

# ARMY AVIATION

NETWORK | RECOGNITION | VOICE | SUPPORT

November 30, 2014



Improved **Gray Eagle**  
Unrivaled **Endurance**

 **GENERAL ATOMICS**  
AERONAUTICAL



Puma™ AE

Raven®

Wasp® AE

Shrike VTOL™

## YOU DEFINE THE MISSION. WE PROVIDE THE SOLUTION.

AeroVironment's family of small unmanned aircraft systems provides real-time situational awareness, increasing the security and effectiveness of your mission. All of our systems are easy to transport and can be in the air within minutes delivering critical information when and where it's needed. Whether your mission is on the frontline, peacekeeping or training, we provide the solution.

*To learn more visit [www.avinc.com/uas](http://www.avinc.com/uas)*

**AV**™  
aerovironment



# Contents

November 30, 2014, Vol. 63, No. 11

## TO THE FIELD

- 10 Realizing the Full Potential of UAS in Air-Ground Operations**  
By MG Michael D. Lundy
- 14 150A Air Traffic and Airspace Management Technician**  
By CW2 Rebecca Pinckney and DAC Brian Swensen
- 16 Traffic is the Greatest Need for Our Tactical Air Traffic Controllers**  
By CSM Eric C. Thom
- 18 Safe Riding Doesn't Just Happen**  
By CSM Leeford C. Cain
- 20 Welcome Back to ARNG Aviation**  
By COL Mark W. Weiss
- 22 The Apache's Sidekick**  
By SSG Christopher D. Smith
- 24 Ask the Flight Surgeon - Eye Injury Protection**  
By Dr. (LTC) Joseph Puskar
- 26 Tech Talk - UAS Airworthiness: The Importance of Understanding Standards**  
By Mr. Joshua Preusser

## SPECIAL FOCUS — Unmanned Aircraft Systems

- 28 PM UAS Update**  
By COL Courtney P. Cote
- 32 Manned-Unmanned Teaming**  
By COL Thomas von Eschenbach
- 36 Alone and Unafraid – UAS Gunnery Standardization**  
By CW4 Frank D. Capri and MAJ Salamasina T. Stokin
- 40 UAS Training for Gunnery, MUM-T**  
By CW3 Adam D. Morton



# Contents

November 30, 2014, Vol. 63, No. 11

## SPECIAL FOCUS — Air Traffic Services

### 42 Training the Air Traffic Control Community for Excellence

By CSM (Ret.) Marlin J. Smith and Mr. Mark J. Hampton

### 46 PM ATC – Evolving to Support Army Aviation

By LTC Johnathan B. Frasier

## FROM THE FIELD

### 50 21st Cavalry Brigade CATT Begins Training D/10th CAB

By LTC (Ret.) Brian Apgar, MAJ Paul Fugere, and CW3 Luis Iglesias

### 52 An Athlete's Mind to an Aviator Problem

By CPT Shane Sullivan

## DEPARTMENTS

### AAAA NEWS

AAAA President's Cockpit.....	8
AAAA VP Chapter Affairs.....	56
Chapter News.....	57
AAAA VP Membership .....	60
New Members.....	61
AAAA Family Forum.....	62
AAAA Legislative Report.....	68
AAAA Scholarship Foundation.....	63

### ARMY AVIATION COMMUNITY NEWS

Advertisers Index .....	64
Art's Attic.....	70
Briefings .....	6
Calendar .....	69
Hall of Fame.....	71
Historical Perspective .....	54
Industry News.....	64
News Spotlight.....	23
People on the Move .....	65

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., (AAP). 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 AAP, 593 Main Street, Monroe, CT 06468-2806. Tel: (203) 268-2450, FAX: (203) 268-5870, E-Mail: [aaaa@quad-a.org](mailto:aaaa@quad-a.org), Army Aviation Magazine E-Mail: [magazine@quad-a.org](mailto: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 AAP, 593 Main Street, Monroe, CT 06468-2806.



# Most capable, best value advanced training helicopter.

**AW119<sup>Kx</sup>**

The AW119Kx is the most durable, safe and “forgiving” advanced training helicopter on the market today. It features modern avionics and glass cockpit, while providing low procurement and operating costs. Plus the AW119Kx offers a five-hour fuel range with the ability to carry additional students, maximizing valuable flight time. Learn more at [AdvancedHelicopterTrainer.com](http://AdvancedHelicopterTrainer.com).

**COMMITMENT BUILT IN.**



**FINMECCANICA**

**AgustaWestland**

**Publisher** / William R. Harris Jr.

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

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

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

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

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

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

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

**Marketing Director** / Jennifer Chittum  
jenn@quad-a.org

**VP Business Development** / Sal D. Lucci  
sal@quad-a.org

**Circulation Department**  
Deb Cavallaro  
Debbie Coley  
Elisabeth Mansson  
Barbara McCann  
Corey Stokes  
Sue Stokes

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

## Editorial Address

593 Main Street, Monroe, CT 06468-2806  
Tel: (203) 268-2450 / Fax: (203) 268-5870  
www.quad-a.org

## On The Cover

PAID ADVERTISEMENT: A next-generation derivative of the combat-proven Gray Eagle® unmanned aircraft system, Improved Gray Eagle (IGE) is a capability enhancement over the Block 1 Gray Eagle configuration currently deployed by the Army in Afghanistan. IGE was developed by General Atomics Aeronautical Systems, Inc. for increased endurance potential and higher payload capacity.  
*Caption provided by the advertiser.*

# Briefings

*Late Breaking News - Announcements - Notes*

## Rep. Duckworth to Retire



Rep. Tammy Duckworth is retiring from the Illinois National Guard after 23 years in the military and ten years after she lost both legs in Iraq when the UH-60 Black Hawk helicopter she was piloting was struck by a rocket-propelled grenade. The National Guard announced the retirement on Oct. 14 and her office confirmed that Duckworth, a lieutenant colonel, is leaving the military. Duckworth was commissioned with the Army Reserves in 1992 and joined the Illinois Army National Guard in 1996.

## AMCOM Changes CSMs



CSM Glen Vela (right), assumed responsibility as the senior enlisted advisor of the U.S. Army Aviation and Missile Command (AMCOM) during an Oct. 24 ceremony hosted by AMCOM Commanding General, MG James Richardson, at the Bob Jones Auditorium in the Sparkman Complex, Redstone Arsenal, Alabama. Vela, and his wife Kathryn, comes to the command from his previous assignment as the command sergeant major for the 166th Aviation Brigade, Fort Hood, Texas. He assumed responsibility from CSM Tod Glidewell, who has held the position since 2012 and will be retiring in March 2015 with more than 34 years of service. Prior to the change of responsibility ceremony, Glidewell was inducted into the Gold Honorable Order of St. Michael by AAAA Tennessee Valley Chapter president, Mr. Gary Nenninger. Glidewell and his wife, Toni, plan on remaining in the Huntsville area.

## 1st Apache Strike Against IS



An Apache helicopter was used in air strikes against the Islamic State over the weekend of Oct. 4-5, 2014, the first such strikes utilizing the Army's premier attack helicopter. In a statement on its website, U.S. Central Command (CENTCOM) reported a series of bombings against IS targets in Iraq's Anbar province as part of Operation Inherent Resolve. The U.S. employed attack, bomber, fighter and helicopter aircraft deployed to the U.S. Central Command area of operations to accomplish the strikes. A spokesman identified the helicopter as an Apache. All aircraft returned from the strike areas safely.

## Travel Regulation Changes Affect PCS Moves

Army uniformed and civilian travelers are directed to use their government travel credit cards for PCS moves as of July 25th, according to the Defense Travel Management Office. By using the government travel card, Army personnel are no longer forced to pay out of pocket for moving expenses. The new policy also generates a number of other benefits, including eliminating the need to apply for advance travel pay and reducing the chance of becoming delinquent on a personal credit card. Just about any moving-related expense is authorized. The Joint Federal Travel Regulations (JFTR) and the Joint Travel Regulations (JTR) were consolidated into one regulation on Oct. 1 and an extensive list of authorized expenses can be found at Appendix G of the new Joint Travel Regulation (JTR) which is available at <http://www.defense-travel.dod.mil/site/travelreg.cfm>. Travelers also can call the Travel Assistance Center at 1-888-HELP1GO, which is open 24/7.



# YOUR MISSION IS CRITICAL. OURS WAS TOO.

## BOSE® A20® AVIATION HEADSET



Military studies show that reducing noise allows for improved communications and mission effectiveness. That's why we introduced active noise reducing headsets to military aircrews across the world more than 20 years ago, forever changing the way crews fly critical missions.

This time, our mission was to improve on the standard set by our Aviation Headset  $\Sigma$ ® – a mission-critical part of military operations worldwide, with a proven record of performance in military applications. The Bose A20 Aviation Headset is specifically designed for the high noise levels military aircrews experience. It features acclaimed noise reduction, a comfortable fit and clear audio. It's made in the U.S.A., and we back it with exceptional customer support. Call today to try it and see how well we've accomplished our mission.

Ask about our no-obligation military evaluation program.  
Call 1-800-736-5018 or visit [Bose.com/MilitaryAir4](http://Bose.com/MilitaryAir4)

**BOSE**  
Better sound through research

**GSA** Schedule  
Contract GS07F0232N

©2014 Bose Corporation. CC014276



# Is Army Aviation Being Marginalized?



Army force structure is under attack from multiple directions. Army leadership is struggling to keep active end strength from going below 490k and there are some proponents who advocate for numbers under 400k! The Army and Army Aviation wisely embarked on a plan to get out in front of the budget hackers who believe that salami slicing a warfighting force is prudent means for achieving monetary targets.

The Aviation Restructure Initiative was created in response to this threat; had it not, the outcome for the Army Aviation Enterprise could have been far worse.

Now the latest indignity to occur: the disestablishment of the aviation staff office in the Army G3/5/7, better known as DAMO-AV. This decision came about as a result of SECARMY and CSA Focus Area Review Groups that were chartered to provide recommendations on how to reduce and consolidate positions and functions within the Army Staff. In the case of DAMO-AV, it was determined that their functions were not vital and recommended elimination of the entire 24 person staff section. All the positions would be recoded and dispersed amongst other HQDA staff sections with only 3 persons identified to perform current DAMO-AV functions.

In terms of numbers of aircraft, Army Aviation is larger than the U.S. Air Force, and larger than the combined air forces of Russia, China and India. In comparison to our sister services the disparity is striking: the Navy has a staff directorate headed by an O-8 with 135 persons, the Marines with an O-9 and 167 persons, and the Air Force with an O-8 and 105 persons.

Army Aviation represents the largest training and equipping portfolio in the Army and is approximately 22% of the Army's training and equipping budget. In times of constrained resources, similar to the 1990s, the most critical inter-service battles both within and amongst the services usually centered on money. Could it be that the long knives are once again being sharpened to diminish the resourcing of Aviation in order to fund and sustain other aspects of the Army? In other words, is Army Avia-

tion, a large resource target, about to be used as a bill-payer for those initiatives that otherwise would go unresourced?

I recall a former Multi-National Force-Iraq commander and former Army Chief of Staff stating that commanders (in both Iraq and Afghanistan) would not depart a forward operating base without Army Aviation. It was, and continues today, to be the most sought after branch in the Army. But be that as it may, here we are about to take out three combat aviation brigades and a key functional staff element at the Department of the Army level.

DAMO-AV was created to synchronize complex aviation issues and has been immensely successful in completing their mission. The Aviation Transformation Task Force, in 2003, deemed that section so important, that it was coded to be led by a 2-star general officer. Today a colonel, working two levels above his grade, admirably accomplishes the myriad staff actions that flow thru his office and quietly and professionally supports Army Aviation to ensure it's trained and ready. And soon, if nothing changes, it will cease to exist. Just like the Caribou, the Comanche, and the C27-J, it will be a memory left only to Army historians to preserve.

BG Howard W. Yellen, Ret.  
31st President, AAAA  
[howard.yellen@quad-a.org](mailto:howard.yellen@quad-a.org)

A close-up, black and white photograph of a Black Hawk's head. The bird's eye is replaced by a glowing green digital display, resembling a cockpit instrument cluster with a central reticle and radiating lines. The background is dark and textured, emphasizing the bird's features.

***THE VALUE OF  
RECOGNIZING  
THAT THE FUTURE  
OF ARMY AVIATION  
STARTS WITH  
COCKPIT DIGITIZATION.***

After successful missions in Iraq and Afghanistan, Northrop Grumman's UH-60V Cockpit Digitization solution is being adopted across the Army Black Hawk fleet. And it's no wonder, considering the open-platform analog-to-digital adaptation minimizes costs and personnel re-training, while the cross-platform application means it's not just the Black Hawk that can benefit from its soaring performance. *That's why we're a leader in adaptable, scalable and affordable solutions.*

***THE VALUE OF PERFORMANCE.***

***NORTHROP GRUMMAN***



## From the Aviation Branch Chief

# Realizing the Full Potential of UAS in Air-Ground Operations

By MG Michael D. Lundy



U.S. ARMY PHOTO BY KATH HANNAH

Over the past 25 years, the role and demand for unmanned aircraft systems increased dramatically. We have come a long way from a few, modestly capable Pioneer UAS deployed at the theater level during Desert Storm, to the rapid fielding of hundreds upon hundreds of unmanned systems ranging from the simple to sophisticated into nearly every echelon of our Army today.

An Apache helicopter takes off at Dugway's Michael Army Airfield as the Shadow unmanned aircraft is readied for its flight onto the battlefield.

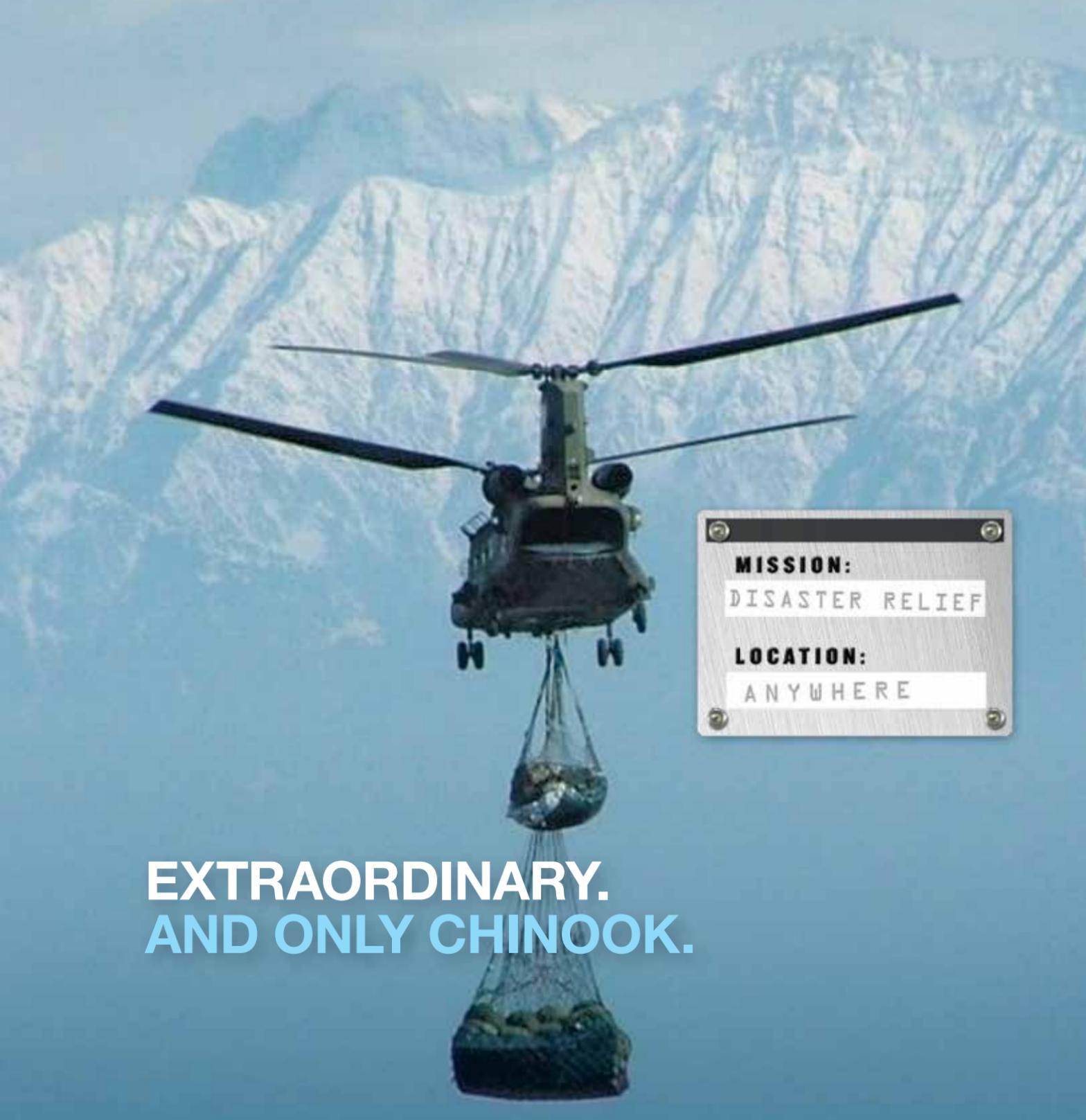
Given this dramatic increase in quantity and complexity coupled with fielding "in contact," we have much work to do to clean up integration, maintenance, training and standardization, as we move from training in support of "predictable" deployment cycles to achieving a level of sustainable readiness to meet emerging and no-notice global requirements.

With the increased capabilities and sophistication of today's UAS, the requirements for our crews are evolving

from executing basic intelligence, surveillance, and reconnaissance (ISR) missions in support of higher echelon collection plans, to fully integrating UAS as a reconnaissance, surveillance, and target acquisition (RSTA) maneuver asset in the Air-Ground Team. We are only scratching the surface in realizing the potential of manned-unmanned teaming (MUM-T), and it will require a focused effort on the part of the Aviation Enterprise and our commanders in the field to ensure we

are trained and ready for future fights. Just as manned Aviation is a maneuver asset that must be fully integrated with the ground scheme of maneuver, so too must our UAS formations.

To fully realize the potential of our UAS capabilities, we must bring our unmanned training and standardization on par with manned Aviation. Increased institutional and unit training of MUM-T is an integral part of how we train. Demanding the same level of agility, discipline and leadership in our



**EXTRAORDINARY.**  
**AND ONLY CHINOOK.**



The CH-47F Chinook is the most versatile, mission-capable heavy-lift helicopter in the world. More powerful than ever with advanced flight controls and avionics, the CH-47F is in a class by itself, whether it's transporting troops and equipment, on deep combat assault, performing search and rescue, or delivering disaster relief. Extraordinary performance—it's what you expect from Chinook.



manned and unmanned formations is essential to maintaining overmatch against our adversaries.

As a foundation, we are changing the focus of the UAS Operator Course for our Shadow and Gray Eagle crews. Instead of developing basic system operators, we are now focused on developing unmanned aeroscouts who understand how to maneuver and conduct reconnaissance as a part of the Air-Ground Team. This training shift is well underway. In addition to the basic system qualification, we are adding training in the synchronization and employment of joint fires, Hellfire gunnery operations, indirect fire target acquisition and delivery and aer scout RSTA tactics, techniques and procedures (TTPs) as a maneuver element during Air-Ground Operations.

To fully enable this training and cultural shift requires updated doctrine and the right training support capabilities. The recently released TC 3-04.45 (Combat Aviation Gunnery) now includes UAS gunnery operations, and we are nearing completion on the MUM-T Commander's Handbook for release this fall. This handbook will serve as a bridging supplement to the release of our updated Aviation Doc-

trine in 2015. For training support, we are working closely with the training enterprise to field the right targets, fund range modifications, field instrumentation and fully develop the weapons and laser safety procedures to enable comprehensive unmanned gunnery and air-ground operations training at home station and the combat training centers. In addition to live training support, we are making a significant investment in virtual capabilities. Linkages between our UAS Universal Mission Simulator, Apache Longbow Crew Trainer and the Aviation Combined Arms Tactical Trainer (AVCATT) are undergoing test and evaluation with fielding planned over the next 24 months. This investment will result in persistent home station and institutional training to drive greater rigor, realism and fidelity as we prepare for the complexities of the future operational environment.

However, institutional training, training support capabilities and doctrine alone will not solve the challenges that lie ahead. The onus is on Aviation commanders and leaders in the field to embrace the power of unmanned options and integrate UAS crews into the Air-Ground Team. No one knows Aviation standardization, training,

maintenance and safety better than the officers, warrant officers, and non-commissioned officers in our Branch. We must reach out to the Shadow units in the brigade combat teams (BCTs) to assist them in their programs, while fully embracing the Shadow and Gray Eagle teams that are forming in the combat aviation brigades as a part of the Aviation Restructure Initiative.

Over the past decade, ground commanders at all levels provided consistent feedback about UAS capabilities: they want more of it, and they have high expectations when they get it. They expect UAS, like all elements of Army Aviation, to deliver in demanding, complex air-ground operations against a determined enemy. As we move forward with UAS elements, whether organic to the aviation brigade or the BCT, owning these challenges and opportunities across the Branch remains critical to realizing the full potential that our unmanned formations bring to the fight and the Air-Ground Team.

Above the Best!

