COL (Ret.) Hawk Ruth during a ceremony on March 20, 2019 at the Division headquarters, Ft. Campbell, KY. Sims was recognized on the occasion of his change of responsibility for his dedicated support of Army Aviation Soldiers and Families throughout his career. He moved on to be the senior enlisted leader for First Army, at Rock Island Arsenal, Illinois.



*Want to change your
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Call 203-268-2450*

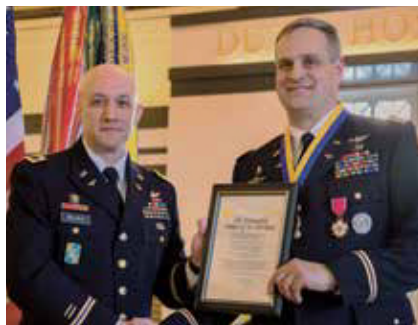
Aviation Center Chapter



CHAPTER PHOTO BY NIKKI MCCAY

SFC Christopher A. Grant, NCOIC Hanchey Army Heliport, Ft. Rucker, AL, is inducted into the Bronze Honorable Order of St. Michael, by Aviation Center Logistics Command commander, COL Richard A. Martin on April 9, 2019 at the Army Aviation Museum, Ft. Rucker. Grant was recognized on the occasion of his change of duty for his long-standing support of Army Aviation. He has been reassigned to Fort Wainwright, AK where he will be a platoon sergeant.

Black Knight Chapter



CHAPTER PHOTO BY MATTHEW WOLLER

LTC Erik Kober, chief of simulations, is inducted into the Bronze Honorable Order of Saint Michael by the Black Knights Chapter President COL Rich Melnyk on March 5th, 2019. He was recognized for a career dedicated to Army Aviation and the induction ceremony took place in the Memorial room of Cullum Hall at West Point, NY.

Tennessee Valley Chapter



CHAPTER PHOTO BY DANIEL CUNNINGHAM

Mr. Gary Nenninger, Tennessee Valley Chapter president, and BG Thomas Todd, Program Executive Officer Aviation, induct **COL Randy Murray**, military deputy/G-3 for the PEO Aviation, into the Silver Honorable Order of St. Michael on March 8, 2019 at the Bob Jones Auditorium, Redstone Arsenal, AL. Murray was recognized for ensuring the effective integration and coordination across PEO Aviation's primary staff and nine project management offices consisting of over 3,000 personnel.



CHAPTER COURTESY PHOTO

CW4 (Ret.) Ernest J. "Nick" Nickles, Black Hawk Crew Station Working Group Lead, CCDC Aviation and Missile Center, was inducted into the Silver Honorable Order of St. Michael by COL Billy Jackson, Project Manager Utility Helicopter on Feb. 28, 2019 in Huntsville, AL. He was recognized for leading the integration of many successful changes to the Black Hawk cockpit systems since the beginning of the development of the UH-60M.

AAAA Functional Awards - Open for Nominations!



Deadline: August 1

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

Deadline September 1

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

Please email all completed nomination packets to:
awards@quad-a.org



AAAA

NETWORK | RECOGNITION | VOICE | SUPPORT

In Memoriam



AAAA Bids Farewell to Joan

We at AAAA headquarters are saddened to announce the sudden passing of one of our team, Joan Zinsky, who was 80 years young. Many outside the headquarters only knew her by her voice when calling in; but, those of us who worked side by side with her over more than 30 years truly have lost a dear friend and co-worker. She was a wonderful lady who had an infectious laugh... she will be missed by all. She was at the office as usual only a few days before she passed away unexpectedly at home.

Rest in peace Joan. We miss you already.

Thank You to Our Scholarship Fund Donors



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

AAAA Badger Chapter
AAAA-Speaker Donation 2019 Summit
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Tactical & Survival Specialties, Inc.
Tee It Up for the Troops, Inc.
The Luminescence Foundation, Inc.
The OV-1 Mohawk Association
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Timothy Wooldridge
Veteran Guardian
VHPA Scholarship Fund
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Vietnam Helicopter Pilots Association
William Newby
William Phillips
**Families of the Fallen Scholarship Fund*

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



AAAA Awards



Order of St. Michael Inductees

Silver

CSM Rodney W. Harris
COL Thomas E. Burke
Jill Davis
CW5 Ronald J. Friel
CW5 Douglas A. DeBoer
CSM James D. Wilson
LTC Michael J. Mannion
CW5 Douglas E. Finstad
Robert Bean
CW5 Patrick Francis
COL Shawn P. Manke
CSM Billy D. Webb
LTC Rodney A. Turner
CW5 Jerry Blackwell
CW5 Michael C. Fiala
CW4 Jason L. Pike
CW5 Brian M. McGlone
LTC Ryan I. Moore
LTC Jacob W. Miller
CW5 Robert A. Korecky
CW5 Lynwood T. Saville

Bronze

CSM Rodney W. Harris
SSG Todd A. Barker
CW4 Paul Getner
CW3 Elvin R. Carr
CW5 Leslie M. McNellie
CW3 Marc Johnson
LTC Thomas M. Jones
SFC Matthew A. Kipp
CW4 Scott D. NewMyer
CW5 Shawn R. Longwell
CW5 Elijah E. Mayers
MAJ Jeremy Thorton
MAJ Kyle Reeves
MAJ Robert Wells
CW4 Stephen W. Ryznic
CW4 Ryker B. Hall
CW4 David Weston
SFC Matthew J. Brickley
SFC Joshau C. Miles
SFC Brian N. Robinson
SFC Daniel Gonzalez
SFC Nikolaos S. Kapodistrias
CW3(P) Salem St. James
CW3 Christoforo Kimoto
MAJ Joy F. Nickel
LTC Walker W. Scott III
CW4 Robert M. Ware

CW4 William J. McClain
MAJ Jerome A. Reitano
CW4 Thomas Johnson
LTC Andrew J. Duus
LTC Roger P. Waleski
MAJ Anthony Colgary
LTC Clifton T. Causey
CW4 Cody W. Grow
CPT Justin Gill
SFC Douglas E. Wilson Jr.
CPT Michael Arcangelo
CPT Joseph B. Wiley
CW4 Jason L. Burke
CW4 Francois Collard
CPT Justin R. Rapp
1SG Nathaniel R. Kittredge
1SG Michael R. Marshall
1SG Allen King
1SG Jesse L. Wandling
CPT Robert E. Turns
1SG Ralph T. Woods
CW3 Brian J. Riesberg
CW3 Daniel B. Hodge
CW2 Roger J. Schilling
Michael T. Cowperthwait
CSM Carl E. Goss
CW5 Marques A. Martins
LTC Christopher A. Spencer
CW4 Eric B. McPherson
CW3 Jesse D. Coslow
CW3 John C. Cole
CW4 Andrew J. Sorenson
CPT Ryan Maynard
CPT Ryan Kirkeby
CPT Robert Caraccilo
CPT Reed J. Alexander
MAJ Christopher D. Zotter
CW4 Mitchell K. Villafania
MAJ Ryan Travis
MAJ Jon Ryder
1SG Preston E. Ring
CW2 Brian C. Reddington
SSG Aaron Powers
CPT Shawn P. Plumb
MAJ Kent B. Monas
CW3 James L. McCormick
SFC John Koonos
1SG Lonnie Gilstrap
1SG Christopher J. Frye
SFC Michael S. Franklin
MAJ David Crigger
MAJ Christopher Colbert
1SG Christian R. Barrios
CW3 Rene Carrillo
SFC Eric M. Scott
1SG William Wilson