*MG Michael D. Lundy is the Army Aviation branch chief and commander of the U.S. Army Aviation Center of Excellence and Fort Rucker, AL.*



# Photo Contest

## Calling for Entries...

**Winning entries will be published  
in the 2015-2016 AAAA Calendar and  
ARMY AVIATION Magazine.**

*12 cash prizes will be awarded. 1st place (\$500), 2nd (\$300),  
3rd (\$200), 4th (\$100), and eight honorable mentions (\$50).*

**Winning entries will be selected based on  
the themes that best represent  
Rotary Wing, Fixed Wing, Unmanned Aircraft  
and the U.S. Army Aviation Soldier.**

**Visit [www.quad-a.org](http://www.quad-a.org)  
for complete rules and entry forms.**

# SUPPORTING THE MISSION THROUGH LOGISTICS.



## Tried. Tested. And Trusted.

At Elbit Systems of America, our contractor logistic support team, M7 Aerospace, works hard to keep Army Aviators in the air. With a proven history of providing exception levels of mission readiness through logistic support and affordable solutions, M7 capabilities include managing field and depot maintenance services while continuing fully supported main base operations. Our process driven service provides aircraft maintenance, modification, and engineering support tailored to meet the unique mission requirements of aviator, so they can successfully fulfill their mission.

American service – globally proven.

**Elbit Systems**  
of America



AN ELBIT SYSTEMS OF AMERICA, LLC, COMPANY



## Chief Warrant Officer of the Branch

*This month I asked CW2 Rebecca Pinckney the United States Army Aviation Center of Excellence (USAACE) 150A Air Traffic and Airspace Management Branch Chief and DAC Brian Swensen the 150A Course Manager to write an article on the latest updates to 150A training. They execute and are the subject matter experts on the 150A course and the 150A technical specific training in the Aviation Warrant Officer Advanced Course. CW2 Pinckney stated, "Becoming a Warrant Officer was the best decision I've made in my career. I care about our MOS, I care about our Soldiers, and I absolutely love being part of the Warrant Officer Corps." Above the Best!* CW5 Godfrey

# 150A Air Traffic and Airspace Management Technician

By CW2 Rebecca Pinckney and DAC Brian Swensen



The 150A Air Traffic and Airspace Management Technician is an Aviation Branch technical warrant officer specializing in the areas of air traffic services, airfield management, and airspace management. They are present throughout Aviation formations from the company level all the way to the airspace management element in the Army Service Component Command (ASCC) headquarters. The Army made the decision in 2005 to revive the 150A Military Occupational Specialty and the first class graduated in August 2007.

The 150A career field reached an important milestone in October when the first group of students completed the first-ever 2-week 150A specific portion of the Aviation Warrant

Officer Advanced Course (AWOAC). Previously 150As attending AWOAC would attend one of the other Aviator-based tracks. With the implementation of a 150A designed track the Army

Above Left: (left to right) CW2 Rebecca Pinckney (Instructor), CW3 Jeremy Drage, CW3 Craig Upchurch, DAC Brian Swensen (Instructor), CW2 Randy Aguirre, CW2 David Phaneuf practicing emplacement of the theodolite to conduct an airfield assessment.

Above Right: CW2 David Phaneuf (left) and CW3 Jeremy Drage, students in the first AWOAC 150A track-specific segment, conduct a compliance inspection at Allen Stagefield at Fort Rucker, AL.

can now better prepare 150As for further assignments by tailoring their AWOAC experience to the future duties they can be expected to assume.

The course material in the 150A

AWOAC segment focuses on the three core areas of interest for a 150A warrant officer. The Air Traffic Services (ATS) Compliance material was developed in consultation with the Aviation Resource Management Survey (ARMS) team based out of the Air Traffic Services Command (ATSCOM) and culminates with an assessment of an ATS facility belonging to 1-11th Aviation Battalion at Fort Rucker to include an outbrief with the unit commander. The airfield management portion was developed based on the Contingency Airfield Management (CAM) workshop held by ATSCOM and culminates in an assessment of the Geneva Municipal Airport near Fort Rucker and a panel discussion with the CAM workshop instructors.

The airspace management segment was developed in close cooperation with the airspace control doctrine writers and analysts at the Mission Command Center of Excellence. The airspace management portion culminates with the students assuming the role of a notional division airspace

management staff section to draft the division airspace control appendix to the OPOD.

CW3 Jeremy Drage, a student in the first group to attend the 150A AWOAC portion, currently assigned to Headquarters, Pacific Command, said:

*"The ATASMT track specific portion embedded in the AWOAC is vital to the education and growth of our MOS. At CW3 and higher grades the positions we'll be expected to fill will require us to perform the Airfield Management and Airspace Management tasks. Both of these skills were primary topics for the track specific course and afforded us the opportunity to learn or hone these skills and prepare us for our future assignments. Our peers that have already attended AWOAC prior to this only had the option to attend the Safety or TACOPS tracks. Although those options had a broadening effect, they don't help our performance of the tasks a 150A must be successful at. Subsequently, those 150A's missed the valuable experience afforded during these past two weeks."*

Drage was also in the first graduating class of MOS 150A warrant officers in August 2007.

The 150A program has afforded opportunities to many excellent air traffic controllers to become warrant officers and show the aviation community what we bring to the current fight and how we will shape the airspace battlefield in future fights. "We want the best and brightest in our Corps, and it is not only about being a good controller. We need and want NCOs who know how to lead Soldiers, how to train Soldiers, who are willing to learn how to make the 150A and the 15Q relevant to all commanders, and genuinely possess the desire to be the best they can be."

CW5 Allen R. "Randy" Godfrey is the chief warrant officer of the Aviation Branch, CW2 Rebecca Pinckney is the 150A Air Traffic and Airspace Management Branch Chief and DAC Brian Swensen the 150A Course Manager, all with the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.



**UH-60M HUPP KIT®**

**All New:**

- HKH60M-PMI1 - 360 HR PMI**
- HKH60M-PMI2 - 720 HR PMI**

**HUPP**  
AEROSPACE / DEFENSE  
www.HuppAerospace.com

**In Stock For Immediate Delivery!**

1690 Summit Street, New Haven, IN 46774, Phone: 260•748•8282



## Branch Command Sergeant Major

# Traffic is the Greatest Need for Our Tactical Air Traffic Controllers

By CSM Eric C. Thom

While the last decade of deployed operations has stressed our Aviation community, our resilience remains intact. Countless air traffic professionals remain poised to accomplish the next mission, eagerly train and prepare their Soldiers to perform at the highest levels, and continuously seek opportunities to put their technical skills to the test.

Maintaining this pace and excellence as we transition out of deployed operations will require a continued modernization of air traffic systems, and a keen understanding and technical competency of complex air traffic environments. The Branch's effort to modernize tactical systems has provided air traffic services (ATS) units the capability to support Aviation operations across a broad range of requirements.

Army tactical ATS systems include: the Mobile Tower System (MOTS); the Air Traffic Navigation, Integration, and Coordination System (ATNAVICS); the Tactical Terminal Control System (TTCS); and the Tactical Airspace Integration System (TAIS) all of which are described in more detail elsewhere in this issue.

While equipment modernization is on track, accessibility of live aircraft traffic training opportunities and integration of ATS into home station



SPC Michael Elizondo, an air traffic control specialist from Company F, 2nd General Support Aviation Battalion, 4th Aviation Regiment, 4th Combat Aviation Brigade, 4th Infantry Division, prepares to run simulated aircraft approaches during ATNAVICS radar system training at Butts Army Airfield on Fort Carson, CO.

collective training events can be a challenge. Although ATS units have the required personnel and equipment, they do not person the "traffic" required to support controller training.

Equipment and academic training is only part of the certification process for our controllers. Unit training programs must include live traffic events to ensure Soldiers possess the skills and abilities required to provide safe and expeditious air traffic control in support of Army, Joint and coalitional operations.

### Training Strategies

The Aviation Enterprise has developed two deliberate actions to

support training opportunities for tactical air traffic controllers. First, Product Manager, Air Traffic Control (PM ATC) has worked diligently to develop and provide simulation capability for ATS units. This effort resulted in the recent fielding of the Air Traffic Control Common Simulator (ACS). Over the past 18 months, this program advanced from a concept on the drawing board to a system being utilized in the field for qualification and currency training. The ACS provides a cost effective and realistic training capability for commanders to incorporate into their training program and can be utilized to meet

approximately 50% of position time training requirements.

The second action is to change AR 95-2 to solidify the requirement for tactical units to utilize fixed-base ATC facilities to support certification and proficiency training programs. I know there are those out there that will say no change is necessary because we have always had the option of training in fixed-based facilities, and that is true to a degree. The problem had more to do with interpretation and limitations than the authority to conduct the training.

Some units have achieved great success working with Installation Management Command (IMCOM) facilities to train controllers, while others have struggled with coordination and availability of personnel to take advantage of the training opportunities our installation airfield ATC facilities provide. The change to AR 92-2 is intended to provide commanders a better understanding of how fixed-base training opportunities are essential to their unit air traffic training program.

An extract of the change states:

*Army installation ATC facilities (includes Army contract facilities) will be utilized to train Army air traffic controllers assigned to tactical units. These facilities provide essential technical training for certification and proficiency. Installation air traffic density, hours of operation, and internal training requirements will be used to determine the number of military controllers that can be trained in the facility during a given period.*

Utilization of installation ATC facilities for Soldier training requires close coordination with IMCOM and continuous oversight from unit leaders. A few points to remember: A letter of agreement (LOA) is required to outline the overall training program, objectives and responsibilities for the tactical unit and IMCOM facility.

The unit must be prepared to apportion Soldiers to this training for the agreed time period or until training objectives (i.e., initial qualification, currency, etc.) are met. And finally, unit training NCOs must ensure all training is documented as controller position time completed in a fixed-base facility can be counted toward a rating for a tactical system.



## New DC PRO Series Headsets

### Clear communication for command, control and training operations

David Clark Company **DC PRO Series** communication headsets provide lightweight durability with a magnesium alloy suspension system, while the 'rest-on-ear' design and plush leatherette ear seals and head pad offer outstanding comfort.

**DC PRO Series** headsets are available as **passive noise-attenuating** or **Hybrid Electronic Noise-Cancelling** models. The DC PRO Series is customizable for a variety of communication environments including UAV control/command centers, data vans, flight simulation and training, or any moderate to low-noise environment.

For more information  
call 800-298-6235 or  
visit [www.davidclark.com](http://www.davidclark.com)



© 2014 David Clark Company Incorporated  
® Green headset domes are a David Clark registered trademark.

[WWW.DAVIDCLARK.COM](http://WWW.DAVIDCLARK.COM)



We will continue to modernize our ATS tactical systems, but we must not lose sight of our obligation to provide realistic and demanding training in order to ensure our Soldiers are prepared to conduct operations in complex environments we surely will encounter during future deployment operations. If you take nothing else from this article, remember: if you want them trained and ready when you need them, then you need to be there when they need you.

I am always interested in feedback

and ideas that can improve training. If you have a suggestion that you believe could improve or facilitate unit or individual controller training, I would be happy to hear from you.

Above the Best!

CSM Thom  
[eric.c.thom.mil@mail.mil](mailto:eric.c.thom.mil@mail.mil)

*CSM Eric C. Thom is the command sergeant major of the Aviation Branch and the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.*



# Safe Riding Doesn't Just Happen

By CSM Leeford C. Cain

*Safe driving or riding doesn't just happen. It's a byproduct of receiving the right training and education, exercising self-discipline, meeting standards and assessing one's ability to execute a given task.*

Since I spoke those words a little more than a month ago, we have closed out another fiscal year. And while accidental losses continue to trend downward, we're still missing 129 Soldiers from our formations due to incidents that could have been prevented. Of that total, 75 percent of those fatalities resulted from off-duty privately owned vehicle accidents. That tells me that we still have a long way to go. We're simply not doing enough when we allow even one Soldier to be lost because of a senseless, careless disregard of safety protocols.

We're conditioned to expect the loss of life on the battlefield, but losing a Soldier during a weekend at home, when he or she should be enjoying time and camaraderie with their friends and families, is a needless tragedy. I think of the young child growing up without a father or mother, and the spouse having to pick up the pieces alone to raise that child. I see that young squad leader trying to understand where he or she went wrong, and who must now fill that void in the ranks and complete the mission. Did we do enough? Did we fail the Soldier and his or her family?

What do you tell the unit commander, who'll notify the family and answer their questions about why this Soldier died. How do you explain that their loved one died simply returning to the barracks after a night of partying with "buddies?" Weren't these the same battle buddies that watched over each other while deployed? Why didn't that continue at home station? Where, as leaders, peers and family members, did we fail this Soldier?

From day one, the Army teaches Soldiers those values of loyalty, duty,

respect, selfless service, honor, integrity and personal courage; loyalty to support and to stand up for leaders and fellow Soldiers alike; duty to fulfill your obligations to the mission, the unit, family and peers; respect for others and to put forth your best effort; selfless service, placing the welfare of the nation, the Army and your subordinates before your own; honor to carry out, act and live the Army values; integrity to do what is legal and morally right; and personal courage to face fear, danger or adversity (physical or moral) to continue on the right path.

Those values are again reinforced through the NCO Creed in which NCOs declare their two basic responsibilities - "accomplishment of my mission and the welfare of my Soldiers."

We have our challenges. Every weekday after 5 p.m., on weekends and holidays, Soldiers often leave behind those tools that will keep them safe. No longer directly supervised by unit leaders, these Soldiers hit the bars, beaches and sometimes head home after an especially long and trying week. Some get drunk and careless or take unnecessary risks like driving too far without adequate rest or route planning. Many of these Soldiers later pay with their lives for their indiscipline and their lapse of judgment.

### So how do we reach that Soldier?

You've heard it all before. Get actively involved. Teach, coach and mentor that Soldier to do what is right both on and off duty. We owe it to ourselves and, more importantly, to that Soldier.

We also ask and encourage families to get actively involved. Steady their Soldier's hand and impress upon them how



SSG Jimmy Robinson, brigade motorcycle mentor assigned to HHC, 3rd CAB, discusses motorcycle procedures with a member of the demonstration team during a brigade motorcycle safety day on Hunter Army Airfield, GA, Oct. 9.

important they are to the family and nation. Make sure they're rested and trips are well planned with adequate stops for rest, food and fuel. Inspect and ensure that their vehicles are well-maintained and can be safely driven before taking those long trips to and from home.

Understandably, families may be anxious to see their loved one, especially after a long absence, but remember it's still more important that they see their Soldier alive. It is our duty and commitment to those families whose sons and daughters have joined our ranks and have pledged to dutifully serve and protect our nation's freedoms and way of life. Together, we can reduce these accidental losses of life.

**Army Safe is Army Strong!**

*CSM Leeford C. Cain is the command sergeant major of the U.S. Army Combat Readiness/Safety Center at Fort Rucker, AL.*

# SWITCH TO THE AUTO INSURANCE WHERE 92% OF MEMBERS PLAN TO STAY FOR LIFE<sup>1</sup>



*USAA members Robert Griffin III,  
Washington Redskins quarterback,  
and his parents, U.S. Army veterans*

## **USAA Auto Insurance: award-winning customer service.**

Renowned for our fast, efficient claim service, USAA is highest rated in customer advocacy in a survey conducted by Forrester Research, Inc.<sup>2</sup> Legendary service: just one reason our members are as loyal to us as we are to them.



**GET A QUOTE.** [usaa.com/insurance](http://usaa.com/insurance) or 866-461-USAA (8722)



<sup>1</sup>92% based on 2014 member communications trend survey. <sup>2</sup>Forrester Research, Inc., Customer Advocacy 2013: How U.S. Consumers Rate Their Financial Services Firms, November 2013. Use of the term "member" or "membership" does not convey any eligibility rights for auto and property insurance products, or legal or ownership rights in USAA. Membership eligibility and product restrictions apply and are subject to change. Automobile insurance provided by United Services Automobile Association, USAA Casualty Insurance Company, USAA General Indemnity Company, Garrison Property and Casualty Insurance Company, and USAA County Mutual Insurance Company, San Antonio, TX, and is available only to persons eligible for P&C group membership. Each company has sole financial responsibility for its own products. © 2014 USAA. 208787-0914



## Welcome Back to ARNG Aviation

By COL Mark W. Weiss

In our last edition, I described who we are – first conversely – by destroying a few myths, and then by listing a few stats for our organization. In this issue, I'll tell you where Guard Aviation is headed and how it will get there...a roadmap to readiness and responsiveness.

### Strategic Direction

Our strategic plan's main effort will always be to accomplish our “dual-mission” – provide competent aviation units to combatant commanders, and provide timely and capable Aviation support to the governors of the 54 states, territories, and District. Everything else we do is subordinate to these two lines of effort. Manning, training, equipping, organizing, and self-development tasks all feed our “Employ the Force” LOE.

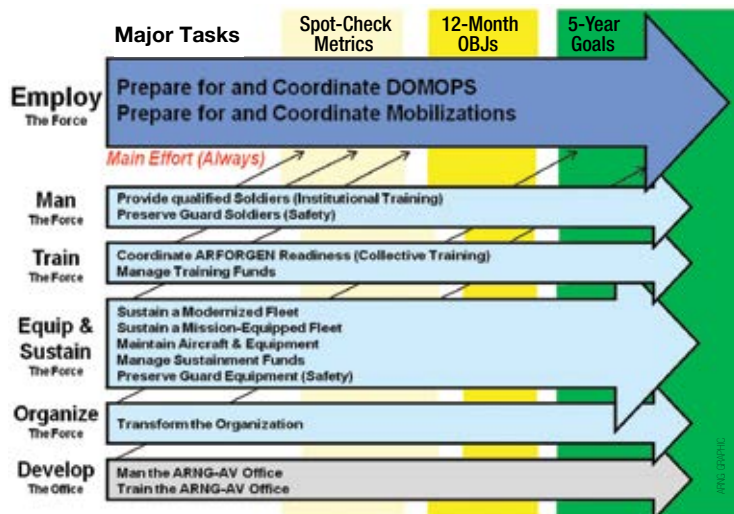
Our 5-year goals give us strategic direction. Some of these goals are “sustain” goals that we've had over the years – such as “Sustain a 100% success rate at meeting mobilization requirements.” But some of them are one-time goals, such as “Achieve a 10% mishap reduction.” To help provide course corrections along the way, each LOE also has 12-month objectives. Likewise, these include “sustainment objectives,” such as “Sustain 90% duty military occupational specialty qualified (DMOSQ),” and “achievement objectives,” such as “Reach a 65% Fleet Modernization index.”

Throughout the journey, we see ourselves more precisely with quarterly, quantifiable spot-check metrics, such as “domestic operations (DOMOPS) Readiness” (that measures available lift-cargo aircraft and crews) and “Mishap Gradient” (that sees if our trend-lines point downward).

Finally, we use the in-house, State-based Aviation Scorecard to supplement the unit-based commanders Unit Status Report, to better assess our small-unit readiness as these units progress through their Army Force Generation (ARFORGEN) cycles. Our “Block II” Scorecard was just released, and we're excited about its new logistics module, which will help state Aviation leaders better assess the performance of their aircraft maintenance programs. I'll give you some feedback on this program later in the year.

### Mission Command

The Active Component headquarters (e.g., U.S. Army Forces Command (FORSCOM)) achieves results by directing action through its “span of control,” normally between 3 and 7 subordinate organizations. The Guard's mission command is more challenging. Since the states, territories, and District report to



Army National Guard Aviation Strategic Direction

their governors, and not the ARNG Directorate at Arlington Hall Station, Virginia, our Aviation and Safety Division achieves results by influencing action throughout its incredibly large span of control – 54. To help with this mission command, we employ our State Army Aviation Officer Advisory Council, and its associated Executive Committee. While this technique may sound unorthodox to the Active Component, they are collections of key external aviation leaders who help generate “best ideas” from the field, gain buy-in from the 54, and perform quality control on Arlington Hall staff work. They are immensely valuable and help us “herd the cats.”

As implied above, the ARNG Aviation and Safety Division (ARNG-AV) provides resources, strategic guidance, policy, and staffing assistance to the states, and coordinates with HQDA, National Guard Bureau (NGB), and other governmental agencies in support of the ARNG state and federal mission. Via direct coordination and participation in all facets of the Aviation Enterprise, ARNG-AV serves as the channel of communication to the states, and helps our Acting-Director, MG Judd H. Lyons, achieve the strategic goals of the Army National Guard writ-large. In coming editions of this publication, I'll lay out a few examples of how this strategy translates into ready, relevant, and competent units – and how these units are excelling at home and abroad.

Finally, let me send out an early invitation. If you attend the AAAA Mission Solutions Summit in Nashville next March, please stop by the ARNG booth. If you're a Guardsman, we'll show you a few things you may not know, and help you become a member of Army Aviation's premier professional forum – AAAA. If you're not a Guardsman, stop by and we'll show you why you should be. Fly Safe – Fly Guard.

*COL Mark Weiss is the chief of the Army National Guard Aviation and Safety Division located in Arlington, VA.*



# OUR TECHNOLOGY TURNS HITS INTO MISSES.

Protecting aircrews and aircraft against evolving threats requires a partner with experience. At BAE Systems, our unsurpassed infrared countermeasures heritage means our customers can depend on more than 40 years of proven experience. We've produced and fielded more aircraft self-protection systems than any other company in the world, delivering advanced technology to keep our customers safer today, and tomorrow.