CW3 Alan R. Crawford
SFC Timothy A. Shoopman
CPT Megan Reading
CPT Stephen T. Sexton
LTC Mark Jacques
MSG Craig R. Covington
1SG Darrell Williams
SSG Kevin E. Jones
MAJ David T. Powell
MAJ Michael J. Vanleeck
CW3 Michael Beck
LTC Jeong Sik Kim
COL Yong Dae Kim
COL Yong Sung Kim
LTC Jeong Yoon Park
CW3 Anthony J. Culley
MSG Tom Migliozi, Ret.
MSG Robert Wood
COL Mark Vandyke
SGM Jeronimo Valdez
MSG William W. Smith
CW5 Bruce Pulgencio
SGM Robert Pruitt
CSM Marcus L. Kellam
CW4 Glyne Johnson
COI David Hall
MSG Janet Graves
CW5 Jeffrey Crandall
COL Louis E. Carmona
COI William T. Breeze
1SG Kenneth N. Welshans
1SG Cody A. Forderwalt
CW5 Jerry F. Irick
CW5 John Bilton
CW4 Thomas H. Parker
Richard M. O'Connell
William J. Papich
LTC Nick J. Morgus Jr.
LTC Lourie N. Formby III
CW4 Joval F. Eblen III
MSG Alexis Bastidas
CPT Clifford D. Crofford
CW3 Bernard A. Higdon
CPT (P) James C. Keaton
CPT (P) Steven E. Mohr
CPT (P) Sharil K. Richards
MAJ Kevin Loughnane
CW4 David A. Stettenbenz
MAJ Gregory J. Gobel
1SG Frank W. Palfrey Jr.
CW4 William Nedostup
CW4 Timothy Seesholtz
Edward Killilea
CW4 Daniel Muthler
CW3 Richard Hill
MAJ Robert S. Dunlap
CSM Shane M. Couchene
LTC Stephen L. Clower
CW3 Justin H. Blizzard
CPT Zachary D. Daker
CW3 Dustin Harkness
MAJ Michael Gabrhel
CPT Richard Ortmann
Alexander Gorshein
MAJ Bryan Whittier
CW4 Jonathan Hulse



Honorable Order Knight

Kristie Lynn Scheuer
Michelle F. Staggs
LTC Christopher M. Hill
Dr. Carlos Correia
Jennifer Beck
1LT James D. DiCarlo
SFC Alvin E. Ortiz-O'Niell
Dr. Angus H. Rupert
CPT Andrew M. Krumm
CPT Joshua R. Smith
CPT (P) Jason C. Lovallo
CPT Joseph S. Douthitt
MSG Brian L. Beers
Peter J. Mock



Our Lady of Loreto Recipients

Paula Turner
Jasmine Ortmann
Crystal Diehl
Melinda "Mindy" Scott
Emily Finney
Adrianne Fuscclaro
Jennifer Smith
Tara Webb
Rebecca L. Pinckney
Sharon McKinney
Bre Ayers
Melissa von Eschenbach
Angela R. McHugh
Victoria Mariani
Mary E. Rouse
Summer L. MacGregor
Lynne M. Bordeleau-Bennett
Patti King
Melissa Willett
Stephanie Balmforth
Amanda L. Greenford
Margaret Elizabeth Caraccilo

Chapter Recognition Awards

Soldier of the Month

SFC Carlos A. Campos
Ragin' Cajun Chapter
January 2019

SPC Shaun E. Haines
Mid-Atlantic Chapter
February 2019

SGT Kevin Fields
Mid-Atlantic Chapter
December 2018

SGT Melissa Green
Mid-Atlantic Chapter
February 2019

Sgt Gordon D. George
Mid-Atlantic Chapter
January 2019

SPC Justin C. Lambert
Oregon Trail Chapter
March 2019

MAJ Michael A. Mignano
Arizona Chapter
April 2019

SPC Damian A. Alvarez
North Texas Chapter
January 2019

SPC Manuel Hureta Romero
Grizzly Chapter
April 2019

SPC Brandon J. Johnson
Grizzly Chapter
May 2019

SPC Walter J. Tygret
Oregon Trail Chapter
April 2019

Soldier of the Quarter

PFC Bryonna N. Anderson
Grizzly Chapter
3rd Quarter 2019

Soldier of the Year

SGT Thomas R. Woolford
Mid Atlantic Chapter
December 2018

NCO of the Month

SGT Lena L. Zagaris
Grizzly Chapter
April 2019

NCO of the Quarter

SGT Michael M. Bobbitt
Grizzly Chapter
3rd Quarter 2019

In Memoriam

COL William M. Gavora, Ret.
LTC Charles S. Kettles, Ret.
Mary Letts
CW5 Earl Peay, Ret.

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.



Competition to Replace Shadow

The U.S. Army has selected Martin UAV and AAI Corporation, a unit of Textron, to provide unmanned aircraft systems for platoons to try out as candidates to replace the Shadow tactical UAS. The indefinite delivery, indefinite quantity contracts are worth up to \$99.5 million each over a three-year period. The plan is to deliver several systems to six platoons in Army Forces Command that will evaluate them during combat training center rotations. The designated platoons have not yet been identified. The unmanned aircraft were selected after a fly-off during December 2018 and January 2019 at Dugway Proving Ground, Utah.

DoD Launches New Chief Technologist Website

On April 24, 2019, the office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) launched a new public website, <https://www.cto.mil>. The new website will help members from the different services, industry, academia, allied partners and the American public to stay informed on happenings in the DoD research, development, engineering and technology enterprise.

Davenport FSI President/CEO



FlightSafety International announced on May 14, 2019 that David Davenport will now lead the company as President & CEO. He most recently served as Co-CEO and President, Commercial. Ray Johns, who previously served as Co-CEO, will continue as President, Government and Manufacturing. He oversees the services and products FlightSafety offers to government and military agencies, as well as the design and manufacture of flight simulation products and visual systems.

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

- General Atomics Aeronautical Systems Inc., Poway, CA**, was awarded a \$99,020,937 cost-plus-incentive-fee contract for performance-based logistics support services for the MQ-1C Gray Eagle Unmanned Aircraft System; work will be performed in Poway, with an estimated completion date of April 23, 2024.
- Gentex Corp., Simpson, PA**, was awarded a \$27,860,817 firm-fixed-price contract for the Head Gear Unit 56/P Rotary Wing Helmet; work locations and funding will be determined with each order, with an estimated completion date of April 25, 2024.

- Honeywell International Inc., Phoenix, AZ**, was awarded a \$70,486,623 modification to contract W56HZV-12-C-0344 for total integrated engine revitalization hardware services; work will be performed in Phoenix, with an estimated completion date of June 30, 2021.
- Lockheed Martin, Orlando, FL**, was awarded a \$723,550,174 modification to domestic and Foreign Military Sales (Lebanon, Netherlands and France) contract W31P4Q-18-C-0130 to procure a variety of HELLFIRE II missile variants; work will be performed in Orlando, with an estimated completion date of Sept. 30, 2022.
- System Studies & Simulation Inc., Huntsville, AL**, was awarded a \$12,364,338 modification to contract W31P4Q-09-A-0019 for technical support services; work will be performed in Huntsville, with an estimated completion date of March 31, 2020.
- The Boeing Co., Mesa, AZ**, was awarded a \$171,887,544 hybrid (cost, cost-plus-fixed-fee, and firm-fixed-price) contract for performance-based logistics service in support of the AH-64E Apache attack helicopter fleet; work will be performed in Mesa, with an estimated completion date of April 30, 2020.