NASHUA, NH

Learn more at: [WWW.BAESYSTEMS.COM/THREAT-MANAGEMENT](http://WWW.BAESYSTEMS.COM/THREAT-MANAGEMENT)

**BAE SYSTEMS**

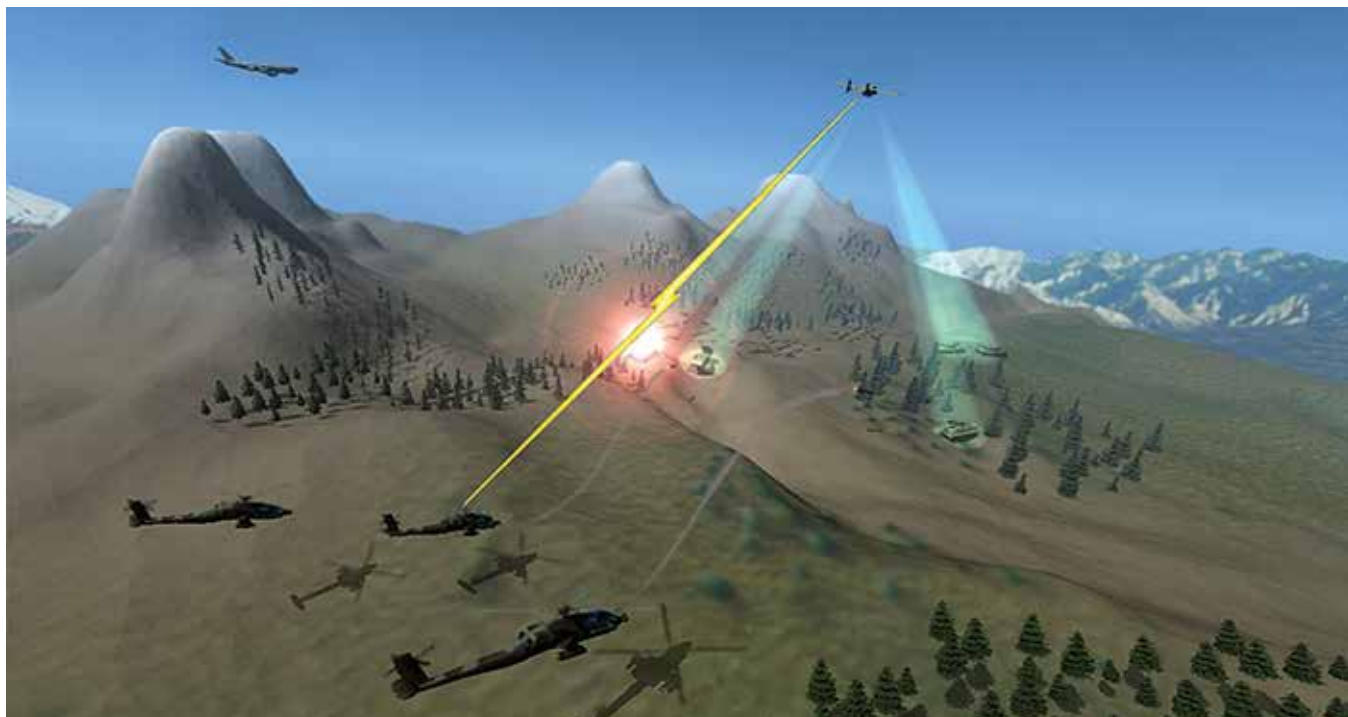
INSPIRED WORK



## 128th Aviation Brigade Update

*For this issue, I have asked SSG Smith to describe the efforts your school house is undertaking to ensure initial and sustainment training of those maintainers charged with ensuring the mission ready capability of assigned unmanned aircraft system assets. COL Rigole, Commander*

# The Apache's Sidekick By SSG Christopher D. Smith



In an ever changing battlefield, the demand for the ability to transmit real-time battlefield metadata and video air-to-air/air-to-ground is becoming increasingly important. Some argue that unmanned aviation assets will one day replace our manned aircraft like the Apache; however, the relationship between manned and unmanned aviation systems is much more effective when the relationship is symbiotic.

The AH-64E Apache Army helicopter can now deploy with a greatly enhanced tactical advantage on the battlefield. Apache pilots now have the ability to communicate with unmanned aircraft systems (UAS) to receive and transmit real-time imagery, metadata, and also monitor UAS sensor and weapons payload information. This is made possible through the Unmanned Tactical Com-

mon Data Link (TCDL) Assembly (UTA) system.

The UTA consists of two integrated systems: UAS Receiver (UR) for receive only and Air-to-Air/Air-to-Ground (AAG) for transmit and receive. It is broken down into four levels of interoperability (LOI) each allowing a variety of capabilities. The UTA Level 2 allows Apache pilots to fly mission routes while

Depiction of Apache and UAS metadata and video transfer.

monitoring a direct data and video feed from the UAS while flying its own flight path. When a situation permits, UTA Level 3 will allow a copilot gunner in the Apache to have control of the payload sensor of the UAS while it is flown by its ground unit operators. The UTA Level 4 gives Apache aviators full control of a UAS's capabilities less takeoff and landings. Apache pilots with UTA 4 can assign its unmanned wingman to area reconnaissance, surveillance and even the targeting of enemy forces across a large area of operation.

The UTA on any LOI has the ability to record data taped via Apache observed and video received from UAS feed utilizing a digital video recorder (DVR). This multichannel recording device can support up to three channels of simultaneous

recording. Each DVR is equipped with a Solid State Recording Device (SSRD) that is self-contained and tightly sealed keeping the stored video data safe.

### Maintenance Challenges

With this increase in capability for the platform comes a maintenance requirement that challenges our Apache maintainers' skills. In order to perform maintenance operational checks our maintainers now must understand data compression rates, frequencies across multiple bands of transmission, and computer networking fundamentals such as identifying and inputting internet protocol (IP) addresses.

Working with the platform managers, the 128th Aviation Brigade has ensured technical manual procedures and test equipment for this vital system have been streamlined to the point that maintainers with the appropriate training can easily fault isolate and return systems to an operational status quickly and efficiently. Maintenance operational checks (MOC) are written so that specific areas and functions can be checked/isolated without having to go through the whole system.

There is no longer a need to have two UTA-equipped aircraft to perform MOCs with the fielding of a unique UTA test set. The test set, which can be set up and operated by a maintainer in a matter of minutes, has already been fielded to those units who have received the UTA. Exportable training packages have also been developed to provide Soldiers in the field with refresher and sustainment training.

The Apache is battlefield proven. The added ability of a UAS wingman increases its firepower and overall effectiveness to support and sustain ground troops in combat. While the added benefits are almost immeasurable with the added task saturation involved, it will be important for aviators to maintain the highest level of crew coordination. The unmanned aircraft's capabilities are enhanced under the guidance of its Apache aviators.

Ensuring this system is always operational and fully mission capable when needed is the challenge for our aviation system maintainers.

---

*SSG Christopher D. Smith is a 15T Training Developer in the Systems Integration Division, S3, 128th Aviation Brigade, Joint Base Langley-Eustis, VA.*

## NEWS SPOTLIGHT

# 25th CAB Paramedics Home Station Training

By SGT Jessica DuVernay



US ARMY PHOTO BY MSG GENE BELIS, 25TH CAB

Soldiers from 25th Combat Aviation Brigade, 25th Infantry Division, participate in a hands on portion of a training class that will help them maintain the licensing requirements, at Kapiolani Community College, in August.

**M**edics assigned to the 25th Combat Aviation Brigade, 25th Infantry Division, partnered with Kapiolani Community College in August, for the 1st phase of the 25th CAB's Paramedic Home Station Training Program.

The program, still in development, will allow 25th CAB medics to train, earn and maintain paramedic certification that is required to qualify as an Army Flight Medic.

"We created a marriage between Kapiolani Community College and the 25th CAB that opened the door for two things: the first being it provided the courses for us to maintain and recertify paramedic and critical care licensure," explained MSG Gene Belis, brigade senior medical noncommissioned officer. "It also provides an opportunity for additional medics within the brigade, and possibly the division, to go through the course." Currently, medics need to recertify several licenses within three years to maintain their credentials. According to Maj. Alan Wu, the 25th CAB flight surgeon, with this program the CAB is working to recertify all medics every two years in order to keep them ahead of the curve.

The August training was comprised of 4 classes: Pre Hospital Trauma Life Support, Advanced Medical Life Support, Advanced Cardiac Life Support, and Pediatric Advanced Life Support. Medics were trained for a total of 16 hours for each class.

Once completed the program will include 72 hours of mandated training through the National Registry of Emergency Medical Technicians, and includes up-to-date classes on current trends and standards throughout the medical field. This initial phase included 48 hours of training and produced 44 credentials.

To finish their certifications, the Soldiers will take their final class in September called Electrocardiography and Pharmacology. The brigade will also continue to train additional medics as classes come available. Expanding the program to medics throughout the entire 25th Infantry Division is a possibility in the future.

*SGT Jessica DuVernay is assigned to the 25th Combat Aviation Brigade Public Affairs Office at Wheeler Army Airfield, Hawaii.*



# Eye Injury Protection

By Dr. (LTC) Joseph Puskar

**P**roper wear of eye protection not only while flying, but also when working in the shop or at home is of the utmost importance in the prevention of eye injury. Most of us are not always wearing eye protection when we should be.

According to a national survey by the American Academy of Ophthalmology, only 35 percent of respondents said they always wear protective eyewear when performing home repairs or maintenance, and even fewer do so while playing sports. Men are more likely to sustain an eye injury due to the types of activities they tend to engage in. Almost half of all eye injuries occur at home as reported during a survey conducted by the American Academy of Ophthalmology and the American Society of Ocular Trauma. Over 40 percent of reported eye injuries happened during projects and activities such as home repairs, yard work, cleaning and cooking. More than a third of injuries in the home occurred in living areas such as the kitchen, bedroom, bathroom, living or family room, and over 40 percent of eye injuries every year are related to sporting or recreational activities.

Eyes can be damaged by sun exposure as well as by chemicals, dust, or other objects, so be sure to wear those high quality, impact-resistant, UV blocking sunglasses for extended periods spent outdoors. Among all eye injuries reported in the survey, more than 78 percent of people were not wearing eyewear at the time of injury. Of those reported to be wearing eyewear of any type at the time of injury including eye glasses and contacts, only 5.3 percent were wearing safety or sports glasses.

Depending on the type of maintenance shop, flight surgeons should conduct annual or bi-annual shop visits to be sure that workers have readily available, and are properly using the eye

protection and other protective clothing and equipment for every chemical agent used there. Consult the posted safety data sheets (SDS; formerly called material safety data sheets, MSDS) to find the proper protective eyewear and clothing, and the recommended first aid treatment of accidental exposures for each chemical used. In case a chemical burn to the eye does occur, immediately flush the eye with copious amounts of clean water, and seek emergency medical treatment right away. The body's natural tearing action also helps greatly to wash out offending chemicals, and neutralize acids and caustic bases. Basic chemicals are generally much more injurious than even the acids are to the eye, so be especially cautious when using them. Eye wash stations should be checked periodically to be sure they are functional, clean, and readily available for rapid use. Any deficiencies found should be reported, and corrected before the need for emergency use arises.

### What to Do For an Eye Injury

For all eye injuries, try not to touch, rub or apply pressure to the eye. Don't try to remove any object stuck in the eye without medical assistance. Do not apply ointment or medication to the eye, and get to a doctor as soon as possible, and preferably to an ophthalmologist.

If your eye has been cut or punctured, gently place a shield over the eye. The bottom of a paper cup taped to the bones surrounding the eye can serve as a shield until you get medical attention. Do not rinse with water, and again do

not try to remove any object stuck in eye, or rub or apply direct pressure to the eye. Avoid giving aspirin, ibuprofen or other non-steroidal, anti-inflammatory drugs. These drugs thin the blood and may increase the risk of bleeding. After you have finished protecting the eye, see a physician immediately.

If you get a particle or foreign material in your eye, do not rub the eye. Lift the upper eyelid over the lashes of your lower lid. Blink several times and allow tears to flush out the particle. If the particle remains, keep your eye closed and seek medical attention.

To treat a blunt force injury to the eye, gently apply a small cold compress to reduce pain and swelling, and be careful not to apply any pressure. If the blow results in a black eye, bleeding into the white part of the eye, or if pain or visual disturbance occurs even after a light blow, immediately contact your ophthalmologist or go to an emergency room. Remember that even a light blow can cause a significant eye injury. To treat sand or small debris in the eye, use eyewash to flush the eye out. Never rub the eyes. If the debris doesn't come out, lightly bandage the eye and see an eye doctor, or visit the nearest emergency room.

*Doc Puskar*

### Question for the Flight Surgeon?

If you have a question you would like addressed, email it to [AskFS@quad-a.org](mailto:AskFS@quad-a.org); we'll try to address it in the future. See your unit flight surgeon for your personal health issues. The views and opinions offered are those of the author and researchers and should not be construed as an official Department of the Army position unless otherwise stated

*Dr. (LTC) Joseph Puskar is a flight surgeon and the director of the Army Flight Surgeon Primary Course at the US Army School of Aviation Medicine at Fort Rucker, AL*



# THE ONE AND ONLY.

## EO/IR AWR QUALIFIED FOR MEDEVAC



TALON



THE WORLD'S SIXTH SENSE™



/flirhq



@FLIRdetection



# UAS Airworthiness: The Importance of Understanding Standards

By Mr. Joshua Preusser



S280 Ground Control Station

Writing an article about unmanned aircraft system (UAS) airworthiness seemed a little odd at first. Like many first impressions, details were missed in that first appraisal. Such occurrences seem to be a recurring theme with UAS. Anyone with aviation experience will likely see them as an aircraft – and not all that different from a manned aircraft given they rely on the same underlying physics.

However, airworthiness for unmanned aircraft isn't as simple as taking manned aircraft airworthiness standards and applying them to unmanned aircraft (UA). Within the Army and industry, we're still learning the differences and similarities between manned and unmanned aircraft and the implications of those differences. Manned aircraft have over a century of learning what does and doesn't work. Unmanned aircraft do not have that history.

From the experience of manned flight, there are many standards that have been written capturing lessons learned and are easily applied to UAS (a wing will always be a wing, and salt fog will always corrode the same materials). Others aren't as clear cut. In fact there are some instances where following a standard as written for a manned aircraft can cause problems when directly applied to UAS. In those cases the underlying intent of the standard needs to be examined.

This need was very apparent in a recently completed effort for standardizing the behavior of ground control station (GCS) hotkeys. While this effort included hotkeys for controlling several different types of control activation and selections, it was the "simple" on/off switch that turned out to be the most complicated case. In a manned aircraft,

turning something on or off can literally be as simple as flipping a switch. However, in a UA, it is more akin to playing a game of telephone requesting the action be done. That being the case, there was significant effort involved as standards written from the experience of manned aircraft tend to assume there is some form of physical connection between the control and the item being controlled. In contrast, a UAS tends to operate far from its GCS so there is no physical connection on which to rely, and the ability of a command to definitively reach the aircraft (and the feedback to be provided in return) requires designing the system appropriately. During that effort, understanding that the standards were intended to supply the operator with timely, accurate and meaningful information was key in determining how to handle the potential for corrupted, dropped (lost), or delayed commands without giving inaccurate, meaningless or outdated information to the operator.

While that was but a single case applied to a single GCS controlling a single UA, the same process applies when dealing with more complicated interactions – and there are many more complicated interactions when dealing with UAS. In fact, some of these interactions are rarely

or completely unseen in the world of manned aviation. A couple of examples of such capabilities are: having a single flight crew operate multiple aircraft or having the ability to allow remote control of the payload and aircraft by individuals removed from both the aircraft and flight crew. Then there is even the basic ability of handover of an aircraft in flight from one GCS to another GCS. While routinely done, this is something that requires special examination as the compatibility between a GCS and UA can be changed by simply changing the software version on one, but not the other.

Now considering that each of these capabilities needs to be evaluated just like that "simple" on/off command, it could quickly become a large if not impossible task. This is especially true when encountering capabilities that have no equivalent in manned aviation. Fortunately many of these capabilities can be broken down to common basic concepts. Then, after breaking them down into common actions, we can begin to examine ways of performing them in a safe and airworthy manner. As part of working on some of these capabilities, we've learned that not only do the manned aviation standards need to be well understood, but that some answers for UAS require going beyond existing aviation standards.

Not only are airworthiness and solid systems engineering processes inherently intertwined, but that UAS are indeed aircraft, albeit unique aircraft.

*Mr. Joshua Preusser is the lead AED engineer supporting the Product Manager, Common Systems Integration (PM, CSI). He is located at Redstone Arsenal, AL.*



## Latest-Generation Versatility

### AW169

The AW169 is the brand new 4.5 tonne class twin-engine helicopter.

Featuring an advanced glass cockpit, state-of-the-art avionics, 4-axis digital autopilot, full digital electronic engine control (FADEC) and dual channel Flight Management System (FMS) for reduced pilot workload and increased passenger comfort.

Based on the operationally proven, market-leading AW139 platform and belonging to the AgustaWestland 'Family' of products (with AW189 and AW139), mixed-fleet operators can leverage the advantage of a common design philosophy across platforms.

### LEADING THE FUTURE

[agustawestland.com](http://agustawestland.com)



[flickr](#) [Instagram](#) [LinkedIn](#) [Twitter](#) [YouTube](#)

 **AgustaWestland**  
A Finmeccanica Company



Gray Eagle undergoing hardware/software in-the-loop testing



## PM UAS Update

By COL Courtney P. Cote

**F**irst let me start by saying how excited I am to be project manager of one of the more complex project management offices within the Army. The Project Management Office, Unmanned Aircraft Systems (PM UAS) continues to field and sustain our current programs while improving functionality and technology along the way. I have been in position for nearly 90 days, and continue to evaluate and assess current operations and am fortunate to have an exceptional deputy as well as product managers to assist me with the myriad everyday responsibilities that come with my position.

The mission of PM UAS is to provide our nation and its allies world class interoperable unmanned aircraft systems and integrated payloads through excellence in program management and lifecycle support. The PM UAS team, comprised of Soldiers, civilians and industry partners alike, works tirelessly to

provide world class UAS technology and support to our nation's forward deployed men and women.

So where have we come from, and more importantly where are we heading in the near term? PM UAS currently manages four programs of record, (Gray Eagle, Shadow, Raven/Puma, and OS-RVT) focused on enhancing combatant commander and Soldier capabilities. The UAS fleet has logged over 2.1 million flight hours to date. 90% of those hours have been flown in direct support of combat operations.

As many of you know, the Army has recently determined the need for a wide scale restructure of manned aviation assets, and unmanned aircraft, specifically the Gray Eagle and Shadow systems have been called upon to fill the void left from divesting certain manned aircraft within the armed reconnaissance squadrons. In doing so, combat aviation brigade (CAB) commanders now

enjoy an organic manned-unmanned teaming (MUM-T) capability never afforded in the past. PM UAS is currently fielding UAS assets in order to fulfill the requirement to include unmanned aircraft within the CABs.

### Medium Altitude Endurance Product Office

The MAE Product Office (Gray Eagle) is in the planning stages for the execution of Fielding and New Equipment Training (NET) for the Follow-On Operational Test and Evaluation (FOT&E), currently scheduled for Third Quarter FY15. The FOT&E is focused on the migration of maintenance tasks to the soldier, implementation of LINK 16, the universal products (Ground Control Station, data terminal and sitcom terminal) and the new unit organization. The test unit is Company F, 227th Aviation Regiment, located at Fort Hood, Texas. The Gray Eagle



US ARMY PMAUS COURTESY PHOTO

Company will execute reconnaissance, surveillance, security, attack, and command and control missions to provide dedicated mission configured UAS support to an assigned division combat aviation brigade, fires brigade, battlefield surveillance brigade, brigade combat teams, and other Army and joint force units based upon mission priorities.

### Small UAS Product Office

The SUAS Product Office is in the process of transitioning the SUAS fleet under the new Rucksack Portable UAS (RPUAS) Capabilities Production Document (CPD) signed late last year. The RPUAS CPD defines the small UASs as Long Range Reconnaissance (LRRS), Medium Range Mobile (MRM) and Short Range Micro (SRM). Initially these will be resourced with the current inventory of the Puma and Raven systems on hand. The SUAS logistics team established a warehouse and in-

ventory control point (ICP) as well as shifted to a new contract approach leveraging several vendors to bring the best the community has to offer at the best value to the taxpayer for repair of the SUAS fleet. The SUAS team has laid the groundwork for other platforms to make informed decisions about the establishment of their own ICP.

### Maintenance, Training, Supply

PM UAS is making several improvements in the areas of maintenance, training, and supply. Our maintenance initiative is focused on providing the required knowledge, documentation, and tools for the Soldier to operate and maintain the Shadow system without reliance on a field service representative (FSR). FSRs are now centered in geographic regions to provide the flexibility to respond to unit needs.

Changing the Shadow maintenance system requires careful coordination with the original equipment manufacturer (OEM) and the Army's organic supply and maintenance organizations. Logisticians are carefully reviewing the Technical Data Package (TDP) and other variables to determine the appropriate levels of repair (Level of Repair Analysis). This is a critical process influencing every facet of the maintenance concept. The Business Case Analysis (BCA) uses the repair analysis data to determine the appropriate maintenance strategy. The

BCA will be complete by 2015 and used to influence the maintenance strategy in 2017 and beyond.

### OSRVT

The One System Remote Video Terminal logistics team has had a busy year actively managing and deftly guiding the OSRVT logistics program through the labyrinth of changing hardware, parts obsolescence, dynamic schedules and documentation requirements in order to meet its Initial Operational Test and Evaluation in FY15 with the Level of Interoperability 3 (LOI3) capable OSRVT. Currently, OSRVT meets all threshold CPD requirements with the exception of the LOI3 bi-directional capability which begins fielding 1st Qtr. FY14 – three months ahead of original schedule.

### Mobile Technology Team

The Tech Management Mobile Technology team has overseen the design and development of multiple mobile applications including interactive technical manuals, programs of instruction review, and a localized Army Publication library. The Ground Maneuver Product Office (Shadow) has been the primary stakeholder since the inception of this concept and continually seeks soldier input as the driving force behind many of the design requirements. As the Mobile Technology team has moved forward, meeting the



The Army Manned-Unmanned Teaming (MUM-T) Aircraft

US ARMY PMAUS COURTESY PHOTO



U.S. Army RQ-20A Puma

U.S. ARMY/PM US COURTESY PHOTO

guidelines of Training and Doctrine Command and ALC 2015 has been at the forefront of their vision. By providing Soldiers with a dynamic one-stop source of information for all learning material, as well as additional Interactive Multimedia Instruction, we are

putting Soldiers in the driver seat of the training environment.

### Simulation

The Multiple Unified Simulation Environment/Air Force Simulation Environment for Reconnaissance and

Surveillance (MUSE/AFSERS) developed by the UAS Joint Systems Integrated Lab at Redstone Arsenal is the primary Command and Staff UAS Trainer for the DoD and coalition partners. Extensive use of simulation for UAS training has proven to be a highly cost effective approach due to the lower relative costs of simulation based training. Procurement cost for a UAS Universal Mission Simulator (UMS), which is capable of training Gray Eagle, Hunter, and Shadow UAS operators, is relatively inexpensive per unit because it leverages the actual ground control environment. The saving that the UMS brings in terms of flying hours is recouped well within the first year of a unit's flying hour program and allows training over a much broader range of system failures/conditions and mission scenarios.

PM UAS continues to provide our nation and its allies world class interoperable unmanned aircraft systems and integrated payloads through excellence in program management and lifecycle support. The Soldiers, civilians and contractors that make up the PM UAS team, as well as our industry partners work diligently to provide exceptional support to our nation's deployed men and women and those at home station.

*COL Courtney P. Cote is the project manager for Unmanned Aircraft Systems, Program Executive Office, Aviation, at Redstone Arsenal, AL.*

**NEW AWR APPROVED  
H-60M CUSHIONS**

**FROM**  
**OREGON AERO**

6A-0251-101      6A-0251-103      6A-0251-105

BACK CUSHIONS AVAILABLE WITH LUMBAR SUPPORT. WOOL/SHEEPSKIN COVERS OR FABRIC COVERS.  
SEAT CUSHIONS ARE AVAILABLE FOR OTHER MILITARY AIRCRAFT.  
VIEW OUR FULL RANGE OF U.S. ARMY AWR APPROVED PRODUCTS ON OUR WEBSITE.

**COASTAL**

**SEAT CUSHIONS, INC.**

THE EXCLUSIVE WORLDWIDE DISTRIBUTOR OF OREGON AERO  
SEAT CUSHION SYSTEMS FOR MILITARY FIXED WING AND ROTOR WING AIRCRAFT

(954) 980-6929 • FAX (772) 673-0200 • WWW.COASTALSEATCUSHIONS.COM • SALES@COASTALSEATCUSHIONS.COM

# TEAM PHANTOM

**PHANTOM  
WARRIOR TLS™**

6230-01-562-3691  
(black case)



**UNIVERSAL  
MOUNTING  
BRACKET**



**PHANTOM  
RES-Q™ LENS**

Make sure your unit is outfitted properly with the **ONLY** light designed just for the US Military.  
Be a PHANTOM WARRIOR® or BECOME A TARGET.

**CALL NOW. JOIN OUR TEAM.**

**Covert. Tactical. Durable.**

Personal, Vehicular, Equipment, Movement and Specialty Lighting  
American made in Rockledge, Florida

PH: 888-533-4968 [www.phantomlights.com](http://www.phantomlights.com)

©2014 Phantom Products, Inc. [careers@phantomlights.com](mailto:careers@phantomlights.com)





Portability of the One System Remote Video Terminal (OSRVT) system provides before, during and after insertion capability to the ground Soldier.

TONY COOPER PHOTO

# Manned-Unmanned Teaming

By COL Thomas von Eschenbach

One of the earliest examples of manned and unmanned teaming, now referred to as MUM-T, was during World War II when a B-17 Flying Fortress took off from RAF Fersfield in England headed to Germany closely followed by three chase aircraft. The B-17, designated a BQ-8 robot, was actually a flying bomb with 20,000 pounds of explosives on board designed with the intent of being remotely piloted into a submarine bunker in Germany. The BQ-8 concept was to launch like a normal aircraft with two pilots, reach a cruise altitude of 2,000 feet, arm the explosives, and then have the crew parachute into the English Channel while the rest of the mission would be flown remotely by one of the chase aircraft. Although the mission ultimately failed, the concept and benefits of MUM-T, along with the technology to execute these types of operations, continue to mature and take hold in concepts of how the U.S. Army could execute improved unified land operations.

The tremendous amount of time, effort, and resources expended on Army MUM-T research and development have grown exponentially in the past two decades forcing not only unmanned systems to evolve in their employment but also driv-

ing inclusion of MUM-T capabilities in our manned aircraft design requirements and integrated base design. For example, currently the AH-64D Apache has the capability to control an unmanned aircraft (UA) and its payload utilizing an add-on system designated MUM-T2; the design of the AH-64E will possess capabilities to not only control the payload but also control the flight of the UAS and will have a MUM-T capability fully integrated into the aircraft human-machine interface during production.

As the US Army takes the lessons learned and best practices from the past decade plus of conflict, partnerships between the TRADOC Capabilities Managers for UAS and Recon/Attack along with program managers from the Program Executive Office (PEO) Aviation, continue to develop and integrate new ways to increase capabilities without task saturating aircrew members. Today MUM-T isn't just conducting attack, recon and surveillance operations but also includes signals intelligence and distributing sensor data to Soldiers on the ground. Tomorrow MUM-T could extend to aerial delivery of cargo as well.

SO ADAPTIVE, IT WILL STOP YOU IN YOUR TRACKS

# MACH-1

Mobile Adaptive Configurable Hardware



# MY MILTOPE

## Reliable in the Extreme

The world's first enterprise class tablet. Configure yours and adapt to your ever-changing world.

**YOUR TABLET • YOUR WAY • MY MILTOPE**

### MACH-1 Features and Functions:

- Configurable I/O
- Upgradable CPU, memory, and function
- Integrated Expansion Modules
- Adaptive Ruggedization
- Intel® Atom™ Bay Trail Quad Core Processor



**MACH-1<sup>i</sup>** INDUSTRIAL GRADE  
**MACH-1<sup>s</sup>** SEMI-RUGGED  
**MACH-1<sup>r</sup>** FULLY-RUGGED



**VT Miltope**

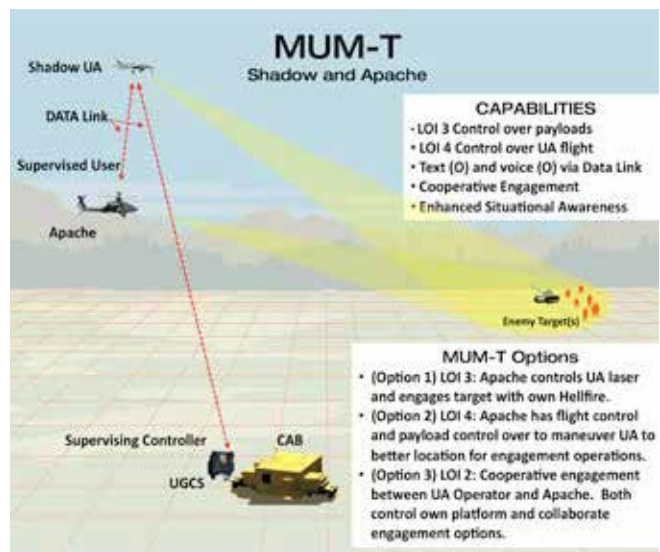
A company of VT Systems

[mymiltope.com](http://mymiltope.com)

MADE IN THE USA



An RQ-7 Shadow unmanned aircraft system and Apache prepare to launch on a mission in Iraq.



## Real-time Intel Enroute and Beyond

The One System Remote Video Terminal (OSRVT) can not only be a great tool for the Soldier maneuvering on the ground by providing situational awareness to the most vulnerable, but can also provide real time information to ground forces aboard a UH-60 Blackhawk or CH-47 Chinook enroute to an objective during an air assault mission. OSRVT also provides aircrews with real time video of the landing/pick-up zone (LZ/PZ) at 15 to 20 kilometers prior to arrival. This capability can continue to provide video to the Soldiers once on the ground due to the portability of the OSRVT system. The -50 OSRVT, which starts fielding in FY15, will provide the ability for Soldiers to request control of the UA electro-optical/infrared (EO/IR) payload sensors, giving them the ability to select specific areas of interest. MUM-T development is not only providing the Soldier on the ground a tremendous advantage in situational awareness but it's also compressing the timeline of sensor to shooter or sensor to action due to the accuracy of the information provided by real time video.

## Future Force Structure

The future organizational force structure of Army Aviation has been shaped by MUM-T advantages. This was accomplished by placing organic Shadow and Gray Eagle formations in the combat aviation brigades (CABs), increasing the UAS operators' recon and attack capabilities, and expanding gunnery requirements with their manned team members. A series of the Army's Hellfire missile, the AGM-114R/R2, was developed to accommodate the increased engagement altitude of the UAS as well as many other capabilities being pursued by TCM-UAS and Program Management Office-Unmanned Aircraft Systems (PMO-UAS) as technology and funding allows.

The amount and pace of MUM-T observations, insights and lessons learned compiled over the last 10 years can be daunting. The ability to sort through the amount of information available would be extremely time-consuming for units, which is why TCM-UAS is developing a MUM-T handbook through a multi organizational collaborative effort. The Handbook is a quick reference guide of best practices proven over the years. It will also serve as a baseline source of in-

formation for commanders and their staff to develop a common understanding of MUM-T that can be customized to their current operation based on mission, enemy, terrain and weather, troops, time available and civil (METT-TC) criteria.

## Training Strategy

Although much work is being done on increasing our MUM-T technologies, our increase in capability will not be possible without the proper training strategies. MUM-T can and will be trained in simulation and is incorporated into manned and unmanned mission simulators, to include the teaming of the Universal Mission Simulator (UMS) with the Aviation Combined Arms Tactical Trainer (AVCATT) for inclusion into the Integrated Training Environment (ITE).

USAACE is leading an integrated project team directed by Headquarters, Department of the Army to identify MUM-T collective training strategies that will include UAS assigned to the National Training Center with tactics, techniques, and procedures (TTP) development and collection oversight. MUM-T is also being included in the Army's professional military education (PME) system for leaders to ensure successful air/ground integration occurs across our formations. Force-on-force capabilities are being developed to fully integrate MUM-T training opportunities at combat training centers, home station training, and in simulation. Force-on-target training opportunities are emerging with the advent of the Digital Air Ground Integration Range (DAGIR) and Digital Range Training System (DRTS).

As the Army looks towards the Force 2025 and beyond concept to maintain its overmatch against a wide range of adversaries in the next decade, UAS employment will have to continue to expand its roles and missions. As this takes place over the coming years, we will need to explore the full range of the capabilities of the UAS and how they can bring synergy to a smaller, leaner Army in a more expeditionary, lethal and survivable manner.

*COL Thomas von Eschenbach is the U.S. Army Training and Doctrine Command (TRADOC) Capabilities Manager for Unmanned Aircraft Systems, located at Fort Rucker, AL.*

# CUSTOMER ORIENTED.

— *Always* —



OUR FOCUS IS ALWAYS ON PROVIDING  
THE BEST **QUALITY OF WORK**, THE BEST  
**PRODUCT** AND THE **QUICKEST RESPONSE**  
TO OUR CUSTOMERS.

Our experienced employees are our greatest strength and our Quality Management System is part of our daily life, ingrained in everything we do. When combined with the right training, the right tooling, and the right facilities, our customers receive a quality product the first time, every time.



**BOTTOM LINE**, when our men and women are at war, it's important that they have the most technologically advanced solutions out there. Science and Engineering Services, LLC (SES) has accepted the challenge of bringing these technologies directly to the warfighter. Through advanced research and development, prototyping, manufacturing, training, and total systems integration, our team has the knowledge and firepower to handle most any project, no matter how large or small.

**SES** – SMALL BUSINESS CUSTOMER FOCUS, LARGE BUSINESS CAPABILITY





# Alone and Unafraid- UAS Gunnery Standardization

By CW4 Frank D. Capri and MAJ Salamasina T. Strokin

**A** lone and unafraid – a motto the unmanned aircraft system (UAS) community adopted over the years. As the unmanned aircraft inventory surpasses the manned fleet in the number of platforms and flight hours flown, the Army continues the push to capitalize on the proliferation of the UAS via manned-unmanned teaming.

The Aviation Branch assumed responsibility for UAS over a decade ago and has begun to embrace their unmanned counterparts just recently. Hence, the overall lack of standardization in the UAS community as compared with the manned community. This is particularly evident in the areas of standardized gunnery training and qualification programs.

This article will briefly highlight a few deficiencies in standardized UAS operations by speaking to the first three elements in the Doctrine, Organization, Training, Materiel, Leadership & Education, Personnel, and Facilities (DOTMLPF) approach.

## Doctrine

Historically, Army manuals separated unmanned aerial operations into sepa-

rate chapters if not separate manuals all together, when UAS were even addressed at all. Army Aviation's capstone manual, Field Manual (FM) 3-04, is scheduled to be released the first of the year, at which time FM 3-04.155, Army Unmanned Aircraft Systems Operations, will be rescinded as all 'Aviation' operations will be addressed together in a unified manner within FM 3-04, not broken out by manned or unmanned missions and platforms. This speaks to a paradigm shift in thinking, critical to fully embracing the UAS community in viewing the UAS as simply another aircraft with a different model design series (MDS) executing an Aviation mission.

Additionally, as manned-unmanned teaming (MUM-T) moves to the forefront of Army Aviation headlines, so too will training requirements for the newest member of our team – the UAS operators. Published in January of this year, Training Circular (TC) 3-04.45, Combat Aviation Gunnery, finally includes standardized requirements for UAS gunnery in Chapter 7 for the same reason that these requirements exist for the armed rotary-wing community – to produce qualified, combat

ready crews assigned to the combat aviation brigade (CAB).


While Chapter 7 establishes minimum proficiency levels to ensure CAB UAS operators are qualified to operate the platform weapon systems, it fails to require non-CAB assigned UAS operators to follow gunnery training guidelines established in TC 3-04.45. The training circular standardizes the CAB assigned UAS platforms but does not mandate gunnery requirements for the non-CAB assigned UAS operators, leaving the non-CAB assigned UAS standardization to the direction of the brigade combat team (BCT) commander.

## Organization

Per the current Aviation structure, the only UAS elements to fall directly under an Aviation unit are those assigned to 2nd Squadron, 17th Cavalry Regiment. However, per the Aviation Restructure Initiative (ARI), the United States Army Aviation Center of Excellence proposed to restructure its Aviation assets to best align the Active Duty and National Guard components with their respective missions and preserve the greatest amount of capability



Our thermal management systems improve performance, reliability and mission success.



Around the globe, military and aerospace systems designers have turned to Meggitt to help them meet thermal and power management challenges with compact, efficient vapor cycle systems and liquid cooling sub-systems.

Meggitt has developed cooling solutions for the most challenging flight envelopes and extreme ground conditions.

From low supersonic flight, to high hot wet hover, to desert and arctic ground operations, our thermal management solutions are proven and ready to meet the challenge of the more electronic battlefield.

email: [gerry.janicki@meggitt.com](mailto:gerry.janicki@meggitt.com)  
[www.meggittdefense.com](http://www.meggittdefense.com)

**MEGGITT**  
smart engineering for  
extreme environments



Students from 2nd Battalion, 13th Aviation Regiment at Fort Huachuca, AZ conduct Gray Eagle gunnery training.

across the Army. This initiative includes standardizing all CAB formations with one MQ-1C Gray Eagle company and three RQ-7B Shadow platoons.

A portion of UAS begin their migration to CABs over the next five years, the UAS teams still assigned to the BCT are currently not held accountable to Aviation standards, not formally required to maintain gunnery standards, not trained on the munitions effects, not required to be gunnery qualified, yet could potentially be the sole observer for a call for fire directing the launch of a missile from a platform in which a target is only visible by the UAS team.

Requiring the BCT-assigned UAS to align their gunnery training with Chapter 7 holds all UAS, weaponized (laser-equipped) and armed (laser and HELLFIRE missile equipped), accountable to a consistent, standardized level of proficiency.

## Training

With UAS inventories and weaponized advances to the UAS platforms, the Army must not only train sufficient numbers of personnel to operate and maintain the unmanned aircraft but provide adequate training to safely operate and effectively employ the systems. Currently the average block of instruction dedicated to gunnery operations within UAS qualification courses is less than four hours. This is grossly inadequate to cover the techniques and principles for the individual, crew and collective tasks required to effectively engage and destroy enemy targets. TC

3-04 outlines one of the few prescribed training scenarios that even encourage teamed UAS operations.

The UAS are equipped with designation laser and HELLFIRE missiles, the most precise guided-munition in the U.S. arsenal. The Army is replacing manned aircraft with UAS, yet does not offer any formal gunnery training to the operators and mission commanders operating armed UAS.

The Aviation Master Gunner Course curriculum was recently updated based on the new standards in TC 3-04.45, but the allotted eighty hour course barely covers gunnery program management and gunnery tables I thru IX. The most common course critique feedback received calls for recommendations to expand the course, providing more time to adequately emphasize desired material in more detail with the gunnery subject matter experts.

An extended period would better facilitate detailed instruction of the collective gunnery tables X thru XII, in addition to expounding upon specific platform considerations to include that of the UAS and their integration. Cross talk has begun with the Maneuver Center of Excellence (MCoE) to add more UAS material to their courses, specifically in support of BCT UAS elements as the material is currently not addressed in their courses.

With the preponderance of UAS training split between Forts Huachuca and Benning, previously segregated Aviation doctrine, overly restrictive access to national airspace, limited expo-

sure to UAS operations in professional military education (PME) and only a small fraction of warrants or NCOs in the UAS community, is it a wonder that the unmanned community has yet to be fully accepted by the manned Aviation community with a majority of UAS education and training farmed out?

A number of ground commanders have begun to express interest in providing their UAS formations with gunnery trained personnel as the Aviation Gunnery Branch received several requests for UAS operators to attend the course. However, the lack of a formally designated master gunner in the UAS formation precludes a commander from just sending a command designated individual to the master gunner course per current prerequisites and a lack of a formalized skill identifier.

It is unfathomable that the same UAS qualified personnel expected to administer the commander's gunnery training program and qualify crews to operate weaponized and armed UAS aircraft receive no formal training on how to do so. Without the formal training, formally designated position or leadership emphasis, feedback from the field contends that being in charge of the unit's culminating training event – live fire gunnery – rates well behind any leadership duties such as squad leader and even behind juggling a number of additional duties such as DTS Clerk in order to stay competitive.

As doctrine continues to evolve, Aviation restructures to a more conducive and inclusive organizational structure and UAS training is updated, leaders at all echelons must step up to embrace UAS as bonafide members of the Aviation community in order to expedite the process.

The time is now to standardize, empower and fully embrace UAS within Army Aviation, sanctioning manned unmanned operations to occur with the greatest efficiency, lethality and ensure the highest probability of success on the battlefield as a unified team, changing their motto to trained and ready!

---

*CW4 Frank D. Capri is the AH-64 Master Gunner, Gunnery Branch, and MAJ Salamasina T. Strokin is Deputy Chief of the Aviation Doctrine and Tactics Division, both with the U.S. Army Aviation Center of Excellence Directorate of Training and Doctrine at Fort Rucker, AL.*

# Mission Success Starts With Clear Vision

*Maximize Situational Awareness with the VisionEdge™ DVE Solution*

## Helping Pilots See, Detect and Avoid Collisions with Terrain, Wires, Obstacles and Other Aircraft

Telephonics' VisionEdge™ sensor with optional spatial audio positioning offers enhanced flight orientation in Degraded Visual Environments (DVE). The system provides a constant, real-time image of the aircraft's forward viewing area with a 3D display as well as audio alerts and warnings. Our solution helps pilots to safely and successfully complete their mission.





MQ-1C Gray Eagle UAS with Captive Aviation Training Missile (CATM)

U.S. ARMY PHOTO BY MICHAEL BUDGETT 21364141

# UAS Training for Gunnery, MUM-T

By CW3 Adam D. Morton

**T**he U.S. Army and several federal agencies are expanding the application of unmanned aircraft systems (UAS) across the globe in support of combat operations, public safety, scientific research, and environmental monitoring. Since 2003, Army Aviation has been on the leading edge of training and employment of UAS with a rapid and unprecedented expansion of capabilities and requirements levied on the Army's UAS formations.

Expansion of UAS capabilities and revisions to doctrinal application enable UAS aircraft to function as more than a reconnaissance asset. With the introduction of the AGM-114 (HELLFIRE) missile, and the inclusion of laser range designators (LRD), UAS is now bringing capabilities to the battlefield role as a kinetic enabler. In support of combat operations requiring direct fires, the 2nd Battalion, 13th Aviation Regiment, 1st Aviation Brigade, based at Fort Huachuca, Arizona, is at the forefront of UAS gunnery training and Manned-Unmanned Teaming (MUM-T) operations. In January of 2014, the U.S. Army Aviation Center of Excellence Directorate of Training and Doctrine (DOTD) released the Combat Aviation Gunnery manual, which for the first time included UAS as a combat aviation gunnery platform.