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AAAA Legislative Report

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

The Unpredictable Budget Cycle on Capitol Hill

For so many years the new norm was for Congress to receive the budget request from DoD via the White House and then months of hearings, meetings, cuts, and adds only to arrive at 1 October with impasses between the House and Senate that lead to a Continuing Resolution that snow balls into uncertainty within DoD and the Defense industry.

After years of Congress failing on their timeline to provide timely legislation on policy and funding, last year we jumped for joy when Congress did their job and turned out the authorization and appropriations bills on time. For once our certainty of uncertainty was replaced with gratitude to our lawmakers coming through for us.

Now, here we are in the midst of the FY20 Congressional markup cycle that began late this year (March) and, by process, should turn out the two defense bills on time by the end of September. So, are we on track? The short answer is that no one really knows, and many are confused that the 4 defense committees are not following the normal sequence of finishing the "mark-up" of the budget request. For decades, the House Armed Services Committee (HASC) has been the first to complete their version of the National Defense Appropriations Act (NDAA) and to coin a term from a former senior HASC staffer, "the HASC always sets the windsock" for all committees to complete their mark-ups. Normally then, the SASC completes their mark-up of the NDAA followed by the House Appropriations Committee-Defense completing their version of the appropriations bill, and then last, Senate Appropriations Committee-Defense completing their version of defense appropriations.

So, not only can we not count on the old norm of uncertainty of Congress even completing the legislation on time, we now are further confused at the sequence of completion in this year's process. This past month, one of the mark-ups was completed, but it was not the HASC as normal. The HAC-D completed their adjustments on the appropriations bill which we will remind

our readers is the legislation that actually issues funding. The White House requested \$750B for Defense and the HAC-D is only authorizing \$690B.

What is interesting here is the mix between base budget request (limited by Sequestration) and Overseas Contingency Funding (OCO)(Sequestration does not apply). The President's budget overtly tries to accomplish a Sequestration end-around by requesting base dollars at \$576B which is the limit with Sequestration, but also requests \$164B in OCO funding. With no bi-partisan deal on defense spending, this was a good try, but law makers know this is the loophole that DoD pursues, and they do not like it. Now, take a look at what the HAC-D presented. Sure, we would expect the total at \$690B to come in lower than the \$750B request, but the mix between base and OCO is interesting. They are allowing for \$622B and \$68B in OCO. Why is this interesting? Well, it's Congress that passed the Budget Control Act of 2012 that gave us Sequestration and it's Congress that can repeal it. That is not happening anytime soon, yet the HAC-D is basically saying out loud that they think DoD deserves more base dollars than what Sequestration will allow.

We will do our best to continue to explain this process and status in the months to come, but some of it is really hard to explain (except for you closet political nerds).

What's to Come This Summer?

It's very important that the 3 other committees pass their mark ups and the two defense bills get into the "conference" period. This needs to happen by end of June if there is any possibility the legislative differences will be resolved in time for final passage and signature by the President.

As we stated last month, it is remote at best this is going to happen. There is plenty of dysfunction that indirectly contributes to the lack of progress and compromise on defense spending. One is the border wall that still stings quite a few on Capitol Hill. Then there is immigration reform that seems to be growing as a priority with the White House. Oh, wait, what about the debt limit? Without

action here by September, sequestration will certainly kick in for the entire federal budget and the Treasury will be at risk for defaulting on the national debt.

So, there is a lot to watch and we encourage our readers to consider non-defense issues that have direct impact to the ability to get on-time policy and funding legislation.

Acquisition Policy

A notable piece of legislation in work by the Armed Services committee is more reform on defense acquisition and is said to result in changes that "make a big difference across the department." These include rapid prototyping and fielding and establishing "a modular open system approach for major defense acquisition systems." I'm a former acquisition officer and actually thought we already had policy on this, so we'll look forward to reading the details! I think our strong bench of Army Aviation Industry partners will welcome further reform that streamlines the process too!

ARMY AVIATION

Upcoming Special Focus



JULY 2019

Simulation and Training
MEDEVAC
Propensity



AUG/SEPT 2019

Army Aviation Blue Book
AAAASF Scholarship
Winners
Corpus Christi
Army Depot

CONTACT:

Bob Lachowski or Erika Burgess

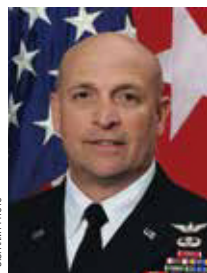
aaaaindustry@quad-a.org

203. 268.2450

People On The Move

Aviation General Officer Promotions/Assignments

The Senate confirmed the following general officer aviators for promotion:



U.S. ARMY PHOTO

MG Leon N. Thurgood, United States Army, for appointment to the rank of lieutenant general and assignment as Director of Hypersonics, Directed Energy, Space and Rapid Acquisition, Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology), Redstone Arsenal, AL. He most recently served as Director for Test, Missile Defense Agency, also at Redstone Arsenal.



U.S. ARMY PHOTO

BG Lonnie G. Hibbard, for promotion to the rank of major general; he is currently serving as the commanding general, United States Army Center for Initial Military Training, United States Army Training and Doctrine Command, Joint

Base Langley-Eustis, VA.

Changes of Command/Responsibility

Wings of Lightning Brigade Welcomes Garcia



U.S. ARMY PHOTO BY SGT RYAN LEWIS

MG Ronald P. Clark, commanding general, 25th Infantry Division, passes the 25th Combat Aviation Brigade colors to incoming commander, COL R.J. Garcia, while outgoing commander, COL Thomas Burke, looks on during a change of command ceremony on Weyand Field, Schofield Barracks, Hawaii, May 14, 2019.

Awards

USAREUR Best Warrior Competition



U.S. ARMY PHOTO BY OPT FORSTGUTTER SIBALUCA, US1ST CAB

From left to right, U.S. Army CSM Robert Abernethy, command sergeant major of U.S. Army Europe, WO1 Rhett Mason, assigned to the 12th Combat Aviation Brigade, and MG Andrew Rohling, deputy commanding general of U.S. Army Europe, pose for a photo during the U.S. Army Europe Best Warrior Competition award ceremony at Tower Barracks, Grafenwoehr, Germany, May 10, 2019. Mason, a native of Pensacola, Florida, received an Army Achievement Medal for being the runner-up for U.S. Army Europe Best Warrior in the warrant officer category.

CCAD Completes 10,000th Engine



U.S. ARMY PHOTO BY EMERY MARTINEZ

From left to right, COL Gail Atkins, commander, Corpus Christi Army Depot, Texas; Cristina Seda-Hoelle, general manager, military customer services, General Electric Aviation; and Tim Hillenburg, director of engine production, CCAD, cut a ceremonial cake during a ceremony at CCAD, March 14, 2019. CCAD celebrated completing 10,000 T700 engines in partnership with GE. Over 20 thousand engines and other helicopter parts have been processed through CCAD during the lifetime of the partnership, which began in 2000.

Promotions

Flight School Graduates

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



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

58 Officers, March 28, 2019

Commissioned Officers

2LT Glauser, Lucas W. – DG
1LT Bickham, Caleb B. – HG
1LT Bugaj, Mitchel L. – HG
1LT Fazzari, Lucas D. – HG
2LT Gray, Joseph W. – HG
2LT Albqowr, Nawras
2LT Alhashem, Rashed
2LT Alna'amneh, Abdallah
2LT Alsharafat, Baker
2LT Bailey, Timothy S.
1LT Burkhardt, Clayton A.
1LT Buyse, Erin M.
1LT Carbol, Jordan D.
1LT Dahm, Brianna E.
1LT Deekard, Joshua L.
1LT Giggey, Derrick D.
2LT Guerrero, Meghan E.
1LT Manion, Ryan M.
1LT McClure, Erik W.
1LT McKay, Jacob A.
CPT Offret, Dustin R.
2LT Pernelli, Stephen F. *
2LT Phillips, James A.
1LT Sandalo, Marisol D.
2LT Sim, Lauren V.
2LT Smith, Ethan M.
1LT Thies, William S.
1LT Watkins, Kyle J.

Warrant Officers

WO1 Roth, Gregory F. * – DG
WO1 Johnson, Carl H. * – HG
WO1 Lung, Joel J. * – HG
WO1 Morris, Kyle B. * – HG
WO1 Terry, Kyle D. * – HG
WO1 Anderson, Cody D.
WO1 Freeman, Matthew M. *
WO1 Gordy, Eric D.
WO1 Hawron, John M.
WO1 Helton, Torrey A.
WO1 Jones, Abby E.
WO1 Knight, Arlin D.
WO1 Ledlow, Joseph M.
WO1 McCall, Matthew J.
WO1 McCullough, Shayne D.
WO1 McLean, Frederick D.
WO1 Ostavitz, Christopher J.
WO1 Redmond, Taylor M.
WO1 Ruiz, Allan I.
WO1 Seaman, Trevor S.



People On The Move

WO1 Sheninger, Kaci L.
WO1 Starr, Joseph L.
WO1 Stidham, Cory M.
WO1 Streaker, Joseph W.
WO1 Taylor, Erik T.
WO1 Thon, Vandy
WO1 Vernor, Joshua L.
WO1 Walborn, Drew N.
WO1 Warren, Andrew P. *
WO1 Yager, Brandon W.

45 Officers, April 11, 2019

Commissioned Officers

2LT Hunter, Jacob D. — DG
1LT Demeuse, Austin R. — HG
1LT Lachance, Austin T. * — HG
2LT Mason, Troy J. — HG
1LT Uyehara, Stephen B. — HG
2LT Alshoubaki, Laith
1LT Blank, Stephen M.
2LT Brittain, Pete M.
1LT Butts, Kenneth G. *
2LT Carlisle, Patrick S.
2LT Davila-Caro, Helen M.
2LT Gerdes, Graham M.
2LT Gibson, Samuel J.
1LT Glover, Larry K. III
2LT Huber, Cole J.
2LT Hyler, Justin K.
1LT Jumper, Brenton M.
2LT Mendoza-deJesus, Jeremy
1LT Mittlstaedt, James M.
2LT Notti, David O.
1LT Otto, Daniel R.
1LT Penley, Laura C.
2LT Puckett, Kelli L.
2LT Quinn, Stephen R.
1LT Sullivan, Andersson J.
2LT Tarascio, Joseph A.
1LT Yagowski, Scott L.

Warrant Officers

WO1 Morrill, Skylar C. * — DG
WO1 Geyer, Benjamin E. * — HG
WO1 Welch, Colby J. * — HG
WO1 Womer, Travis G. * — HG
WO1 Bisnett, Cody C.
WO1 Bradford, Patrick R.
WO1 Broome, Shane M.
WO1 Calleja, Joseph A.
WO1 Denesowicz, Matthew A.
WO1 Donaldson, Daniel R.
WO1 Geipel, Andrew T.
WO1 Gray, Richard A.
WO1 Johnson, David A.
WO1 Jonus, Charles L. *
WO1 Malpass, Alton M.
WO1 Prestianni, Nicholas D.
WO1 Rocha, David M.
WO1 Skupin, Alexander *

38 Officers, April 25, 2019

Commissioned Officers

2LT DeFreece, Dakota R. — DG
2LT Strobel, Oliver R. — HG
1LT White, Aidan M. — HG
2LT Bissinger, Jacob A.
2LT Chapman, Hayden R.
1LT Condez, Christian A.
2LT Cornell, Matthew C.
1LT Fisher, Glen M.
2LT Gentry, Seth-Austin R.
2LT Goodpaster, Alexander J.
1LT Hakimi, Sayed
2LT Hamidi, Qudratullah
2LT Krol, Timothy P.
2LT Kubik, Benjamin C.
2LT Paktiwal, Mohammad
2LT Roberts, Mark L.
1LT Smith, Michael G.

Warrant Officers

WO1 Albright, Christopher A. — DG
WO1 Emiling, Samuel G. * — HG
CW2 Haka, Stewart M. — HG
WO1 Whitney, Matthew B. — HG
WO1 Adkins, James M.
WO1 Alldridge, Karen J.
WO1 Cook, Chase A.
WO1 Diaz-Colon, Alberto
WO1 Elliott, Eric A.
WO1 Hoover, Corey B.
WO1 Isley, Jarrod M.
WO1 Mackoviak, Diana C.
WO1 MacLee, Christopher D. *
WO1 Martinez, Arquí
WO1 McFarland, Kienan R.
WO1 McFarlane, Jesse S.
WO1 Mehlretter, Andrew J.
WO1 Murphy, Brendan L.
WO1 Perales, David J. *
WO1 Rall, Brendan J.
WO1 Thayer, Michael S.

48 Officers, May 9, 2019

Commissioned Officers

1LT Laboe, Gregory D. — DG
2LT Duffy, Mark A. * — HG
1LT Seegmiller, Trevor J. — HG
2LT Young, Cory N. — HG
1LT Bravo, Robert M. *
1LT Camacho, Francisco J.
1LT Deardorff, Daniel P.
2LT Fattman, Anthony J.
1LT Hart, Michael K.
1LT Kenny, Kit C.
1LT Landry, Nathaniel J.
1LT McGhee, Hayden G. *
2LT Russell, Kelly M.
2LT Salix, Valerie G. *
2LT Schorr, Natalie M.
1LT Toner, Zachery C.
2LT Trumble, Alex D.
1LT Watson, Jacob M.
2LT Wolfe, Austin O.

Warrant Officers

WO1 Valovich, Ryan S. — DG
WO1 Nelson, Kyle F. — HG
WO1 Petree, Thomas O. * — HG
CW2 Shealey, Jacob E. — HG
WO1 Swift, Nathan D. — HG
WO1 Aguirre, Aaron B.
WO1 Battle, Alek J. *
WO1 Brewer, Adrian S. *
WO1 Butenschoen, Adam C.
WO1 Cannoot, Michael K.
WO1 Carlomusto, Alyssa A.
WO1 Daniels, Germaine S.
WO1 Durgin, Mia A.
WO1 Eaves, Andrew L.
WO1 Garrigues, Brandon T.
WO1 Gird, Steven A.
WO1 Greening, Brandon M.
WO1 Henke, Stephen C.
WO1 Holdaway, Joseph A.
WO1 Mesta, Adam D.
WO1 Osborne, Payton S.
WO1 Richards, Zachary J.
WO1 Saenz, David L. *
WO1 Schnupp, Phillip C.
WO1 Thielen, Taylor D.
WO1 Thompson, Charles L.
WO1 White, Hannah M.
WO1 Wilhelm, Justin A.
WO1 Zarfenga, Robert J.

DG: Distinguished Graduate

HG: Honor Graduate

* = AAAA Member



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People On The Move

FY 2019 Lieutenant Colonel Army Competitive Category Selection Board Results

The fiscal year 2019 lieutenant colonel army competitive category selection board results were released May 9, 2019. AAAA congratulates the following 86 Aviation majors on their selection.