## Initiating the Gunnery Program

Over the course of the last 18 months the 2-13th rigorously set conditions to initiate a UAS gunnery program for initial 15W qualification as well as a MUM-T training program. Prior to the release of

the new combat aviation gunnery manual, the unit conducted environmental surveys and coordinated with the installation to facilitate the first ever approved UAS laser range on Fort Huachuca. Over the span of nine months, the 2-13th received approval to purchase targets and barriers to install in the laser range complex. Throughout the approval process, the unit systematically reviewed the entire program of instruction (POI) for UAS Operators, including appropriate attack and scout gunnery principles. The 2-13th successfully launched their full gunnery program upon release of the gunnery manual and began qualifying permanently assigned cadre instructors, as well as initial qualification requirements to all 15W initial entry training (IET) Soldiers for the Gray Eagle and Shadow.

The gunnery program initiative focused on utilizing lessons learned, together with current and emerging doctrine into a newly developed POI. Students and cadre were immersed in Aviation gunnery academics and the foundational gunnery principles that our manned counterparts have refined over more than a decade of conflict. After cadre successfully completed the gunnery academics module, they began a detailed qualification program, utilizing the crawl-walk-run model, with a culminating qualification table that clearly demonstrated the trainee's proficiency and comprehension. The students also completed the same academic module, followed by a familiarization live-fire with the Captive Avia-



U.S. ARMY PHOTO BY MICHAEL BUDGETT 21364141

Students from the 2-13th Aviation Regiment conduct Gray Eagle UAS gunnery training.

tion Training Missile (CATM). This training equipped the student with their first real-life, live-fire experience and prepared them for future success as an Aviation combat multiplier.

## Building on Success

To date, the 2-13th has qualified over 50 instructor operators through Table VI individual gunnery qualification. Their team has trained nearly 130 students through the initial gunnery qualification requirements. The 2-13th will continue to expand and develop the gunnery program in line with emerging capabilities and requirements while infusing a high level of expertise into the training base and operational force, providing the ground commander with a competent and capable Aviation Warfighter.

*CW3 Adam D. Morton is the standardization officer for the 2nd Battalion, 13th Aviation Regiment, 1st Aviation Brigade located at Fort Huachuca, AZ*

# Military forces. Dangerous missions. Information to safely guide their way.



For more than 25 years, Rockwell Collins advanced, affordable and adaptable solutions have accompanied the world's military forces on their most critical missions. Contact us at 800.321.2223 or [learnmore@rockwellcollins.com](mailto:learnmore@rockwellcollins.com) to discuss your requirements.

*Situational awareness*

*Communications*

*Navigation*

*Training*

*Service and support*

[rockwellcollins.com](http://rockwellcollins.com)

© 2014 Rockwell Collins. All rights reserved.

**Rockwell  
Collins**

Building trust every day



# Training the Air Traffic Control Community for Excellence

By CSM (Ret.) Marlin J. Smith and Mr. Mark J. Hampton



Unit leaders have two primary training responsibilities: develop Soldiers for future responsibilities and prepare their unit to accomplish the assigned mission. In the absence of a directed mission, leaders must prepare their unit to perform missions for which the unit was doctrinally designed across the full range of military operations within the unified action environment.

The full range of military operations includes offensive, defensive, stability and Defense Support of Civil Authorities (DSCA). Paramount to the future success of air traffic control units is the training, qualification and certification of Army air traffic controllers to operate within complex environments while providing air traffic services to military, civil and non-governmental aircraft. Air traffic leaders must focus air traffic control training and certification efforts to support all phases of Army operations under varying regulations, international agreements, NATO policies, and joint doctrine. To achieve

these requirements, ATS leaders should develop training strategies utilizing all available opportunities including aviation collective exercises, combat training center (CTC) rotations, simulations, and special duty assignments into installation fixed-base facilities.

In the end, an effective ATS training program requires continuous leader oversight, innovative ideas, and a relentless pursuit of training opportunities to achieve individual controller readiness and ensure the unit is prepared to conduct its wartime mission.

## Air Traffic Control Collective Training

Air traffic control collective training is detailed within the combined arms training strategy (CATS). This training strategy incorporates a series of collective training events throughout the year and includes monthly team training, quarterly situational training exercises (STX), and annual field training exercises (FTX). Synchronizing live-fly

SPC Justin Stewart (left) and SPC Richard Bosquez (right), both with Company F, 2nd Battalion, 149th Aviation Regiment based at Martindale Army Airfield in San Antonio, train on an air traffic control simulator that uses the latest technology to prepare them to control military aircraft in Kuwait.

aviation support within these events remains the biggest obstacle in satisfying controller progression skill training. ATC skills are not easily mastered in singular short duration training events due to air traffic volume, density, and variation. This requires unit leaders to seek air traffic environments and other avenues of training to meet controller skill development and proficiency requirements. Leaders should also maximize participation in team level air traffic control missions that support the combat aviation brigade such as aviation gunneries, live fire exercises, and aviation field training exercises.

Much like the aircrew training pro-

# *The Best of Both Worlds*



*Now the proud owners of the Model  
234 Chinook **AND** the Boeing CH-47D!*

You can trust our aircraft maintenance because WE trust our aircraft maintenance.

As an operator, mission availability is as important to us as it is to you.

Our people are the best - many with military experience - and they take great pride in the quality of their work and keeping the helicopters ready to fly.

Talk with us. Find out why Chinook operators provide the best Chinook maintenance.



 **COLUMBIA  
HELICOPTERS**  
[www.colheli.com](http://www.colheli.com) 503-678-1222



SPC Quentin Bradford, an air traffic control specialist for 3rd Battalion, 82nd Cbt. Avn. Bde., Task Force Corsair, directs air traffic at FOB Shank, Afghanistan. SGT Ken Scar, 7th MPAD



An air traffic controller from 2nd Battalion, 227th Aviation Regiment, 1st Air Cavalry Brigade, receives details of an incoming flight as Iraqi Air Force 2nd Lt. Taha Khaleel, an air traffic controller, watches the flight line for signs of activity in the air traffic control tower.

gram for aviators, air traffic control personnel complete a similar training program to reach technical and tactical qualification. TC 3-04.81 (Air Traffic Control Facility Operations, Training, Maintenance and Standardization) outlines controller readiness level requirements while training principles outlined in ADRP 7-0 (Training Units and Developing Leaders) and CATS assist commanders with developing, managing and administering comprehensive air traffic training programs (ATTPs).

CATS training and evaluation outlines (T&EO), located on the Army Training Network (ATN), detail information on collective training objectives, related individual tasks, resource requirements and applicable evaluation procedures. The ATTP reflects an assembly of training requirements organized to fulfill the broad, overall training goals for air traffic personnel.

The ATTP serves as the commander's program for progressing Soldiers through the appropriate readiness levels and supports assessment of unit collective training proficiency. The ATTP includes equipment certifications, live-traffic training environments and simulation.

The program covers task proficiency at the individual level, to team proficiency, and finally to unit proficiency in executing mission-essential tasks necessary to accomplish joint and combined arms operations as defined in the Army universal task list. IAW TC 3-04.81, commanders should construct ATTPs to include:

- Benefits to be gained through

standardization

- Objectives to be achieved
- Procedures or actions to be standardized
- Specific plans for implementation
- Effective procedures for enforcement
- Delineated responsibilities

### Combat Training Center Support

Effective employment of ATS facilitates aviation operations under complex conditions and is essential to the mitigation of risk often present within hazardous operating environments. Integration of the ATS unit into battalion and brigade training events is critical to the unit's ability to achieve individual controller readiness and collective task proficiency. Integrating air traffic control teams into the CTC rotations maximizes unit deployment activities and air traffic employment and certifications.

Coordination of airspace to support these air traffic systems remains essential in unit planning activities. ATS personnel should closely work with aviation standardization officers during the development of instrument recovery procedures, staging of air traffic systems in the aviation assembly area or contingency airfield environment, and document airspace coordination procedures with the aviation task force and ground support brigade tasked with the CTC rotation.

Airspace coordination and planning is essential to ensure air traffic personnel and their systems are contributing to the overall effectiveness of mission command. ATS leaders should collabo-

rate with the brigade combat team aviation element, division airspace cell, and the aviation task force S-3 to clearly establish air traffic control procedures, UAS operations, transition points, and mission command responsibilities in support of the rotation.

### Air Traffic Control Simulation

Utilization of simulation provides the commander a scalable, realistic and cost effective option for conducting ATS certification and currency training. Trainers can adjust conditions within the simulated environment to infuse elements not always present in live training events, but commonly encountered during deployments, including coalition aircraft, UAS, weather, and heavy traffic density.

Air traffic control simulation also allows the training event to focus on specific tasks including lost communications procedures, responding to an aircraft emergency and providing ATS support to joint partners and civil aircraft. Incorporating the newest air traffic training device, the ATC Common Simulator (ACS), into the ATTP supports RL requirements, extends training opportunities and enhances Soldier skill development. Effective utilization of the ACS requires recurring simulation periods scheduled on the training calendar, documentation of training in controller records and unit leaders who are familiar with the system's capabilities and scenario development features.

The ACS provides tower and radar training with voice recognition software and customizable training sce-

narios to enhance air traffic controller progression. The system is accredited by the U.S. Army Aviation Center of Excellence (USAACE) Directorate of Simulation, and includes logistical and maintenance support for the life of the system. The ACS is presently undergoing fielding and is under the product management of PM-ATC at Redstone Arsenal, Alabama.

### Installation Air Traffic Control Facilities-Special Duty Assignments

Perhaps the most relevant training environment our tactical air traffic formations have to develop ATC skills is replicated daily in our installation fixed-base air traffic support facilities (tower, airspace information centers and terminal radar). These facilities can support aviation home station training and controller progression requirements on a scale that is not easily replicated in tactical ATC mission sets.

Leader oversight and engagement, including overall supervision, training

oversight and records management, is essential when utilizing installation facilities as a training venue. Installation ATC facility training programs vary in duration based on the type of facility and individual Soldier progression. Successful completion of these training programs results in the Soldier earning ATC credentials and gaining critical experience required for Army controllers to support complex aviation environments during joint and civil operations. Incorporation of tactical air traffic controllers and their deployable ATC systems in these installation settings remains the most viable solution for the future.

Army air traffic control policy, AR 95-2 (Airspace, Airfields/Heliports, Flight Activities, Air Traffic Control and Navigational Aids), details an initial and subsequent installation ATC training strategy to gain the knowledge and skills required to operate in today's complex air traffic environments. This policy directs the use of fixed-site ATC facilities found on many installations

across the Army to satisfy tactical air traffic controller skill requirements.

ATS leaders should seek out the benefits of this training opportunity and commit to a strategy that includes the use of these facilities for initial experience ratings and refresher training gates as outlined in AR 95-2. The adoption of fixed-site facilities into a unit's core training concept will increase controller proficiency, minimize risk, and better prepare controllers for aviation operations in support of unified action partners (military forces, governmental and nongovernmental organizations and elements of the civil sector) as detailed within ADRP 3-0 (Unified land Operations).

---

*CSM (Ret.) Marlin J. Smith and Mr. Mark J. Hampton are both Air Traffic Control Specialists with the U.S. Army Forces Command (FORSCOM) Air Traffic Services Command (ATSCOM), located at Fort Rucker, AL.*

**K-3000-MIL-1**  
**NSN 4920-01-628-2469**  
**Composite Repair Tool Kit**

**GSA** Cage: 64878  
Contract # GS-06F-0009L  
1-800-344-2393 ~ sales@fsirivet.com

**FSI** FASTENING SYSTEMS  
INTERNATIONAL, INC.  
www.fsirivet.com



## PM ATC – Evolving to Support Army Aviation

By LTC Johnathan B. Frasier

**S**ince the beginning of air traffic control operations in 1929 at the St. Louis Airport where the first air traffic controller stood in a prominent location on the runway and used green and red flags to communicate with the pilots, the air traffic control (ATC) community continues to be a key enabler to aviation operations.

Although the equipment and methods have evolved over time with the advancement of technology and the application of lessons learned, the ATC controller continues to provide risk mitigation to aviation operations in all operational environments. This has certainly been evident in the mission critical support provided by Army ATC organizations during the extremely high optempo aviation operations in support of Operation Enduring Freedom and Operation Iraqi Freedom.

### The Charter

Despite the continued demonstrated success over the last 13 years of combat operations, the ATC community must

continue to evolve in order to meet future threats. The Product Management Office for Army Air Traffic Control (PM ATC), located at Redstone Arsenal, AL, is chartered to provide total lifecycle management for all Army ATC equipment. This responsibility includes providing the Soldier first-class support thru the acquisition, fielding, modernization, sustainment, and retirement of all tactical and fixed base ATC equipment that support aircraft movement worldwide.

The current ATC portfolio includes Digital Airport Surveillance Radar (DASR), AN/TPN-31 Air Traffic Navigation, Integration, Coordination System (ATNAVICS), Fixed Based Precision Approach Radar (FB PAR), AN/TSQ-221B Tactical Airspace Integration System (TAIS), AN/MSQ-135 Mobile Tower System (MOTS), AN/TSQ-198 Tactical Terminal Control System (TTCS), AN/TSW-7A Tactical Tower, DoD Advanced Automation System (DAAS), Tactical Non-Directional Beacon (NDB), and

Above left: An AN/TPN-31 Air Traffic Navigation, Integration, Coordination System (ATNAVICS) set up at Forward Operating Base Wolverine, Zabul province of southern Afghanistan.

Above right: Soldiers from Foxtrot Company, 2nd Battalion, 3rd Aviation Regiment, Task Force Viper, control air traffic from the AN/MSQ-135 Mobile Tower System, or MOTS, at Forward Operating Base Wolverine, Afghanistan.

various other radios, display systems, voice recorders, automation systems, and switching systems that are utilized in Army airfields worldwide.

Although these systems continue to perform admirably, supporting the controller and flight crews, PM ATC continues forward to ensure the Army remains postured to meet all future aviation operational requirements through modernization.

### Mobile Tower System

The newest product in the PM ATC portfolio is the AN/MSQ-135, MOTS. MOTS replaces the aging 7A

Tactical Tower, which has been around since 1976. MOTS provides the joint force commander a highly mobile, self-contained, integrated, and reliable information system platform for visual and procedural aircraft deconfliction and aircrew force protection in unified action terminal airspace environments. MOTS utilizes a modified S-280 shelter on an M1083A1 Medium Tactical Vehicle (MTV) and is fielded with a Deployable Rapid Assembly Shelter (DRASH) trailer, which hosts two 18 kw generators and soldier equipment, as well as two prime movers that tow a tactical airfield lighting system (ALS) capable of establishing a 5,000 foot lighted runway.

The ALS system can be powered by generator, through shore power, or operate independently by using the light's solar capability. Additionally, MOTS incorporates a modernized radio suite that provides communication with the Army's modernized aircraft as well as other joint and allied aircraft. Finally, MOTS provides enhanced airspace awareness through the TAIS Airspace Workstation (AWS), allowing the controller to provide pilots increased situational awareness.

MOTS recently achieved Initial Operational Capability (IOC) in September 2014. PM ATC has successfully fielded 10 Block 0 systems to date and will begin fielding Block 1 systems in the Spring of 2015. The MOTS Block 1 will incorporate lessons learned from Soldier feedback and replace the Digital Service Access Node (DSAN) with the Tactical Operations Center Intercommunications System (TOCNET) and add AN/PRC-117G radios, providing commonality across the suite of ATC tactical systems. With MOTS promise for improved reliability as well as its enhanced capability, ATC organizations are postured to effectively support aviation operations for years to come.

### Tactical Terminal Control System

Over the past few years, PM ATC continued the theme of evolving to meet the operational need thru modernization of the TTCS. Starting in 2011, PM ATC embarked on a focused effort to improve capability, survivability, and maintainability in the TTCS by providing an "agnostic" rack that could be utilized in both the M1097 and M1165A1 HMMWV variants.

Additionally, the new TTCS design, AN/TSQ-198B, provides commonality with the other ATC tactical systems by incorporating the AN/PRC-117G radio, Blue Force Tracker (BFT) 2, the PRC-150 HF radio, and a new 3 kw generator. PM ATC will begin fielding this new capability in Spring 2015.

### ATNAVICS

The next area of focus for PM ATC is the modernization and sustainability of the ATNAVICS. With the initiation of the Block 6 effort, PM ATC provided a standardized fleet configuration and an ability to provide air track information to the TAIS. To date, PM ATC has fielded 15 of the Block 6 systems.

The next evolution of ATNAVICS will provide commonality with the other tactical systems thru the incorporation of the AN/PRC-117G radio and TOCNET, but will additionally incorporate Mode 5 and improved sustainability thru the incorporation of modern computer processors and circuit card assemblies, technical manual rewrite, and the provisioning of an additional 600 components. PM ATC will begin fielding this new capability in Spring 2016. Future efforts will

# An Unbeatable Combination for H-60 Heater Mat Testing

UxValidator Series II

Blade Burn Pod Set

Fast, Safe,  
Simple, and  
Consistent



+



H-60A/L/M  
De-ice Mat  
Testing

Innovative solutions to improve readiness on a reduced budget

**Only from the Yellow Box Guys™**

ULTRAX Aerospace, Inc.

800-214-7971

ULTRAXinc.com



Use of DoD photo does not constitute or imply DoD endorsement.

incorporate Mode S capability, remote work stations, and range extension for the primary radar returns.

## TAIS

Finally, PM ATC has made significant progress in the evolution of the TAIS. Current development efforts will incorporate the TOCNET for commonality across the tactical systems and will also replace the Air Defense Systems Interrogator (ADSI) with the Enhanced Airtrack Sensor Interface (EASI). This evolution will not only provide a tremendous cost savings throughout the life of TAIS, but will also provide simplified operation for the Soldier, enhanced battlefield situation awareness for the commander, overall reduced system complexity, and the ability to exchange data with other ATC tactical systems thru a local airfield network. PM ATC will begin fielding the latest version of TAIS in early 2015.

Future efforts will incorporate the AN/PRC-117G radio and optimization of the TAIS software to provide a modular, scalable, sustainable, service

based capability set that will allow any device with an HTML 5 compliant web browser the ability to access and utilize the TAIS capabilities.

## Future Focus

Future efforts across all tactical ATC platforms are focused on receiving advanced real-time (passive) surveillance data from line of sight aircraft. The data and other real-time ATC data will be disseminated across an ATC network located at an airfield. This will provide a greater level of automation enhanced situational awareness, reduced operator workload, and overall increased aviation operational safety.

PM ATC fixed base systems continue to evolve globally thru modernization of the DAAS and DASR, incorporation of the GATM compliant CM-300 family of ATC radios as part of the Radio Replacement Program, and the incorporation of the Interim Voice Switch Replacement (IVSR), which will replace the Small Tower Voice Switch (STVS) and Voice Communication Switching System (VCSS).

To date, PM ATC has fielded 18 ATC

Common Simulators (ACS), which are fielded in pairs, one for MOTS and one for ATNAVICS. Each simulator is capable of training two controllers on either tower operations or radar tasks. The two simulators can also be coupled together for collective training and can provide as much as 50% of the controller's required annual training and proficiency requirements. Future simulator efforts involve incorporation of a TAIS training capability.

As the Army Aviation community continues to transform thru Aviation Restructure Initiative (ARI), PM ATC stands ready to provide first-class support to the Soldier and Army Aviation thru continued sustainment and modernization of its tactical and fixed base systems. No matter where Army Aviation is called to conduct future operations, Army ATC is equipped to support!

---

*LTC Johnathan B. Frasier is the product manager for Air Traffic Control (PM ATC), Project Management Office, Aviation Systems; Program Executive Office, Aviation located at Redstone Arsenal, AL.*

## Supporting the Department of Defense since 1997



Acquisition Services • Advanced Visualizations  
Defense & Aerospace • Education and Training  
Information Technology • Studies and Analysis  
Medical Operations & Maneuver Sustainment

A Service Disabled Veteran-Owned Small Business



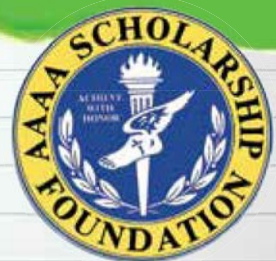
p: 334.347.7612  
www.ndgi.com



# MAKING DREAMS COME TRUE

**50 YEARS OF SERVICE TO ARMY AVIATION SOLDIERS  
AND THEIR FAMILIES**

Since 1963, the Army Aviation Association of America Scholarship Foundation has played an important role in supporting the education of Army Aviation Soldiers and their families. This year, the Foundation awarded just under one-half million dollars. This would not be possible without constant and generous support from Army Aviation Industry and Private Donors.



For more information on how you can  
contribute, please go to [quad-a.org](http://quad-a.org)

*Scholarship Applications are due 1 May.*

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



U.S. ARMY PHOTO BY SGT DAVID SCHULTZ, 21ST CAV

## 21st Cavalry Brigade CATT Begins Training D/10th CAB

By LTC (Ret.) Brian Apgar, MAJ Paul Fugere, and CW3 Luis Iglesias

**F**resh from supporting the fourth MQ-1C Gray Eagle (GE) Unmanned Aircraft System (UAS) company's certification and validation in March 2014 at Fort Stewart, GA, the 21st CAV Gray Eagle Unmanned Aircraft System (UAS) Combat Aviation Training Team (CATT) rolled up their sleeves and immediately started planning and executing training for Company D, 10th Combat Aviation Brigade (CAB), the U.S. Army's fifth Gray Eagle UAS company, located at Fort Drum, New York.

Having completed its initial site visit and in brief with the 10th CAB commander in May, the GE UAS CATT continues to work closely with Forces Command (FORSCOM), Training and Doctrine Command (TRADOC), Project Manager, UAS (PM UAS), 10th Mountain Division, 10th CAB, and other Fort Drum agencies to finalize an adaptive and comprehensive training program that will prepare Company D, 10th CAB to deploy as part of the Army Force Generation (ARFORGEN) cycle as required.

### The Process

Over an eight month span, the GE UAS CATT will conduct six collective training events to prepare Company D for any deployment contingency. Newly minted UAS crew members, mission coordinators, maintenance and other essential personnel will complete a required set of classroom instruction, review and refine their standing operating procedures (SOPs) and battle drills, fly multiple missions utilizing simulators and live exercises, and undergo a capstone pre-evaluation exercise. The GE UAS CATT will conduct all training events at home station in preparation for a certification event executed under the Army Training and Evaluation Program (ARTEP).

As part of the ARTEP certification, the GE UAS CATT will replicate a high OPTEMPO environment in a deployed setting. The training includes operationally realistic simulated and actual mission sets that Company D must execute within the confines of Fort Drum's airspace. Operating from its tactical operation center (TOC),

Above: Co. E, 3rd CAB crew chiefs conduct preflight on an MQ-1C prior to a 12 hour mission during ARTEP at Ft. Stewart, GA, March 2014.

Company D will receive, plan, and fly missions that include air to ground integration, manned-unmanned teaming with other attack and reconnaissance assets from 10th CAB.

Company D will demonstrate its proficiency in tasks relevant to the type of missions executed by MQ-1C units over the operational environment (OE). To create this type of scenario, the GE UAS CATT coordinates with multiple entities at the unit's home station. These organizations provide personnel who participate in the exercises as both opposing (OPFOR) and friendly forces. In addition, the GE UAS CATT integrates tenant U.S. Air Force Joint Terminal Attack Controllers (JTAC) who provide crew members with classroom and applied instruction on various types of interactions between JTAC and crew members during tactical engagements.

The integration of manned aircraft and ground forces into the GE UAS training is imperative. The GE UAS CATT implements the combined arms concept and coordinates with other units within the CAB to provide support throughout different scenarios. The GE UAS is not only designed to provide better situational awareness (SA) to the ground commander but also serves as an armed platform that can shape the OE prior to a decisive event.

The GE UAS CATT's expertise and meticulous approach to planning each event ensures that every training and evaluation scenario is tactically relevant and encompasses the necessary rigor expected of currently deployed units. Since the train-up of the first MQ-1C unit equipped in 2011, the CATT maintained a paramount role in training every Gray Eagle Company in the U.S. Army. With the discontinuation of the 21st Cavalry Brigade in the near future, FORSCOM plans to template future GE UAS training models from the past successes of the 21st CAV GE UAS CATT.

Given the incorporation of new technology into the combined arms concept and the limited time GE UAS units have from fielding to deployment, it is important to deliver timely, relevant, and realistic training. The 21st CAV GE UAS CATT stands committed to provide quality training to Company D guaranteeing its best opportunity to succeed as a deployable fighting unit.

*LTC (Ret.) Brian Apgar is the Gray Eagle UAS Mobile Training Team lead for System Studies and Simulation, Inc. (S3), MAJ Paul Fugere is the team chief and CW3 Luis Iglesias is the standardization officer for the 21st Cavalry Brigade Gray Eagle UAS Combat Aviation Training Team stationed at Fort Hood, TX.*

Above right: : SGT Roman, an instructor operator with Co. E, 3rd Cbt. Avn. Bde., supervises a mission during ARTEP at Ft. Stewart, GA, March 2014.

Center right: CW2 Nathaniel Barnard a UAS technician with Co. E., 3rd CAB, performs duties as Battle Captain during ARTEP at Ft. Stewart, GA, March 2014.

Below right: CW4 George Aldridge, a member of 21st CAV GE CATT, supervises Soldiers performing maintenance on an MQ-1C at Ft. Stewart, GA, March 2014.





Soldiers of Varsity Company maximize the capability of the CH-47F by carrying a battle damaged AH-64D across mountain ranges of Eastern Afghanistan.

ALL PHOTOS - US ARMY PHOTO BY SSGT NEIL CAMPBELL, 17 WING POC

# An Athlete's Mind to an Aviator Problem

By CPT Shane Sullivan

I love sports, and I think most aviators can relate. I grew up playing sports, and now I work out to feel better in the morning and look better at night. My personality is hell-bent on getting better every day. They call it type A, for Aviator, I think. As a leader, I read, reflect, and try new ideas. As a pilot, it's not much different. The problem is where that energy can lead. As an athlete, you've got to add a little weight to get stronger. As a pilot, you add challenge to be challenged. The problem with aviation is that depending on how you approach personal improvement, it can make you better or lead you to disaster.

Athletic training is all about focusing energy toward a goal. Without a focused training plan, your goal is a dream. I've never met a trainer who recommended getting fit by going to the gym and lifting whatever catches your eye. With pilots, we should focus on specific training objectives each day, for both seats and both ends of the aircraft. We should make specifically tailored plans that feed the developmental needs of each crewmember. That takes a lot of work, time, and discipline. Realistically, we send them out on routine missions and tell them to focus on safe and successful

aviating. Let's be honest – that can get boring and be a perfect lead-in to complacency. The result is that we catch a pilot landing too fast or flying too aggressively, and we complain about their indiscipline and overconfidence.

## Channeling the Energy

It takes maturity to realize when you are flying immaturely. I recently rotated to daytime flights after a long period of challenging night air assaults in the mountains of eastern Afghanistan. I had to wear sunglasses it was so bright, and I got sunburned just walking to chow. The world was wide open, and the flying was fun. I landed to a forward operating base for a simple logistical support operation. The junior pilot was mission managing, so I was happy to be at the helm – too easy. I had to reposition to refuel, and I made it look good. It was controlled, nothing outside of my perceived limits, and I felt like I was getting better at hover work in the process. But I got to thinking, "I just got here pretty quickly." Was I undisciplined or reckless? I looked over at the junior pilot. I'd been mentoring him for a few flights, and I wondered what I had just taught him. I knew

there was a better use of my energy, but there had to be something that still kept me from beating my helmet against the window on the next day's six hour flight. Failing to improve is to stagnate. It is a good thing that our pilots want to be challenged, and that they make personal attempts to improve. The problem in aviation comes when getting better means getting aggressive. Still, if you attack that desire for challenge, you just crushed the spirit of an aviator interested in getting better every day. Instead, let's channel that energy to something more positive.

## Know the Success Metric

I brought my CH-47F Chinook formation to meet a civilian helicopter company neighboring us at our outpost in Afghanistan. The helicopter was similar to our own, and I thought sharing our processes would challenge our perspectives, constraints, and assumptions. We met with a retired Army Aviator who admitted having to completely relearn how to fly when he joined the company. We were surprised. He had a great reputation as a pilot, so why would he need to change so much? It turns out the company was far less impressed with

his mission management or his ability to get the most out of helicopter performance. Their metric of success was smooth control touch, and the precision that follows. The aircraft was simple and power limited, but they expected him to fly smooth like butter, and land the aft wheels inside the chocks. Their culture valued smoothness over speed and precision over power.

If an Olympic lifter consistently adds weight each workout, he'll eventually hit either peak or injury, whichever comes first. If the athlete focuses on form, the weights go up more gradually, but the injuries are held at bay. Pilots need something to work at too, so I argue we should give them the right focus. Do we value who can land the fastest, look the coolest? Should we instead have a competitive culture that argues about who is best at the standards we most value... those standards linked to desired mission outcomes?

### Constructive Improvement

One method is to stress working at perfecting smoothness in flying all maneuvers, which is exceptionally challenging and rewarding. It's also a great way to manage power, think ahead of the airframe, and drives good decisions to support desired outcomes. Downwind, large power applications, big decelerations, and heavy banks won't win me points on the smoothness scale. Homeruns are always favored, but swinging big for a strikeout just makes you look dumb.

I remember learning fast rope approaches in Green Platoon. We'd fly low

and fast to stalk the target and increase surprise. The goal was a deceleration to simultaneously place the forward cabin door fast rope to the rooftop, and the aft ramp ropes to the ground-level entrance. The building was narrow and tall, references limited, and the pilot (me) sucked. A smarter man than I fixed the problem with one lesson. He said, "You've got it all wrong. This isn't a 'fast' rope maneuver. It should be called the 'slow' rope." We did about ten more, and timed every maneuver. The slower and smoother it seemed, the faster we hit the target. Training smoothness in all maneuvers may speed them up, but not to the point of indiscipline. Too fast, and there will be a cost to how smooth the maneuver. You're probably a better aviator than me, and fast and smooth go together like chapters five and nine. But, never forget who you're flying with and the example you send with your actions.

### Establishing the Culture

Establishing this culture of constructive improvement requires leaders to applaud aviators for taking on appropriate challenges, rather than condemn indiscipline and recklessness. Shift negative energy to the positive. Create a sense of competition that encourages getting better every day in the right way, even during routine missions. You have to work a strong practice team if you want to test your line before game day, but you don't crush your starting quarterback. My favorite method is the "butterfly approach." It's a stupid name, but great fun. The crew waits in antici-

pation, invisible scorecards at the ready, sensitive to any bump of the aircraft all the way to the ground. For crew chiefs, there's nothing better than getting to judge a pilot. They do it all the time, but now they have an empowered voice. It creates a shared accountability, a competitive spirit, and a eustress for peak performance in even the most mundane activity. With positive competition, complacency will drop, competency will rise, and aviators will have something to work toward. My crew chiefs are so happy to tell me, "I felt the wheels hit on that one, and that angle wasn't as good as..." Well it doesn't matter who they said, I'll be better tomorrow. It drives me to get smoother on the next one, and practice good habits for every task.

Our athletically-minded aviators will work at getting better every day. It's our job not to stifle self-imposed challenges, but to harness that energy to something positive. Get a faster time out of both your twelve and your sixteen minute two-milers. Train, get better, and don't settle for mediocrity. Daily improvement fights complacency. As leaders, we need to establish the values, the plan, and the culture of improvement. For me and mine – we'll fly smooth like butter.

*CPT Shane Sullivan is the commander of Company B (Varsity), 7th Battalion, 101st Aviation Regiment, 159th Combat Aviation Brigade, deployed to Regional Command East, Afghanistan from Dec. 2013 to Sept. 2014 and headquartered at Fort Campbell, KY.*



Varsity Company, B/7-101st of Task Force Wings provided Regional Command East Afghanistan with precision aviation support, including nightly joint special operations air assaults and general support operations from December 2013 thru September 2014.

ALL PHOTOS: US ARMY PHOTO BY SSGT NEIL CHITELL, F.WINGS.PCO

*Summing up as AAAA panel moderator, LTG Harry W. O. Kinnard, USACDC commander, asks that we consider . . .*

# Aviation as a System

**A**S we start the second 25 years or second 100, whichever it is depending on how you count the (Civil War) balloons, I suppose that all of us could try to play Nostradamus. I don't pretend to do that but I do have a few observations that I would like to make that seem to me to be at the heart of what we should be trying to do in Army aviation as we go on from here.

I think that one of them perhaps relates to the job that I have right now in Combat Developments Command. It's become crystal clear that we can no longer look at single weapons or single anything. We look at

families of artillery weapons, and we look at families of tank anti-tank weapons, and so forth. Similarly, it seems crucial to me that we take this same kind of a look at the family of Army aircraft.

Now we've taken this kind of look at times in the past with the *Rogers Board* and others, but I think that we have to keep this family in mind very carefully, rather than think in terms of a replacement for this, that, or the other, and *that* is the kind of look I can assure you which we in Combats Development Command intend to take.

## Army aviation as a system

In addition, I think that we have to increasingly consider the entire Army aviation effort *as a system*. I think we have to be very careful and do better than I believe we have even so far in being sure that the peripheral things come along with the main items, and I have in mind such things as the Pathfinders with their organization equipment and systems, the traffic controllers, the lightening of the weight of our aviation logistics, and

---

*The senior Army Aviator in the Army, LTG Harry W. O. Kinnard commanded the 11th Air Assault Division at Ft. Benning, Ga., during 1963-1965, leading that division into combat in Vietnam as the newly-activated 1st Cavalry Division (Airmobile) in September, 1965. Later assignments as Deputy CG of I Field Force, Vietnam, and Deputy ACSFOR, DA, preceded his current assignment as USACDC.*

## AVIATION AS A SYSTEM

(Continued from Page 35)

that sort of thing. This is not a new thought. All I'm saying is that I believe that it's going to become increasingly important.

I think as we take this look at Army aircraft, we have to be extremely wise — as wise as we human beings can be — and as far-sighted as we can be in measuring the trade-offs between increasing performance which all of us want, and the complexity and expense that inevitably goes along with it. There is obviously no simple answer, and obviously again, this is not a new problem, but I think it's one that gets increasingly tough.

### Beat your "branch" drum!

I believe that Army Aviators more, not less, need to think in terms of their basic branch as well as the fact that they're Army Aviators. I think that the Vietnam war has proven among the many other things that it's proven, that the idea that a man is an Infantryman as well as being an Aviator or Artilleryman and so on makes eminently good sense, and I think we find that it works both ways: that the man who is a good Infantryman, if he's an aviator is also a very good flier, and he's a *better* flier by virtue of the fact that he is a good Infantryman.

But the whole idea of getting your branch more and more interested in aviation, it seems to me, takes on increasing importance. Maybe you can do it by coaxing and cajoling or maybe you have to drag them screaming into the 20th century, but whatever you have to do, I believe it *must* be done with respect to your branch.

General Wright has spoken in terms of the infantry — I think if you're an armored type you'd better be sure that all the armored

types are getting up to date and up to speed on aerial cavalry, because I think it's here to stay and in a very big way. If you're an artilleryman, I would suggest that you make it crystal clear to all artillerymen that aerial rocket artillery is really here to stay, and they'd be well advised to learn a great deal about it. So I simply invite you to keep beating the "branch" drum, but with a strong aviation flavor.

I think it's important that we do our best to look ahead to expanded uses of Army aviation, and maybe you can come up with a better list than mine, but some of the things that occur to me are increased ability to operate at night, increased ability to operate in marginal weather, increasing capability to operate against sophisticated anti-aircraft weapons systems of the *Red-Eye* type or radar-controlled guns, or what have you.

It seems to me that we simply have to stay ahead of the power curve in all of our thinking about the new aircraft and in our approach to our design work we must be thinking in terms of Army aviation that's up against tougher and tougher problems, and it's doing more and more.

### The key to progress

I would add to that thought that I personally believe that as the assets in Army aviation become available — when the Vietnamese war is over — that we can do a great deal along the same lines that was done by the 11th Air Assault Division. To me the idea of a development of techniques and tactics and organization and equipment and doctrine that goes along on a broad front and in complete harmony is really the way to make progress.

The sort of thing that I would visualize, for example, would be the introduction in Europe of enough aviation assets over there — the idea of air cavalry units using the most sophisticated anti-tank weapons and so on. We should actually try those out in a place like Europe. So all I'm saying is that the next twenty-five years are going to be just as interesting, and perhaps more challenging than the last twenty-five, and I wish I were going to be around for all of them. I look forward to the few that I will.





*Appreciate the support from COL (Ret.) John Gallagher, the Mid-Atlantic Chapter President, for providing and sharing this information to our membership.*



## Mid-Atlantic Chapter Chapter Support for a Transitioning Army

The Mid-Atlantic Chapter of AAAA continues to support activities that meet both their member needs and supports our Army Aviation family. In working with the Aviation commanders in their region, they agreed there are significant challenges that their chapter could assist an army transitioning from a force at war to a force ready to deploy.

They identified three major challenges: how to keep a combat ready sharp edge while dealing with reduced budgets; professional survival in a downsizing Army; and continuing to support the troops who are serving downrange. To address these challenges the chapter is sponsoring a professional development mentorship program that shares the personal experiences of senior leaders to address a unit's transition from a force at war to a force that is training for the next conflict. They also continue to support activities such as deployment ceremonies, homecomings, family days, soldiers of the month/quarter and sending care packages to deployed Soldiers.

### Large Geographical Area

The chapter boundary encompasses all of New Jersey, Eastern Pennsylvania and Maryland North of Baltimore. Within those boundaries are: two aviation brigade headquarters – the 244th Theater Aviation Brigade (U.S. Army Reserve) and the 29th Combat Aviation Brigade (Maryland Army National Guard); four aviation battalions – 2-228th Avn. Bn. (fixed wing), 1-150th Assault Bn., 1204th (minus) Avn. Support Bn., 2-224th Avn. Bn. (Surveillance & Security); and three separate Aviation companies – C/1-169th Air Ambulance, B/3-126th Gen. Spt. Avn. Bn., and C-2-224th AHB. Also in their region are the Communications-Electronics Research, Development and Engineering Center (CERDEC), the Communications-Electron-

ics Command (CECOM), Army Test and Evaluation Command (ATEC) and Tobyhanna Army Depot.

### Commander's Perspective on Unit Support

To best serve these units they asked the aviation brigade commanders what they could do to assist. COL Kerry Dull, commander of the 29th CAB states, "We, as the United States Military, are expected to fight and win when called. As I look around my formation I see the "been there – done that" portion of the force. At the same time I also see the new faces both officer and enlisted, dry sponges, waiting to absorb knowledge from the experience base. As we enter this post Middle East war period, I look back and reflect on how the military of Germany faced far greater adversity and still sustained proficiency in the profession of arms following World War I. They did it with a miniscule budget and very little equipment. Their leadership bridged the gap. They shared lessons and built the foundation for the Blitzkrieg."

Dull continues, "We have too many instances in our nation's history that point to how our force has atrophied and a level of apathy has set in following extended conflict. History, ours and other nations', has shown that leadership bridges the gap in the interwar years to sustain and even repair war fighting proficiency. We have so much to learn and share from the past decade alone it would be a crime to miss this window of opportunity. Bring

in the seasoned veterans from past conflicts with the talent to coach and teach our young professional leaders and share their lessons learned. It's the old teaching the young the profession of arms. It's what we owe them so they can achieve and even exceed expectations."

COL Joe Edwards, commander of the 244th Avn. Bde. states, "The 244th continues to enjoy unbridled support from AAAA. The Mid-Atlantic Chapter has graciously supported the Warhawk Brigade in many endeavors ranging from social functions to award ceremonies, and most importantly Soldier recognition for outstanding service. AAAA has proven to be the steadfast constant during a tumultuous time in a sea of change. The 244th will continue our positive relationship with the Mid-Atlantic Chapter for the coming years."

Based on those comments, the chapter will continue to coordinate speakers for unit professional development events.

### Dedicated Leadership

A special debt of gratitude is owed to Ed Carnes and Kit Roache for their untiring efforts and dedication in leading the chapter activities for the past several years. During their leadership tenure, the chapter initiated and supported nine fully funded scholarships, received three AAAA Chapter of the Year awards and was responsible for raising over \$1.5 million dollars in donations to the Fisher House Foundation.

### Summary

The Mid-Atlantic Chapter has always been on point for AAAA. With great leadership, the chapter has been able to support the membership within their diverse, multi-state region. We look forward to the continued outstanding support of Aviation Soldiers and families that is the bedrock of chapter activities.

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



## Idaho Snake River Chapter



**AAAA Idaho Snake River Chapter** members pause for a Kodak moment at their 7th annual golf tournament on Sept. 13, 2014 at Boise Ranch Golf course. This year's tournament was the most successful yet, raising more than \$4,000.00 to help fund two scholarships – MAJ Ed Freeman and CW2 Jesse Phelps Memorial Scholarships.

## Tennessee Valley Chapter



The Tennessee Valley Chapter held its Fall Bob Vlasic's Classic Bass Tournament on Wheeler Lake at River Walk Marina, Decatur, AL on September 20, 2014. 22 boats competed for the top five places – 1st place went to **Taylor Vinson** and **Matt Sherman** (12.88 lbs.); (pictured center left and right, w/ Bob Vlasic (left), chapter VP Retired Affairs, and Gaylen Bush); 2nd, **John Frasier** and **Bill Radcliff** (9.07 lbs.); 3rd, **Jeff Benefield** and **Terrell Wilson** (6.60 lbs.); 4th, **Steve Burgess** and **Roger Messick** (6.55 lbs.); and 5th, **George Schussler** and **Steve Weis** (6.53 lbs.). Big Bass honors went to Taylor Vinson with a 4.15 lb. Largemouth Bass. The Hard Dock Café in North Decatur was the venue for the awards ceremony which included a buffet, and drawings for the numerous door prizes. This was all made possible by sponsors: Avion, Dynetics, MCR, MSSI, MWR, Tennessee Valley Marine, Triumph Group, VT Group, and VENCORE. The Spring Bass Tournament is planned for April 11, 2015 on Lake Guntersville, AL.