Seq

0169 Adams, Edward C
*0485 Anderson, Lucas R
0105 Angus, Grayson F
0460 Attaway, James A
0156 Battle, James A
0409 Beck, Herbert F
0442 Belobrajdic, Bonnie
0441 Betz, Travis
0406 Bottrell, Jeffrey P
0040 Bowman, Matthew J
0407 Bozovich, Stephen R
0304 Brownell, Mackland
0331 Buck, Mark A
0310 Burke, Megan T
0107 Button, Paul Steven
0466 Casiday, Billy B
0096 Channels, Benjamin
0265 Chivers, Luke T
0160 Christensen, Pearl
0375 Christy, Joshua T
0176 Clark, Joseph A
0283 Comeaux, Aris J
0259 Cooke, Michael D
0104 Dana, Todd A
0374 Decker, Timothy J
0207 Delafuente, Rene M
0036 Duval, Adam G
0417 Evans, Andrew S
0164 Ewell, Phillip J
0028 Ewing, Jonathan P
0039 Feathers, Scott T
0090 Freude, Anthony E
*0497 Fuscellaro, Anthony
0372 Gardiner, Ashley R
*0481 Gates, Bradley C
0206 Gillett, Kristopher
0174 Gosney, Chad M
0273 Hall, Charles W
0161 Hodges, Matthew A
0337 Hogan, Timothy D
0244 Holt, Douglas N
*0478 Hudson, Rhian A
0346 Hultquist, Michael
0303 Isenberg, Travis C
0242 Jones, David R
0055 Kane, Daniel M
0277 Kane, Kevin P
0087 Katzenberger, Keith
0171 Knowlden, Jarrod K
0348 Koch, Richard P
0151 Landers, John J
0180 Loeffert, Ethan
0235 Malcomb, Dylan W
0314 Mardis, Brett A
0190 McCoy, Adam S
0025 McKinney, Paul L
0220 Merkl, Brian M
0187 Miller, Joseph J

0419 Miller, Trent D
0234 Mueller, Christopher
0332 Muller, Jeremy A
0165 Mullins, Justin V
0343 Nadler, Jonathan C
0302 Norland, Jeramy R
0003 Norris, Dana
0300 Omodt, Michael S
0230 Orzech, David J
0181 Polk, James B
0060 Rabb, George T
0267 Robbins, Cristian A
0237 Rodriguez, Elpidio
0185 Roman, David F
0054 Roper, Jacob E
0147 Rouzer, Charles O
0031 Sartori, Timothy E
0094 Schapker, Brian T
0463 Slingerland, Kather
0305 Stahl, Nathan A
0457 Swanson, Justin J
0307 Taylor, Patrick J
0020 Underwood, Clinton
0092 Walker, Charles R
0367 Watts, James F
0373 White, Kevin C
0184 Wientjes, Gage L
0270 Yang, Andrew K

* Below the zone selection

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 006-19
PV2 Gabriella A. Kornish *- DG
PV2 Kevin Matthew Aragon
PV2 Elizabeth Lucille Auer
PV2 Samantha Marie Costa
PV2 Mckynzie Rae Dragoo
PV2 Morgan J. Meisenheimer
PV2 Brenna Shae Parker
PV2 Kelsey Jean Robinson
PV2 Brittany Lynn Robison
PV2 Tess Ke Aloha Sandoval
Class 506-19
PFC Zachary T. Buck *- DG
PV2 Jaden Brye Bolton
PV2 Eduardo Delgado
CPT Mostafa S. R. Elafifi
PV2 Tristen M. Fournutia
SPC Anthony Michael Kalm
PV2 Zachary J. R. Korbel
PV2 William Harold Marlowe
PV2 Noah James Marquis
PFC Gabriel Antonio Perez
PFC Matthew Rey Sanchez
SPC Daniel James Teixeira
Class 507-19
PV2 Dillon J. Henschen - DG

PV2 Maxwell Lyle Dayton
PV2 Damion Antoine Isum
PV2 Joseph P. Lymore Jr.
PV2 Ethan W. Marsingill
PV2 Bong Jun Moon
SPC Delmar D. Operania
PV2 Itzhak Joseph Parizat
PV2 Ryan D. Petersen
PV2 Shannon Lee Pinkston
PV2 Justin Lokepa Pires II
Class 007-19
PFC Steve G. Beniga *- DG
PV2 Eric Phillip Borunda Jr.
PV2 Kristopher E. Christensen
PV2 Samuel E. Garcia
PV2 Bryson Taylor Johnson
PV2 Austin Lee Jordan
PV2 William Ortega
PV2 Marco Antonio Tollinichi
SGT Daniel Steven Walker
PV2 David R.I. Washburn Jr.
PV2 Tyler Allan Wilt
Class 008-19
PV2 Felix J. Ortega *- DG
PV2 Trey Lee Barrett
PV2 Nathan Cory Black
PV2 Daniel R. Castillo III
SGT Ssu-Hua Chin
PV2 Corey Anthony Davis *-
PV2 Jacob James Frost
SPC Anthony Youki Lambert
PV2 Christian Dean Roberts
PV2 Thomas Cetin Shearer
PV2 Zacharian Tarik Spigner
PV2 Justin Addison Wilson
Class 508-19
PFC Jordan M. Powell *- DG
PV2 Mercedes S. D. Arrington
PV2 Braedyn Layne Beal
PFC Elijah Carlton Braddy
PV2 Makayla Mae Burrows
PV2 Celeste C. Gutierrez
PV2 Aubreonne L. Niemann
PV2 Richard Steadman
PV2 Belinda R. Thompson
PV2 Joshua Devan Wright
Class 509-19
SPC Sung Chang Kang-DG
SPC Amadou H. Goudiaby
PFC Chris Hartono Halim
PV2 Dylan Thomas Kage
PFC Ba Ul Kweon
PFC Varas L. Montesdeoca
PV2 Ramones Andres Nunez
PV2 Nicholas Michael Olup
PV2 Mark Anthony Osorio
PFC Christopher P. Vazquez
PV2 Jayce A. Quattlebaum
PV2 Bryce Dwane Quinn
Class 510-19
PFC Alex O.S. Gonzalez - DG
SPC Stephen A. Agharese
PFC Jephthe Cadet
PV2 Anthony W.I. Carbajal
PV2 Lance Russell Gow
PV2 Chase Avery Rabon
PV2 Justin Bryan Smith
PV2 Abraham Villalobos
SGT Drew Elliott Way
PV2 Lawrence P. Welsh
PV2 Leng Yang
PV2 Marcus F. Young III