## New Chapter Officers

**Aviation Center Chapter**  
Treasurer, Melissa Glavan

**Badger Chapter**



Secretary, CPT Nils Henderson  
VP Technology, 1LT Daniel Hamilton  
VP Programs, 1LT Sarah Latza  
VP Fundraising, 1LT Patrick Peterson  
VP Enlisted Affairs, SSG John Limoseth  
Treasurer, CW4 J. Mike Tomblin

**Griffin Chapter**



VP Awards, CPT Andrew Tehvand

**High Desert Chapter**  
President, LTC William Garber III

**Pikes Peak Chapter**  
Secretary, MAJ Eric Megerdooian  
VP Membership, CPT Joshua Meyer

**Ragin' Cajun Chapter**  
President, LTC Jamie Wallace  
Secretary, CPT Adam Marr  
VP Community Relations, CPT Dan Mendez

**Rio Grande Chapter**  
Secretary, MAJ Matthew Landrum

**Winged Warriors Chapter**  
Treasurer, CPT Gregory Lewis

## Order of St. Michael and Our Lady of Loreto Awards

### Aviation Center Chapter

BG Timothy J. Edens, commanding general of the U.S. Army Combat Readiness and Safety Center, Fort Rucker, AL, inducted four aviators into the Bronze Honorable Order of Saint Michael during an Aug. 14 awards ceremony at the Fort Rucker Officers Club. All four are assigned to the Spanish Helicopter Pilot School, Co. B, 1st Bn., 212th Avn. Regt. at Ft. Rucker. Inducted were:



**CW4 Peter A. Hernandez** – recognized for outstanding duty as the platoon leader, instructor pilot and instrument examiner for the Army's only Spanish Helicopter Pilot School, as well as having served in a variety of military units during his 24 years of service. He is being reassigned to the Army Warrant Officer Career College;



**CW3 Jose J. Graulau** – recognized for outstanding accomplishments as the company safety officer and Spanish instructor pilot and having served in a variety of military units during his 19 years of military service. He will continue in his present assignment;

*(Continued on next page)*

**Want to change your AAAA Chapter Affiliation?**  
**No Problem —**  
**Call 203-268-2450**



CHAPTER PHOTO BY USAFEE CHAPTER PUBLIC RELATIONS

**DAC Vladimir Kultschizky** – in recognition of outstanding duty as a Spanish instructor pilot, standardization instructor pilot and a variety of roles in Army Aviation during 27 years of military aviation service. He will continue in his present assignment; and



DAC Torres

**DAC Mickey Torres** – recognized for outstanding duty performance during 16 years of military aviation service and specifically as the standardization officer and Spanish instructor pilot for the company. He will continue with his current duties.

## Rio Grande Chapter



US ARMY PHOTO BY SFC CHRISTOPHER DENNIS, 1501ST PUBLIC AFFAIRS

**CW4 Christopher S. Ashton**, an AH-64D Attack Helicopter pilot assigned to 1st Battalion, 501st Aviation Regiment, Combat Aviation Brigade, 1st Armored Division, was inducted into the Bronze Honorable Order of Saint Michael by CAB Commander, COL Carey M. Wagen, during an Oct. 1 promotion ceremony in the Dragon Battalion Conference Room at Fort Bliss, Texas. Ashton was recognized for his outstanding support to the battalion and more than 18 years

of Army Aviation service as he prepares to depart for his new duty assignment as an instructor pilot with the 166th Avn. Bde., at Fort Hood, TX. Celebrating with Ashton are (left to right) son, Christopher, Jr.; his mother, Claire Ashton; Wagen; Ashton; his wife, Deanna, and son, Tristan.

## Savannah Chapter



US ARMY PHOTO BY OPT CAROL ASKE, 3RD CABRNO

**CPT Jay R. Berger**, commander of Headquarters and Headquarters Company, 3rd Combat Aviation Brigade, is inducted into the Bronze Honorable Order of Saint Michael by 3rd CAB commander, COL John D. Kline, during an Aug. 1 ceremony at Hunter Army Airfield, Savannah, GA. Berger was recognized for his outstanding service as a two-time 3rd CAB company commander as he changed duty for an assignment in the Pentagon, Washington, DC.

## Tennessee Valley Chapter



US ARMY PHOTO BY HENRY NORTON, ARPADEMO

Tennessee Valley Chapter President, Mr. Gary Nenninger, inducted **COL Brian R. Tachias**, outgoing project manager of the Fixed Wing Project Office, into the Silver Honorable Order of Saint Michael during a change of charter ceremony at Bob Jones Auditorium, Redstone Arsenal on July 31, 2014. Tachias was recognized for successfully leading and facilitating executive oversight of all Army fixed wing aircraft as directed by the Army Acquisition Executive and Chief of Staff, Army, resulting in united program authority for all fixed wing aircraft life cycle management and the integration of mission

equipment packages. He will serve on the staff of BG Robert L. Marion, Program Executive Officer for Aviation. During the same ceremony, Nenninger also inducted Tachias' wife, **Judy**, into the Honorable Order of Our Lady of Loreto for her dedicated support to the Army Aviation community.



CHAPTER PHOTO BY DENISE DENALI

**Mr. David Arterburn**, former chief of the Armed Scout Helicopter Project Office Technical Management Division, was inducted into the Silver Honorable Order of Saint Michael by Tennessee Valley Chapter president, Gary Nenninger, during a ceremony on Nov. 6, 2013 at Redstone Arsenal, AL. Arterburn was recognized on the occasion of his change of duty for his outstanding service to Army Aviation over 20 years on active duty as a maintenance test pilot and an additional 10 years in his current and subsequent roles within the acquisition and science and technology communities. He continues to contribute as the director of the Rotorcraft Systems Engineering and Simulation Center at the University of Alabama, Huntsville.



US ARMY PHOTO BY HENRY NORTON, ARPADEMO

Gary Nenninger, Tennessee Valley Chapter president, inducts **LTC Shawn B. Powell**, former assistant project manager for the international Apache program, into the Bronze Order of St. Michael during an Aug. 28 retirement ceremony at Redstone Army Airfield, Redstone Arsenal, AL, May 19 while Apache Project Manager, COL Jeffrey E. Hager, observes.



**Mr. James A. Hawkins**, chief of the Logistics Division of the Utility Helicopter Project Management Office, is inducted into the Bronze Honorable Order of Saint Michael by COL Thomas H. Todd, Utility Helicopters PM during a Sept. 30 awards ceremony at Redstone Arsenal, AL. Hawkins was recognized for his outstanding achievements in logistical support to the UH-60M program.



The **AAAA National office** recently celebrated the one year anniversary of the new logo featuring **Network, Recognition, Voice and Support**. The team enjoyed a Pizza party with a branded cake and an AAAA Trivia game with prizes.



## The Following AAAA National Awards Are Open For Nominations Now!

**Recognize the Hard Work of Your Fellow Army Aviators!**

Presented at the 2015 Army Aviation Mission Solutions Summit

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

**Suspense: January 1**  
**Send in Your Nominations Today!**  
 Nomination forms for all of the AAAA Awards are available from the AAAA National Office,  
 593 Main Street, Monroe, CT  
 06468-2806  
 Telephone: (203) 268-2450  
 FAX: (203) 268-5870 and  
[www.quad-a.org](http://www.quad-a.org)



*This month's article is authored by CW3 Rebecca Chambers. She serves on your AAAA National Membership Committee. Becki brings a unique perspective – married to an Active Duty Soldier and having served in the National Guard, she continues her service in the U.S. Army Reserve.*

*CW5 (Ret.) Dave Cooper, AAAA VP for Membership*

# The Membership Corner



MSG Dana (right) and SSG Jarin Trakel

During my time in the military I have had the opportunity to work with some amazing female Soldiers and I wanted to highlight one for you this month. Please meet MSG Dana Trakel, a member of the Washington Army National Guard, currently assigned to the Joint Force Headquarters. Not only is Dana a Soldier herself, her husband is a retired Soldier, and she is the proud mother of SSG Jarin Trakel, who is assigned to 4th Battalion, 160th Special Operations Aviation Regiment (Airborne).

Dana originally joined the U.S. Army Reserve in Waterloo, Iowa as a Wire and Cable Specialist, military occupational specialty (MOS) 31L, in a Signal unit. She joined after graduating with a two year degree and wanted the Army to pay off her student loans. She has an older brother who was in the Air Force and an older sister who was in the Army Reserves. All joined after college for the Student Loan Repayment Program (SLRP). When her signal unit was deactivated, all the unit members were picked up by the Iowa Army National Guard (ARNG).

She met her husband through friends and family in Wisconsin. He was Active

Duty and by her being in the Guard she was able to travel and stay in the military while following his Active Duty career. They moved to Washington State in 2000. The Washington ARNG became her fourth state as a National Guard member. When she transferred, her MOS was available in male only infantry units so she chose 15P, Flight Operations Specialist, as her new MOS.

Her son, Jarin, graduated high school in 2006. He always loved the military life. They lived at the National Training Center in California for three years prior to going to Joint Base Lewis-McChord (JBLM) and he loved every minute of it. Dana thinks that Jarin had always

known he would join the Army and, as parents, they tried to influence him a little on his decision. His father was a 12B Combat Engineer and she was a 15P and they told him there were better ways to enjoy a career in the Army. Jarin was always a kid who wanted to take things apart and fix them. So, when he went to the recruiter on his own he signed a commitment for the Active Army as a 15U, CH-47 Helicopter Repairer. Dana was a little shocked because she could have helped him get a slot in the Guard in that same job but he wanted to do it his way and he did.

Dana has been a single Soldier, the spouse of a Soldier, and now the mother of a Soldier. She has deployed and left behind a husband and two young boys and understands the role she is expected to play as a senior NCO in supporting her son on his many deployments. But as a mother, she finds that it's helpful not knowing much about the mission until he comes home – then the worry doesn't creep in as much. She is very proud of her son and his accomplishments but he is still her child so there will always be a little bit of worry.

Quad A came to the 66th Theater Aviation Command several years ago and established a chapter on JBLM. Dana's chain of command strongly supported the organization and for good reason as she believes it is important to have a voice for the Aviation community. Her current position in the Guard is in Joint Service Support. In this position it is important to build community relations. She says AAAA is a great example of a program where you can join and have a large network with many opportunities at your disposal from networking and job announcements to scholarships for family members. Dana says it also helps her stay "in the know" of what is happening in the aviation community while she works in a different arena.

*CW3 Becki Chambers*



## New Lifetime Members

LTC Michael J. Alvarado, Ret.  
CW2 Sandy N. Caul  
SGM Walter Detrinidad  
COL Richard E. Erwin, Ret.  
CW5 Dana Edward Jones  
CW3 Patrick Conan Kelly  
SFC Donald G. Lamury, Ret.  
MAJ Joseph J. Pyun  
CW3 Michael Francis Tobin

## New Members

### Air Assault Chapter

SGM Jay Blessing  
SG5 Douglas Englen  
Jim White

### Aloha Chapter

WO1 Randy Bowser  
CW5 Eugene Santos  
CW3 Charles Daniel Weaver  
CPT John F. Wlasniewski

### Armadillo Chapter

Neil Edward Chico

### Aviation Center Chapter

2LT Kyle A. Applegate  
WO1 Jason D. Busch  
WO1 Carl A. Crittendon  
2LT Ty Dawson  
WO1 Scott A. Graham  
CW2 Matthew Humphrys  
Ronnie Kearns  
Steve Overby  
WO1 Jason M. Rademacher  
2LT Aaron E. Rhodes  
2LT Adam D. Schilling  
2LT Stephanie K. Thacker  
WO1 Jordan A.W. Whitney

### Badger Chapter

1LT Robert Hofer

### Central Florida Chapter

MAJ Charles Stroup, Ret.

### Colonial Virginia Chapter

Chris Burgess

### Connecticut Chapter

CW3 Matthew Lanese

### Delaware Valley Chapter

SPC Konrad W. Wildman

### Embry Riddle Eagle Chapter

MSG Christopher T. Wolfla

### Flint Hills Chapter

CPT Matt Mraz

SGT Kade Poore

### Flying Tigers Chapter

LTC Mark Brozak

### Griffin Chapter

SSG Tyler Parsons

CPT Andrew Tehvand

### Jimmy Doolittle Chapter

Larry Robb

### Keystone Chapter

SSG Nicholas Davis

### Land of Lincoln Chapter

LTC Lawrence W. Hallstrom, Ret.

### Lindbergh Chapter

LtCol Thomas R. Metzler, Ret.

### Mid-Atlantic Chapter

CW4 James P. Burton, Ret.

PVT Christian M. Chiafullo

PVT Matthew H. Crawford

SFC Tiffany N. Cruz

SPC William A. Daniels

SPC Cody G. Spoon

### North Star Chapter

CPT Andrew Thomas Ueland

### North Texas Chapter

COL Steven Kihara, Ret.

### Oregon Trail Chapter

CW2 Dustin Nathaniel Hayes

COL Ricardo Love

Ellen E. Mitchell

SFC David M. Pickett

SFC Richard Lewis Powell

SFC Jack E. Ruscoe

Craig Smalley

David Smalley

Larry M. Smalley

### Phantom Corps Chapter

CW3 Eric Rumplick

### Pikes Peak Chapter

MAJ Eric Carlson

### Rio Grande Chapter

CPT Julianne Apodaca

CW2 Gabriel Apodaca, USAR

CW4 James Matthew Cobb

SSG Hesse Penaflor, USAR

MAJ Adam Springer

### Rising Sun Chapter

Kyoko Horidan

Naoki Kihara

LTC Tatsurou Sakaguchi

Tadasu Takahashi

Timothy J. York

### Savannah Chapter

SGT Arthur Wayne Hinkle

### Tarheel Chapter

LTC Joseph Bishop

### Tennessee Valley Chapter

LTC Alexander Alejo

Forrest Collier

Brian Forte

Michael Guest

LTC John Latimer

Kim McCorvey

Derek A. Santiago

### Thunder Mountain Chapter

CW2 Sean Potter

### Thunderbird Chapter

SPC Justin Daniel Conlee

SFC William C. Ritter

### Volunteer Chapter

SSG Joseph S. Webb

### Washington-Potomac Chapter

LTC Joseph Bishop

SGT Jeffrey Curtis Holter

Cara Weldy

LTC Kevin M. Woods, PhD Ret.

### No Chapter Affiliation

Gary Buchanan

CPT Bryan Dirren

LTC Patrick Gary

R. Scott Hanling

Steven Hojnacki

SPC Lucas Jones

CPT William Long

SGT Jace J. Lopez

CW4 Robert J. Metoyer

Stephan Solymosy

Andrew Michael Tarr

Anita Vannetta

Yoshimasa Yamaguchi

## Lost Members

Help us locate a lost member on this list and receive a free month extension to your AAAA membership:

SPC Jason Michael Adams

SGT Daniel Theodore Ames

SGT Renioa S. Battle

SPC Hailey Benson

SSG Chestnut Brown

SGT Curtis John Willie Brown

COL Kenneth G. Campbell

Gerald W. Egeberg

SSG Brandon S. Felyer

SPC Ryan Allen Grebe

David H. Hays

LTC Jody Hicks, Ret.

Rob Huggins

1LT Mark J. Luker

SGT Danielle J. Massaro

SPC Alan Montoya

CPT Christopher J. Moroski

CSM Robert D. Parmer

Edward Rojas

LTC Jami C. Shawley

1LT David William Smith

WO1 Gregory D. Spiker

CSM Curtis V. Stapleton

1LT Scott I. Stark

WO1 Clifton M. Streagle

DeLacy Tozier

SGT Brian Triplett

WO1 Lane Troyer

CPT Mindy Lorraine Wallace

LTC William G. Waters, Jr. Ret.

CW2 Jeremy S. Wendt

Dallas Wolf



## Don't Miss Out!

Recently, a number of AAAA members have not seen critical messages from us about the Martina McBride Dinner Concert on 31 March 2015, the AAAA Annual Summit hotel rooms/ housing links and the 2015 Summit Proffer acceptance among others. In many cases the email is being filtered directly to your spam filters.

Add **@quad-a.org** to your email Safe Senders list.

If you are not sure how to do this, go to [quad-a.org](http://quad-a.org) for detailed instructions based on what email program you are using.



# The Yellow Ribbon Program for VA Eligible Students

By Judy Konitzer

If a spouse or child is looking to further their education, the Yellow Ribbon Program (YRP) may be for you if you are eligible for the VA Post 9/11 GI Bill. I personally would have loved having this additional assistance as we educated our seven children, however at the time it was not available. Before retiring this past October, our son-in-law transferred his VA education benefits to his children and recently learned about the Yellow Ribbon Program. As a result, our grandchildren will be able to apply for it when it is time for them to enroll in college and help defray some of the additional expenses they may encounter.

## Available Benefits and Eligibility of the Post 9/11 GI Bill

In July 2008, the Post 9/11 GI Bill was signed into law, creating a new robust education benefits program. It provides education benefits for military personnel who have served on Active Duty for 90 or more days since Sept. 10, 2001. These benefits are tiered based on the number of days served on active duty, creating a benefit package that gives current and previously activated National Guard and Reserve members the same benefits as Active Duty service members.

Once your application on VA Form 22-1990 is received, the VA will issue you a certificate of eligibility. Active Duty service members can transfer these entitlements to their spouses and

dependents making them eligible for payment of tuition and fees for a public school. This entitlement, however, does not cover tuition and fees that exceed the amount at a private school or for a nonresident student, which are capped each academic year.

## Yellow Ribbon Program Features

The Yellow Ribbon Program (38 USC 3317) is a provision of the Post 9/11 Veterans Educational Assistance Act of 2008. The program only applies to additional tuition and costs not covered under Section 3313 (c) (1) (A) of the Statutes of Individuals Eligible at the 100% Benefit Level.

Veterans (not serving personnel) who are entitled to the maximum benefit rate (100% benefit level) determined

by service requirements or their designated transferees may receive this type of funding. Active Duty students or their spouses, who are eligible for the transfer of entitlements, are NOT eligible as their benefits are currently paid under Section 3313 (e). However children as designated transferees of active duty members are eligible.

## Qualifications for Receiving YRP Benefits

To qualify to receive Yellow Ribbon benefits you must have:

- Served an aggregate period of active duty after September 10, 2001, or at least 36 months;
- Were honorably discharged from active duty for a service connected disability and have served a minimum of 30 continuous days after September 10, 2001;

- Are a dependent (spouse or children) eligible for Transfer of Entitlement under the Post 9/11 GI Bill based on a veteran's service under the VA eligibility criteria. More information is at <http://www.military.com/education/gi-bill> or [www.va.gov](http://www.va.gov).

### Academic Institutions Voluntarily Participate

Institutions of higher learning may voluntarily elect to participate in the Yellow Ribbon Program to make additional funds available without an additional charge to your GI Bill entitlement. Participating institutions are listed at [www.benefits.va.gov/gibill/yellow\\_ribbon.asp](http://www.benefits.va.gov/gibill/yellow_ribbon.asp).

I was amazed at how many institutions there are within each state and how much financial assistance is available.

These additional funds may be needed to cover Non-resident fees at Public Schools or tuition that exceeds the academic cap at Private Schools. The VA will match specified dollar amounts towards tuition and fees not to exceed 50% of the difference and will make payments directly to the institution.

It is best to discuss these benefits with your desired institution prior to your final enrollment, as they must not offer assistance to more than the maximum number of individuals as stated in their program. If you are accepted, they

will then certify your enrollment and provide Yellow Ribbon Program information to the VA. For those already enrolled at a university, etc., there may still be an opportunity to receive the benefits if they have yet to be awarded.

For more info you can call the VA Education Line direct at 1-888-442-4551 and speak with one of their representatives.

*Judy Konitzer is the Family Forum editor for ARMY AVIATION; questions and suggestions can be directed to her at [judy@quad-a.org](mailto:judy@quad-a.org).*

## AAAA Scholarship Foundation

NETWORK | RECOGNITION | VOICE | SUPPORT



### 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 since the beginning of calendar year 2014. 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!*

Sidney W. & Ruth R. Achee Trust\*  
Airbus Group, Inc. (EADS NA)  
Aloha AAAA Chapter  
Ameripack, Inc.  
Arizona AAAA Chapter  
Army Aviation Center Federal Credit Union  
AugustaWestland North America, Inc.  
Avenge, Inc.  
Aviation Center AAAA Chapter  
BAE Systems  
Badger AAAA Chapter  
Bank of America Employees  
LTC (Ret.) James R. Barkley, Sr.\*  
Elisabeth Cassel Baugh\*  
COL (Ret.) Robert P. & Janet L. Birmingham  
S.S. Blocker\*  
The Boeing Company  
Bonham Technologies, Inc.  
Billy & Glenn Brashear\*  
Albert W. Buckley, Jr.  
Keith E. & Constance Cedras  
Charlie Horse Air Cav Troop Assoc.  
COL (Ret.) Colin D. Ciley, Jr. & Yhanh Thi Ciley\*  
Michael Coffey  
Computer Sciences Corp.  
Connecticut AAAA Chapter  
Corpus Christi AAAA Chapter  
Cub Club\*  
W. Kirby & Ann Archer Davis

Jack H. Dibrell Alamo AAAA Chapter  
Digiflight, Inc.  
Jimmy Doolittle AAAA Chapter  
LTC (Ret.) Jan S. Drabczuk  
COL (Ret.) Joseph A. Durso  
Elbit Systems  
Alecia Elwell  
LTC (Ret.) J. Joe Emerson  
Empire AAAA Chapter  
EXTEC  
Fidelity Charitable Gift Fund  
FLIR  
Darel Gallagher  
COL (Ret.) William M. & Jill D. Gavora  
Leslie H. Gilbert\*  
S. and C. Glor  
Donald and Alestin Graham  
Griffin AAAA Chapter  
Susan G. Guerrant\*  
Carol A. Harmon  
Thomas M. & Katrina B. Harrison\*  
Paul L. Hendrickson  
COL (Ret.) Curtis & Caroline Herrick  
Keith R. & Elayne C. Hertenberg  
BG (Ret.) James & Joyce Hesson  
Kathleen Howard\*  
COL (Ret.) James E. & M. Roberta Hyers  
Idaho Snake River AAAA Chapter  
Iron Mike AAAA Chapter  
COL (Ret.) Larry M. Jonas

William A. & Andrea J. Johns  
MG (Ret.) Richard D. Kenyon  
Art & Dotty Kesten  
Gregory L. & Kimberly R. King  
Dr. (COL./Ret.) Hal Kushner  
Edward L. Landry\*  
Robert M. Leich  
Lockheed Martin  
Stephen J. & Debra S. Lyding  
Daniel T. Madish  
Magnolia AAAA Chapter  
Geoffrey W. & Rebecca A. Mann  
Roger C. & Nancy S. Martin  
Marvin Test Solutions, Inc.  
David & Maria Paola Mawhinney  
MG (Ret.) Carl H. & Jo Ann W. McNair, Jr.\*  
LTC (Ret.) Thomas McNamara  
Magnolia AAAA Chapter  
Mid-Atlantic AAAA Chapter\*  
Minute Man AAAA Chapter  
Mount Rainier AAAA Chapter  
Florine Mullins  
Munsch & Co. Aeromechanics  
Nammo, Inc.  
Gary S. & Bonnie M. Nenninger  
Helen Neuarth  
Northern Lights AAAA Chapter  
Northrop Grumman  
Old Tucson AAAA Chapter  
Ostovich Enterprises, Inc.  
Pelican Realty

LTG (Ret.) Daniel J. & Barbara S. Petrosky\*  
Alton G. Post  
Edward S. & Nan V. Rebholz  
Robertson Fuel Systems, L.L.C.  
Rockwell Collins  
Safran Group  
Savannah AAAA Chapter  
Sigmatech, Inc.  
Sikorsky  
B.S., K.J., & S.E. Silver\*  
Kenneth M. & Linda Slye  
Systems Studies & Simulation, Inc.  
Tarheel AAAA Chapter  
Techno-Aide, Inc.  
Textron  
Thunderbird AAAA Chapter  
TJK Consulting Inc.(5/6/14)\*  
COL (Ret.) Harry Townsend & Ms. Diana Townsend\*  
Transportation Corps Aviation Association  
United Technologies  
Vietnam Helicopter Pilots Association  
Volunteer AAAA Chapter  
Voodoo AAAA Chapter  
Washington Potomac AAAA Chapter  
Mr. & Mrs. P. D. Walker\*  
Wright Brothers AAAA Chapter  
David M Zieff Deborah Zieff\*

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

Editor's note: Companies can send their Army Aviation related news releases and information to [editor@quad-a.org](mailto:editor@quad-a.org).