Class 005-19
PFC Steely S. Carter *- DG
PFC Michael Bryson Allen
PV2 Michael Joseph Cuellar
PFC Jake Patrick Everdell
PV2 Zachary P. Haldeman
PV2 Randy Thomas Hall
SPC Okoye Letrey Harris
PV2 Ty Harding Jones
PV1 Samuel Adam Mercer
PV2 Nathaniel A. Smith
SPC Christopher J. Zocher
Class 006-19
PV2 Traevon D. Batiste
PFC Lawrence Bengough, Jr.
SPC Luis M. Casablanca
PFC Jefferson S. Cavanaugh
PV2 Clayton M. Cessna
PV2 Dalton Taze Goins
PV2 Joseph Nathan Miller
PV2 Caleb Austin Smith
PV2 Landon Trefft Smith
PV2 Landon Timothy Smith
PV2 Samue Jacob Smith
Class 007-19
PV2 Harrison M. Kluge - DG
PV2 Deshay Dean Berry
PV2 Stefan James Caswell
PFC Coletin Allan Defabio
PV2 Wazeer Hashiem Ferrell
PV2 Samuel Ray Hathaway
SPC Kevin T. Hayworth
PV2 Marquis Jamal Mottley
PV2 Patrick Lane Poynor
PV2 Blake Allen Riedle
PV2 Christopher D. T. Slagle
PV2 Joshua Michael Snyder
Class 505-19
PFC Jeremy W. Lance *- DG
SGT Brian E. Burrell-Felton
PV2 Jacob Taylor Busby
PV2 Spencer B. Callahan
PV2 Levi Franklin Clements
PV2 Lawrence G. Dierlam Jr.
PV2 Jonathan Taylor Filzen
PV2 Andrew E. C. Heins
SPC Isaac C. Martinez
SPC Jordan Samuel Miller
SGT Nicholas David Shupe
UH-60 Helicopter Repairer (15T)
Class 017-19
PFC Matthea L. Taylor *- DG
PFC Austin Tyler Edgar
PFC Henry Michael Garcia
PV2 Lizeth C. Garcia Torres
SPC Zachary Dean Hoy
PFC Derick Q. McNeal
PV2 Evan Michael Mitchell
PV2 Oliver Alexander Rice
PV2 Dalton M. Robinson
PV2 Keith A. S. Nicolas Santos
PFC Tiffany Heather Stafford
SPC Harrison Kiwhang Yi
Class 018-19
SPC Luis A. Cervantes *- DG
PV1 Nathan D. Bigelow
PV2 Evan Tyler Brown
PV2 Luke Giovanni Cozza
PV2 Cody Warren Schaefer
PV2 Mitchell Cutis Shea
PV2 Chase Franklin Staggs
PV2 Zachariah Scott Taylor
PV2 Maxwell T. Wilson
PFC Colin Ronald Wingfield

CH-47 Medium Helicopter Repairer (15U)

Class 509-19
SPC Kyle E. Voeltz *- DG
PFC Jeremiah Mikal Davis
PFC Dillon Bruce Fox
PV2 Tyler Gene Gaddis
PV2 Peter Thomas Gilroy *-
PV2 Weston Chege Gitau
PV2 Christian J. Graham
PV2 Tyler Andrew Gresso
PV2 Evan Robert Mark
PV2 Jordan Matthew Smith
PV2 Clay Treasure Schilling
PV2 Michael T. Waldez
Class 019-19
SPC Haley M. Porter *- DG
PV2 Levi Tyler Daffron
SGT Sheila April Hatala
PV2 Andrew S. Jeanes
SPC Benjamin J. Martell
PV2 Matthew T. Myers
PV2 Alexis Lynn Norris
PFC Edgar D. L. Ortiz Rodriguez
PFC Jairo Lenin Rodriguez
SPC Jason Omar Roman
SPC Jordan Lee Warbington
Class 020-19
PV2 Noah G. Kruse *- DG
PV2 Jayson Mitchell Davis
PFC Cole R. Greathouse
PFC Tanner Lee Guidry
SPC Nicholas C. Howland
PV2 Cameron Michael Littell
PV2 Esteban Maldonado
PV2 Daniel C. Monton
PV2 Luis Manuel Pizarro
PV2 Michael James Ray
PV2 Kyle Andrew Thompson
Class 510-19
PFC Sloan T. Kraus *- DG
PV2 Justin Dewayne Alley
PFC Zachery Allen Felbab
PV2 Zavery Joseph Galba
PFC Tanner Lee Guidry
PV2 Nicholas Taylor Holland
PV2 Mekhdi K. Makkhella
PFC Brian Franklin Varner
PV2 Patrick Francis Weigel
PV2 Justus N. Wilkinson
PV2 James Michael Wolfe
Class 021-19
A1C Jacob T. Baer - DG
A1C Hunter Garcia
Amn Zachary Ryan Hain
A1C Tyler Joseph Jass
A1C Devin Michael Newton
Sra Craig Joseph Rose
A1C Travis J. Schweighart
A1C Tyler Scott Simmons
A1C Casey Marshall Sims
Amn Simon Dean Toney
Class 022-19
PFC Kavonn D. Thomas *- DG
PFC Ethan Thomas Bulford
PV2 Kristopher A. Fletcher
SPC Bipol Gauli
PV2 Mark Lorenzo Graves
PFC Christian Cole Henry
PV2 Austin Dakota Johnson
PV2 Jeremy S. Klimowicz, Jr.
PV2 Corey Lee Sommers
PV2 Tim David Thompson
SPC Reinaldo Cruz Valle
Class 511-19
PFC Dylan S. St John *- DG
PV2 Jordan Tyler Lee
PV2 Adam Daniel Lewis

PV2 Aaron Randell Lucas
PV2 Arturo Melanocampo
SPC Taylor James Miller
PV2 Michael Thomas Novak
PV2 Ademir Pavao Filho
PV2 Eduardo Rojas
PV2 Ryan Matthew Smith
PV2 William A. Smith
Class 023-19
PFC Justin T. Gates *- DG
PV1 Toua Chang
SPC Joshua Lee Crites
PV1 Lynsee J. Dempsey
SPC Adam M. Henderson
PV2 Joel Eskild Korsholm
SGT Andrew Michael Luther
PV2 Amber Lee Mcgarvie
PV2 Bryson R. T. Mills
SPC Samantha L. Pacheco
PV1 Francheska M. V. Camacho
Class 024-19
PV2 Zachary T. Brishaber *- DG
PV2 James C. Canada, III
PV2 Zachary Alex Moore
PV2 Trystan Jacob Peace
PV2 Steven L. Poindexter
PV2 Colton Jacob Proctor
SPC Eric Rathnayake
PV2 Phillip A. Rodriguez
PFC Martinez Edwin Roman
PFC Dorian B. Zermeno

Aircraft Powerplant Repairer (15B)

Class 003-19
SPC Ge Dai *- DG
PV2 Christopher T. Brightman
PV2 Darwin Alexis Buezo
PV2 Jacob Nicholas Carlson
SPC Dong Ryool Choi
PV2 Zachary J. Funston
PV2 Deshay Dean Berry
PV2 Stefan James Caswell
PFC Coletin Allan Defabio
PV2 Wazeer Hashiem Ferrell
PV2 Samuel Ray Hathaway
SPC Kevin T. Hayworth
PV2 Harrison Mitchell Kluge
PV2 Marquis Jamal Mottley
PV2 Patrick Lane Poynor
PV2 Blake Allen Riedle
PV2 Christopher D. T. Slagle
PV2 Joshua Michael Snyder
SPC Amber Noel Hulen
PV2 Nicholas Joseph Lucio
PV2 William Dean Mclean
PV2 Colton Lynn Northrup
PV2 Vignesh Mohan
SPC Shyam Mutha
SPC Kihwang Nam
Class 501-19
PV2 Josue Remy *- DG
SPC Lei Qin
PV2 Tyler John Reidy
PV2 Carson A. Rippentrop
PV2 Otaber Ruzimamatov
PFC John Patrick Tietz
PV2 Tyler Ryan Williams
PV2 Andrew Jacob Wilson

Aircraft Powertrain Repairer (15D)

Class 002-19
PV2 Thomas B. Childress *- DG
PV2 Idris Joel Bailey
PV2 Matthew Clark Bowen



People On The Move

PV2 Logan Garrett Bruce
PV2 Joseph Hunter Brunner
PV2 Raine Yi Mei Brysostom
PV2 Nathan Correa Villafan
PV2 Orlando L. Figueroa
PV2 Zayk E. Forrester
PV2 Miguel A. Garcia
PV2 Travis Allen Hopkins
PFC ZacharyHuber-Tomlinson
PV2 Sean Luke Johnston
PFC Byeong Hyeon Kim
PV2 Wesley Daniel Lones

Class 502-19

PV2 Cody A. Stokes * - DG
PV2 Zane Madison Kimmel
PV2 Zackery Scott Lanier
PV2 Jordan W. Lowrimore
PV2 Patrick Collins Malcolm
PV2 Nicolas G. Matthews
PFC Adam Lee Morton
PV2 Jorge Alfredo Padilla
PV2 Robert C. Ramos
PV2 Nathan Paul Smith

Aircraft Electrician (15F)

Class 003-19

PV2 Owen C. Bame * - DG
PV2 Anthony Tyler Bilyeu
PV2 Kenneth J. Cassidy
PV2 Travis Lee Crawford
SPC Mathura Prasad Dahal
PV2 Tyler Ky Dahlke
PFC Aaron John Daniels
SPC Era Maskey

Class 004-19

PV2 Richard L. Everett Jr. * - DG
SSG Stephen E. Brett Jr.
PV2 Soto Eliud Delgado
PV2 Curtis William Haby
PV2 Dustin E. Haggans
SPC Patrick Cody Kidson
Class 502-19
PV2 Nicholas Lynn Manor
PV2 Tyler James Meadows
PV2 Christopher J. Melendy
PV2 Luis Enrique Palma
PV2 Rodolfo Pena Jr.
PV2 Christopher G. Quiroga
PV2 Quinton Michael Void

Aircraft Pnedraulics Repairer (15H)

Class 004-19

PV2 Gayle A Philp - DG
PV2 Jose M. Barajasramirez
PFC Andrew Harrison Exum
PV2 Nathaniel Cage Hardy
PV2 Xavier Jose Sena
PV2 Joseph Kevin Tan

Aircraft Structural Repairer (15G)

Class 003-19

PFC Katherine N. Rodriguez - DG
PV2 Maverick J. Aivaliotis
SPC Justin Robert Barros
PV2 Robert Donald Brown
PV2 Jessica Maria Galleges
PV2 Abraxas K. Haole
SPC Akorede A. Ibirogba
PFC Tristan M. McGarry
PV2 Chandler L. Melcher
PFC Michael Murry
PV2 Quintin Patrick Obrien
PFC Carl Mendel Shoup

PV2 Brian S. Smart-Mckertlie
PV2 Austin Wayne Smith
Class 503-19
PV2 Wendell J. Woods * - DG
PV2 Leyton M. Analla
PV2 Brian Robert Power
PV2 David H. Summers
PFC Randy Tejada Tejada
PV2 Richard Ryan Tilbanie
PV2 Andrew Paul Van Horn
PV2 John Glennon Werner
PV2 Kody Anthony Willard

Avionic Repairer (15N)

PV2 William A. Bennett * - DG
PV2 Abel Cipriano Anaya
SPC Jesus Darren Deleon
SGT Williams Spencer K. Ellis
SPC Aidan E. Murphy
PV2 James Damen Sebre

Class 023-18

PV2 Hakeem O. Harris * - DG
PV2 Abigail Rose Flores
PV2 Ana Cecilia Flores
PFC Emily Rose Hoffman
PFC Brandon Terez Knight
PV2 Kaitlyn Nicole Long
PV2 Rosanna C. Young

Class 504-18

PFC Ryan J. Fitzpatrick * - DG
PV2 Cody Michael Brashear
PV2 Carson Colliton Dean
PFC Matthew N. Gaeta
PV2 Derick Milo Gross
PFC Zachary Ryan Harper
PV2 Maverick Wayne Jarrell
PV2 Ousmane M. Samake

Air Traffic Control Operator (15Q)

Class 19-005

PV1 Kaihem A. S. Louis
PV2 Kemonei C. Butler
PV2 Jefferson R. Perez
PV2 Marquez R. Lemon
PFC Geoffrey R. Whittington
PV2 Kevin Anibal Perez
PV2 Maxwell D. Meloche
PV2 Sidney Michelle Slay
PV2 Juan F. Sanchez
PV2 Tyler Ernest Adorno
PV2 Angel Unique Chavez

Class 19-006

PV1 Weitzel Alli Marie
PV1 Cook Justin Reese
PFC Bissen Sarah Elizabeth
PV1 Baumann T. Michael
PVT Ewing H. Constance
PV2 Jackson Mehki Hessein
PFC Remer Kevin Andrew
PV1 Valencia Victor Jose
PV1 Le Hung Vy
PV1 King Isreal Elizabeth

Aviation Operations Specialist (15P)

Class 19-016

PVT Brett Stewart
SPC Mitchell Fowler
PFC Shawn Fluhr
SPC Dahlia Large
PFC Mary Rigatuso
PV2 Carolyn George
PFC Katlin Burnett
PV2 Asjah Jenkins
SPC Richard Montgomery

PV2 Dominique Millett
SPC Chad McGaha
PV2 Alexandria Futrell

UNMANNED AIRCRAFT SYSTEMS (UAS) GRADUATIONS

WARRANT OFFICER

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

Tactical Unmanned Aircraft Systems Operations Warrant Officer Technician Course

6 Graduates, 05 Apr 2019

WO1 Dustin M. Rice—DHG
WO1 Travis J. Bernas
WO1 Oscar O. Diaz
WO1 Francisco C. Hernandez
WO1 David E. Mills
WO1 Mark L. YinBaker

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

14 Graduates, 02 Apr 2019

PVT Brady R. Hanson
SGT David P. Knaak
SPC Daniel J. Schlack
PFC Deonson T. Leatimua
PFC Killian Y. Pignault
PV2 Preston J. Behrmann
PV2 Charles E. Lewis
PV2 Adam D. Worful
PVT Brendan T. Busby
PVT Angel A. Macias
PVT Michael B. Mesngon
PVT James W. Sanford
PVT Devon R. Terrell
PVT Matthew E. Watts
9 Graduates, 15 Apr 2019
SPC Brandon C. Baker
PFC Dalton T. Hollowell
PV2 Victor H. Castillo
PV2 Braxton A. Dowell
PV2 Adrian A. Herrera
PV2 Ethan G. Olive
PV2 Luke W. Rasset
PV2 Dhylan K. Spano
PVT Sarah J. Adams

Gray Eagle UAS Repairer Course

13 Graduates, 15 Apr 2019

PFC Garrett T. Gilkison—DHG
PV2 Donald K. Ernestburg—HG
PV2 Ernest W. Abis
PV2 Andrew R. Bales
PV2 Daniel T. Jones
PV2 Clyde D. Ladd

PV2 Max A. Province
PV2 Douglas A. Schoenling
PV2 David A. Perez
PV2 Jonluke Torres
PV2 Lance D. Vann
PVT Brent C. Gray
PVT Kai M. Key

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

40 Graduates, 19 Apr 2019

PV2 Tyler E. Simpson—DHG
PVT Jonathan K. Freese—HG
SGT David J. Bittell
SPC Patrick M. Egan
SPC Kenneth D. Sierra
PFC Brett A. Beard
PFC Marcus E. Dodson
PFC Austin P. Fandey
PFC Vincent A. Holbrook
PFC Christopher H. Kon
PFC Michael D. Matta
PFC Andrew G. Pendleton
PFC Aidan G. Quinn
PFC Jacob W. Smith
PFC Garrett M. Wilson
PV2 Benjamin P. Aretha
PV2 Nicholas J. Barrett
PV2 William A. BatesSkelly
PV2 Connor P. Brockman
PV2 Samuel A. Cassis
PV2 Christian W. Harris
PV2 Christopher P. Harrop
PV2 Noah T. Heath
PV2 Kevin D. Janish
PV2 Nathan C. Kurz
PV2 Christian A. Labar
PV2 Dillan B. Ledford
PV2 Bobby Lopez
PV2 Jesus Luna-Hernandez
PV2 Jose D. M. Sanchez
PV2 Austin S. McDonald
PV2 Jordan P. Oliver
PV2 Eduardo D. Pacheco
PV2 Aaron J. Temples
PVT Jimmy L. Edwards
PVT Colby J. Harris
PVT Joshua G. Herbert
PVT Michael V. Millard
PVT Daniel C. Provost
PVT Chase M. Williams

Gray Eagle UAS Operator Course

9 Graduates, 29 Feb 2019

SPC Nicolaus Trivelpiece—DHG
SGT Phillip E. Dunegan—HG
SGT Austin R. Gardner
SGT Alejandro Garrido
SGT Christopher L. Reeves
SPC Christian Dilligencia
SPC Javier M. Perez
PV2 Jadon D. Bell
PV2 Randall H. Hammarsten

DHG = Distinguished Honor Graduate
HG = Honor Graduate
* = AAAA Member

Save the Dates



Luther Jones

*Luther G. Jones Army
Aviation Depot Forum
August 20-21, 2019
Corpus Christi, TX*

ASE

*Aircraft Survivability
Equipment Symposium
November 18-19, 2019
Huntsville, AL*

Cribbins

*Joseph P. Cribbins
Aviation Product
Sustainment Symposium
November 20-21, 2019
Huntsville, AL*

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Art's Attic

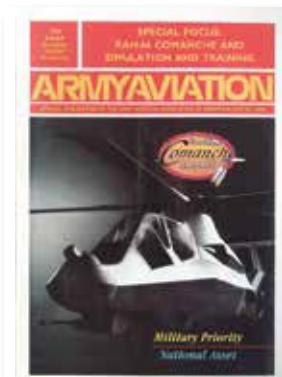
By Mark Albertson



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



JOE GAYHART



25 Years Ago June 30, 1994

Briefings

May 23, The White House: Posthumous Medals of Honor were accorded to a pair of valorous American soldiers killed in action in Mogadishu, Somalia. The October 3, 1993 action in question saw to the tragic deaths of MSG Gary I. Gordon, 33, and SCF Randall D. Shughart, 35, members of the U.S. Army Special Operations Command (USASOC), Fort Bragg, NC. MSG Gordon's medal was presented to his widow, Mrs. Carmen R. Gordon; while SFC Shughart's medal was accepted by his widow, Mrs. Stephanie A. Shughart. The above are the first Medals of Honor accorded since the Vietnam War.

Briefings

Moving rapidly from design phase to prototype is the Boeing-Sikorsky RAH-66 Comanche. At the Stratford, Connecticut Sikorsky plant, the prototype's forward fuselage structure is already fifty percent complete; and, has been moved to the second assembly stage towards completion. Meanwhile the Boeing MEP Systems Integration Laboratory has successfully amalgamated the mission computer cluster racks, power supplies, backplanes and data processing modules. The first flight of a completed prototype is scheduled for 1995.



Fort Campbell, Kentucky, November 5, 1993



Guest speaker, Colonel Robert Dees (left), Commander, 3rd Brigade, 101st Airborne Division, was presented with an Order of St. Michael Bronze Award. Presenter (right), Commander, 7th Battalion, 101st Aviation Regiment, Lieutenant Colonel Roger Matthews.



50 Years Ago June 30, 1969

In Memoriam: General William B. Bunker

General William B. Bunker passed away on June 5, 1969, in the Rader Clinic, Fort Myer, Maryland, as a result of a heart attack. He is survived by his wife, Crystal, and a son, Paul D. Bunker, III, an employee of the U.S. Army Aviation Systems Command, St. Louis, Missouri, plus three grandchildren. General Bunker was the son of a Regular Army officer, and was born September 30, 1910, Fort Slocum, New York. He was commissioned into the Cavalry, upon graduation from the U.S. Military Academy in 1934. Two years later he transferred to the Engineer Corps and attended the Massachusetts Institute of Technology, where he earned a degree in Master of Science Engineering. General Bunker received an array of military awards: The Distinguished Service Medal, Legion of Merit with two Oak Leaf Clusters, Army Commendation Medal, American Defense Service Medal, American Campaign Medal, World War II Victory Medal, Army Occupation Medal (Germany), National Defense Medal, Berlin Airlift Device, Foreign Service Medal and the United Nations Service Medal. General Bunker was a Past President of the American Helicopter Society, Associate Fellow of the American Institute of Aeronautics and Astronautics, member of the American Society of Civil Engineers, President of the Armed Forces Management Association and a member of the American Management Association and AUSA. Lastly . . . General Bunker was a charter member of AAAA and proved instrumental in the formation of AAAA's Lindbergh Chapter in St. Louis.



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

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

The deadline for nominations for the 2021 induction is June 1, 2020

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

Army Aviation Hall of Fame

Chief Warrant Officer Four Raymond A. Frank

Army Aviation Hall of Fame 1995 Induction



CW4 Raymond A. Frank epitomized the spirit of the Army Aviation Warrant Officer. Enlisting in the Army at the age of 17, he served three tours in RVN both as a ground combatant and helicopter door gunner. Attending flight school in 1974, he served in a wide variety of assignments including pilot, instructor pilot, standardization instructor, maintenance officer, and operations officer. His special place in the annals of Army Aviation, however, was earned as a result of his skill and enthusiasm as a pilot and his indomitable spirit as a patriot, one for whom duty, honor and country were a way of life and not merely a slogan.

He was one of the first to become an instructor in air-to-air tactics and his contributions in the development for future Comanche ACM capabilities continue to shape both hardware and doctrine.

In 1990, he received a Broken Wing Award as a result of his superb handling of a night mission mechanical failure in an MH-60. His skill and composure saved the lives of eight soldiers; however, he was left with severely fractured vertebrae and a shattered knee. Overcoming the medical odds that he would never fly again he was assigned as a Night Stalker in TF 160 in 1990. During this period, he achieved full mission qualification, Standardization Instructor Pilot and Joint Mission Planner status. In August 1993, he deployed to Somalia with Joint Task Force Ranger.

CW4 Frank deployed as a member of a flight lead crew whose responsibility it was to plan and lead special operations combat assaults. He conducted seven highly successful assaults; many during daylight, deep in enemy-territory. He provided great leadership to the aviators and was particularly respected for his advice on the employment of armed and assault helicopters in an urban environment. When his teammate was shot down, he was called for assistance.

While providing protective fires, his aircraft was hit by a rocket propelled grenade (RPG). Realizing that the tail rotor had separated, he autorotated to a safe landing in the city. Surviving the crash with tremendous injury to his back he egressed from the helicopter and assumed a fighting position in the urban downtown sprawl of Mogadishu known as the Black Sea. He was killed in action on October 3, 1993 while defending his fellow Night Stalkers and ground force members of TF Ranger in the vicinity of his crashed MH-60 SOF assault helicopter. One member, CW3 Michael Durant, was taken POW and eventually released. CW4 Frank received the Silver Star for his gallantry at the crash site.

The most deserving recognition for Ray Frank is to be memorialized as a member of the AAAA Hall of Fame; for truly in death, he will continue to serve as an inspiration to all Army aviators into the 21st century and beyond.

A man and a woman, both wearing DynCorp International caps and dark blue shirts, are working on a piece of equipment. The man is on the left, smiling and pointing at a component. The woman is on the right, focused on her work. They are in a workshop or maintenance area with various tools and equipment visible in the background.

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- Aviation Field Maintenance–West (AFM II–West)
- Army C-12 Transport Contractor Logistics Support
- Worldwide Logistics Support Services Contractor Logistics Support (WLSS-C)
- Responsive Strategic Sourcing for Services (RS3)

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