## Nine Teams Selected for DVE Mitigation Ground Testing



US ARMY PHOTO

Nine participants have been selected by the U.S. Army for early 2015 ground testing of sensors designed to help helicopter pilots see through degraded visual environment (DVE), the Aviation and Missile Research Development and Engineering Center (AMRDEC) announced on Sept. 29. AMRDEC will oversee testing of two systems being developed under its DVE Mitigation Program – one from the Sierra Nevada Corporation and a second from the Communications-Electronics Research, Development, and Engineering Center's (CERDEC) Night Vision Electronic Sensor Directorate and Arete – as well as separate submissions from General Electric, Honeywell, two teams from Lockheed Martin, Near Earth Autonomy, Rockwell Collins, and Telephonics. Testing is scheduled for January and February 2015 at Yuma Proving Grounds, AZ.

## Bell Helicopter Contributes \$1 Million to National Army Museum

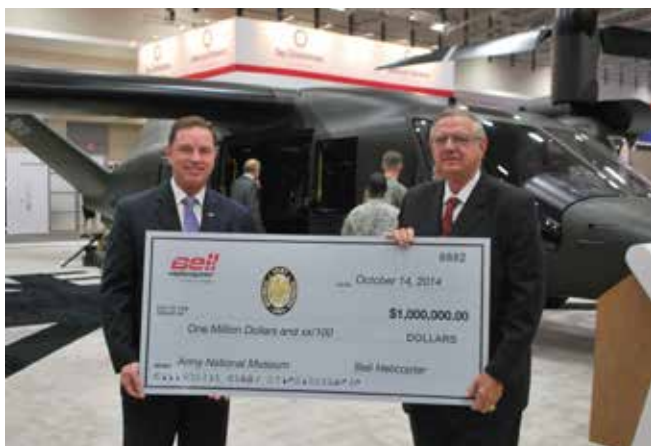


PHOTO COURTESY OF BELL HELICOPTER

Bell Helicopter announced a \$1 million contribution to the National Museum of the United States Army. Robert Hastings (left), Bell Helicopter's Senior Vice President of Communications & Government Affairs and Chief of Staff, presented the ceremonial check to retired Army Gen. William W. Hartzog, President of the Army Historical Foundation (AHF) on Oct. 14 at the 2014 Association of the United States Army's Annual Meeting and Exposition at the Walter E. Washington Convention Center. Bell Helicopter will sponsor its venerable UH-1 Iroquois "Huey" helicopter as the featured key artifact of the Museum's Vietnam War exhibit.

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

**Alliant Techsystems Operations, LLC**, Plymouth, MN is being awarded a \$36,778,430 firm-fixed-price, requirements contract for M230-30MM automatic guns and 32 spare parts in support of the Apache helicopter; work location and funding will be determined with each order with an estimated completion date of Sept. 28, 2017.

**The Boeing Company**, Mesa, AZ, was awarded a \$130,000,000 modification to fixed-price incentive, full rate production contract with a cumulative total, before this modification, of \$1,156,446,681. This is an undefinitized contract action to build seven new Apache AH-64E helicopters; work will be performed in Mesa with an estimated completion date of March 31, 2017.

**The Boeing Company**, Ridley Park, PA, was awarded a \$27,700,422 modification to a cost-plus-fixed-fee contract for development, fabrication, testing and bench qualifying a modified electrical system which will result in an improved electrical system for the CH-47 aircraft; work will be performed in Ridley Park with an estimated completion date of Sept. 30, 2017.

**Doss Aviation, Inc.**, Colorado Springs, CO, was awarded a \$32,174,550 firm-fixed-price contract for advanced instructor pilot support services to the 110th Aviation Brigade, Ft. Rucker, AL; funding and exact work location will be determined with each order, with an estimated completion date of Sept. 14, 2018.

**International Automated Systems, Inc.**, \* Minneapolis, MN, was awarded a \$52,236,909 firm-fixed-price, indefinite-delivery/indefinite-quantity, contract for aviation light utility mobile maintenance cart, field support package, and authorized stockage list and orientation training; funding and work location will be determined with each order, with an estimated completion date of Sept. 17, 2019.

## Advertisers Index

AeroVironment.....	2
Agusta Westland .....	27
BAE Systems .....	21
Boeing, Defense, Space & Security.....	11
BOSE Corporation.....	7
Coastal Seat Cushions, Inc. ....	30
Columbia Helicopters, Inc. ....	43
David Clark Company .....	17
Elbit Systems of America, Inc. ....	13
Fastening Systems International, Inc. ....	45
Finmeccanica North America.....	5
FLIR Systems, Inc. ....	25
General Atomics Aeronautical Systems, Inc. ....	1
Hupp Aerospace Defense.....	15
Meggitt Defense Systems .....	37
Navigator Development Group, Inc. ....	48
Northrop Grumman Corporation .....	9, 72
Phantom Products Inc. ....	31
Rockwell Collins, Inc. ....	41
Science and Engineering Services, SES, Inc.....	35
Telephonics Corporation .....	39
ULTRAX Aerospace .....	47
USAA.....	19
VT Miltope Corporation .....	33

## Aviation General Officer Promotions/Assignments



**MG David C. Wood** was promoted to his present rank on Oct. 1, 2014. A Senior Army Aviator, Wood assumed command of the 38th Infantry Division, Indiana Army National Guard, from MG Joseph L.

Culver on Oct. 18, 2014. He previously served as the division's deputy commanding general for operations since 2011.

## Change of Charter

Clark Takes Over at PM FW



BG Bob Marion (left), program executive officer for Aviation, presents **COL Steven B. Clark** with the charter for the Fixed Wing Project Office during a ceremony held at the Bob Jones Auditorium, Redstone Arsenal,

July 31. Clark most recently served with the Special Operations Command (SOCOM) as the product manager for MH-60K/L/M helicopters, where he led the program from low rate initial production through fielding and divestment. The outgoing project manager, COL Brian R. Tachias, will serve on BG Marion's staff at the program executive office.

## Transfer of Authority

TF Vandals Takes Over in Kosovo



**LTC Michael LaPoint** and **CSM John Hicks** uncased the battalion colors of TF Vandals during the transfer of authority ceremony for the Aviation Task Force at Camp Bondsteel, Kosovo on Oct. 2, 2014. TF Vandals (KFOR 19), Multi-National Battle Group-East (MNBG-E), assumed mission responsibility from TF Warhorse (KFOR18) and is comprised of HHC, A and D companies of the 1st Bn., 150th Avn. Regt. (NJ ARNG) and Co. F, 5-159th Gen. Spt. Avn. Bn. (USAR).

## Awards

Two Receive Master Wings

BG Timothy J. Edens, commanding general of the U.S. Army Combat Readiness and Safety Center, Fort Rucker, AL, presented the Master Army Aviator badge to two aviators during an awards ceremony at the Fort Rucker Officers Club, Aug. 14.



**COL Stuart J. McRae**, commander of the U.S. Army Garrison at Ft. Rucker, achieved over 2,000 flight hours with more than 15 years in Army Aviation service; and



**CW4 Ralph J. Hernandez**, a Spanish instructor pilot with Co. B, 1st Bn., 212th Avn. Regt., attained more than 15 years of Aviation service and over 3,800 flight hours.

## Flight School Graduates

AAAA congratulates the following officers graduating from the Initial Entry Rotary Wing (IERW) courses at the U.S. Army Aviation Center of Excellence, Fort Rucker, AL. AAAA provides standard aviator wings to all graduates and sterling silver aviator wings to the distinguished graduates of each flight class.

29 Officers, Sept. 18

### IERW UH-60 Track

LT Edward Casey – DG  
WO1 Jason Kram – DG  
LT Ian Diede\*  
LT Samuel Hargrove  
WO1 Kimberly Richardson\*  
WO1 James Stratton\*  
WO1 Robert F. Tobin, Jr.

### IERW UH-60A/M Track

LT Joshua Davis – DG

WO1 Chad Gregory – DG  
WO1 Zachary Acey – HG  
LT Matt Hopkins – HG  
LT Clinton Barr  
LT Austin Barrett  
LT Stuart Brimmer  
WO1 Michial Cebe\*  
WO1 Bradley Courtway  
WO1 Eric Currier  
WO1 Calvin DeVault  
WO1 Steven Hawley  
WO1 Michael Hoehn  
WO1 Michael Holmes  
LT John Hurdt\*  
WO1 Melody Jackman  
LT Cristina Lowman  
LT Nicholas Pawlowski  
LT Daniel Petterson\*  
WO1 Anthony Powell  
LT Matthew Richardson

52 Officers, Oct. 2

### IERW AH-64D Track

LT David Dyksterhouse – DG  
WO1 Erik Henderson – DG

WO1 Samuel Addington\* – HG  
LT Jeffrey Batchelder  
LT Sean Carson\*  
LT Stuart Godlasky\*  
WO1 Jaiuan Hunter\*  
WO1 Brett Ingleby\*  
WO1 George Laubhan\*  
WO1 Sean Meyer  
WO1 Justin Muhlbeier  
WO1 Antonio Schlee\*  
LT Stephen Scott  
WO1 Ryan Vanderpool\*  
WO1 Matthew Weber  
WO1 Shawn Weiler\*  
LT Jana Welch\*  
LT Evan White

### IERW CH-47F Track

LT Hunter Satterfield\* – DG  
WO1 Dylan Brown  
LT Brian Coyle  
LT Mario Maldonado  
LT Christopher Poppleton\*  
WO1 Christopher Thore  
LT Bryan Wilson

### IERW UH-60 Track

WO1 Randy Addington – DG  
LT Dominic Chargualaf  
WO1 Joshua Salas  
WO1 Jeffrey Trombly  
WO1 Stephen Young

### IERW UH-60A/M Track

WO1 Stephen Barton – DG  
LT Alexander McMahan – DG  
LT Kevin Foerschler\* – HG  
WO1 Ariel GomezMena – HG  
WO1 Joseph Briggs\*  
LT Andrew Beltran  
LT Aaron Benson  
CPT Curtis Cullen\*  
WO1 KayLee Dysart\*  
WO1 Robert Emmons  
WO1 Jarod Herniak  
WO1 Christopher Jester  
WO1 Joseph McKnight  
LT Benjamin Miller  
LT Brian Morenus\*  
WO1 Andrew Morrison  
LT Maighdin Shea  
LT Jacob Shelton

WO1 Allen Stiff  
WO1 Armando Villa  
LT Cody Waterman\*  
WO1 Jeremy Wilson\*

31 Officers, Oct. 16

### IERW AH-64D Track

WO1 Matthew Linton\*

### IERW UH-60 Track

WO1 Joshua O'Handley\* – DG  
WO1 Jeremy Breidenstein  
WO1 Darrell Busquets  
WO1 Joshua Cohoe\*  
CPT Evan Dale  
WO1 Joshua Latour  
WO1 Spencer Prewitt  
WO1 Nathaniel Redden  
LT Robert Sorensen  
WO1 Samuel VanLoon

### IERW UH-60A/M Track

LT Michael Bernier\* – DG  
WO1 David Boring\* – DG  
WO1 Dylan Aucoin – HG

*Continued on page 66*

# People On the Move

NETWORK

RECOGNITION

VOICE

SUPPORT

## Awards

**Bell Helicopter Safety Awards**  
Immediate past AAAA National president, LTG (Ret.) Daniel J. Petrosky, presented Bell Helicopter Outstanding Achievement awards to 3 aviators for accident-free hours in Bell helicopters during an Aug. 14 ceremony at the Fort Rucker Officers Club.



CW4 Hernandez

**CW4 Peter A. Hernandez**, a Spanish instructor pilot assigned to Co. B Co, 1st Bn., 212th Avn. Regt. at Ft Rucker, AL, achieved over 1,600 accident free hours in the TH-67 and OH-58A/C aircraft over a 24 year career with total time of 4,000 plus hours.



CW3 Torres

**CW3 Omar Torres**, also assigned to Co. B as a Spanish instructor pilot, was recognized for flying 1,200 accident free hours in Bell Helicopter aircraft to include the TH-67, OH-58A/C, and OH-58D (out of 2,500 total flight hours) during 13 years of military aviation service.



DAC/CW4(R) Coghlan

And **DAC/CW4 (Ret.) Harold A. Coghlan** (pictured above being congratulated by BG Timothy J. Edens, commanding general of the U.S. Army Combat Readiness and Safety Center at Ft. Rucker) who currently flies C-12 aircraft with the Army Air Traffic Ser-

vices Command (ATSCOM) was recognized for flying 5,200 accident-free hours in Bell Helicopter aircraft to include the AH-1G/S/F, OH-58A/C, and UH-1H/N. Coghlan accrued a total of over 20,500 total flight hours during 34 years of military aviation service.

## Retirements

**Williams Retires from FORSCOM**



**COL Daniel E. Williams** (right) retired on Sept. 2, 2014 at HQs, Forces Command, Fort Bragg, NC. The ceremony was hosted by LTG Patrick J. Donahue II, the deputy commanding general, FORSCOM, and BG Erik Peterson, CG, U.S. Army Special Operations Aviation Command, inducted Williams into the Silver Honorable Order of Saint Michael, and his wife, **Suzan Williams**, into the Order of Our Lady of Loreto (pictured). Williams retired as

the FORSCOM G3/5/7 Director of Plans and previously served as the command's Director of Aviation. Throughout his 29 year career, he served in every leadership position from platoon leader, to a combat aviation brigade commander. As the 4th CAB commander, he was responsible for the successful deployment to Afghanistan, and the redeployment, BRAC movement and unit restructuring from Ft Hood to Ft. Bliss, Texas.

## Mann Makes Final Flight



**CW5 Darren K. Mann**, Fixed Wing Project Office program integrator for C-20 and C-37 aircraft, gets "wet-down" by the Redstone Airfield fire department and his sons Johnathan and Jeremy following his final flight as an Army Aviator on July 1, 2014. Mann accumulated over 6,800 flight hours and retires with more than 29 years of Army Aviation service.

## Flight School Graduates

*Continued from page 65*

LT Date Dakitise – HG

WO1 Karin Anderson

LT Kimmie Balkcom

WO1 Sun Min Chun \*

WO1 Cody Dodge

LT Nicholas Fettinger \*

WO1 Zackery Huffman \*

WO1 Jesus Inzunza

WO1 James Joseph

LT Patrick Liddle \*

WO1 Rogelio Mercado \*

WO1 Jordan Myer

LT Joshua Pcsolyer \*

WO1 Erik Pollender

LT William Tucker \*

LT Kyle Ulises

LT Robert Waters

## Unmanned Aircraft Systems (UAS) Graduations

**UAS OPERATOR**

AAAA congratulates the following graduates of the Unmanned Aerial Vehicle Operator Course, MOS 15W, at Fort Huachuca, AZ.

**Shadow UAS Operator Course**  
23 Graduates, September 26, 2014

SPC Haley, Mitchell B. – DHG

SGT Guevara, Jr., Jose – HG

SSG Hendershot, Seth C.

SGT Vara, Hector A.

SPC Bennett, Christopher A.

SPC Lheureux, Jordan M.

SPC McFadden, Destiney L.

SPC Nachbauer, Edmond J.

SPC Prins, Brian J.

SPC Rivera, Derick

SPC Santos, Lawrence A.

PFC Lott, Lysa M.

PFC Morgan, Cody S.

PFC Nagakura, Jacquilyn K.

PV2 Arotinco, Jennifer

PV2 Charm, JeremyD.

PV2 Moriarity-Hendricks, Correene

PV2 Pinchott, Joseph T.

PVT Aguilon, Reniel Z.

PVT Bale, Benjamin K.

PVT Perez, Michael A.

PVT White-McClellan, Brent J.

PVT Winfrey, Tyler C.

**Shadow UAS Operator Course**

18 Graduates, October 20, 2014

SGT Hennes, Robert V. – DHG

SPC Espana, Orrin D. – HG

SGT Giles, Charisse D.

SGT Moore, Christopher

SGT Ring, William T.

SPC Agosto-Melendez, Alwin

SPC Arriaga, Eduardo A \*

SPC Baugh, Devan A.

SPC Carratt, Mason D.

SPC Clark, Corey A

SPC Disney, Jean Claude P.

SPC Marinos, Nicholas C.

SPC McLaughlin, Timothy I.

SPC Norton, Joshua W

SPC Parker, Kyle E.

SPC Taranto, Carlos F.

SPC Torres, Luis A.

SPC Velezplaza, Jonathan J.

**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**  
6 Graduates, September 30, 2014

SPC Fountain, Corey T.

SPC Hackworth, Andrew M.

PFC Kidwell, Danielle L.

PFC Kielpikowski, Michael J.

PVT Gaona, Vicente

PVT Saddington, Robert J.

**Shadow UAS Repairer Course**

5 Graduates, October 15, 2014

PVT Nida, Daniel C. – DHG

PFC Hendrix, Alex R. – HG

SPC Smith, Luther W.

PVT Allard, TravisM.

PVT Novobilsky, James C.

DG = Distinguished Graduate

HG = Honor Graduate

\* = AAAA Member

+ = Life Member



## New Order of St. Michael Recipients

### Gold

CSM Richard D. Stidley  
MG James C. McConville  
BG(R) Charles M. Burke

### Silver

CW5 William E. Butler Jr.  
COL Michael L. Shenk  
CW5 Troy L. DeGolyer  
COL Gary W. Toney  
LTC Robert A. Willis  
COL Daniel E. Williams  
Mark Ballew  
CSM David L. Leamon  
CW5 (R) John Lane  
1SG Roger Nickel, Ret.  
COL Mark F. Burke  
LTC Matthew A. Jury  
CW5 Ivan S. Murdock  
COL James H. Bradley  
COL Robert B. Gaston  
CW5 David B. Smith  
COL Brian R. Tachias  
BG Terry A. Ethridge  
CSM Glen Vela  
MG Warren E. Phipps Jr.  
COL Cory A. Mendenhall  
LTC Todd E. Buhr  
CW5 Robert McQuaid  
CW5 Granville D. Shrader  
CW5 Curtis Bell  
COL John R. Evans Jr.  
COL Darren S. Gerblick  
CW5 Dean D. Vanderberry  
CW5 William L. Thurmond  
COL Michael C. Aid

### Bronze

CW4 Christopher Ashton  
MAJ Nicholas D. Ryan  
CW5 Timmy Davis

CPT Ty Huffman  
MSG Kevin M. Hoggard  
MAJ Scott Miroddi  
CW4 Christopher D. Wood  
CW3 Patrick J. Murray  
LTC Scott A. Bovee  
Donald E. Hubler  
CW3 Robert Streit  
1SG Kevin D. Barker  
CPT Christian Abney  
CPT Ketty Ibanez  
LTC Clinton Conzemius  
MAJ Mark O. Fulmer  
MAJ Jeffrey L. Paulus  
MAJ Matthew J. Scher  
CW4 Brent W. Welsch  
MAJ Robert J. Holcombe  
CSM Mark A. Smith  
CPT Ryan Tompkins  
MAJ James Smith  
CW3 Charles A. Villanida  
CW3 Kristie L. Hickey  
CW4 Shane L. Sellenrick  
CPT Christian Abney  
CW3 Pedro Flores  
CW4 Jeffrey D. Fichter  
CW3 Charles D. Weaver  
H. Wayne Sumner  
COL Grant Webb  
1SG Jeremy Lindner  
SGM Dexter Kimble  
CW4 Kevin Hartwell  
LTC Michael Pouncey  
John Sullivan  
CSM Jean Thomas  
CW4 Damian Balthaser  
CW3 Ney Torres  
MAJ Veronika Reynolds  
CW3 Kevon Yearwood  
CW4 Tod Clark  
CW3 Christopher Zimprich  
CW3 Casey Pfannenstiel  
MSG Gabriel Gonzalez  
CW2 Adam J. Rideau

## New Our Lady of Loreto Recipients



Janeth Lopez  
Stephanie Bumgarner  
Michelle G. Adams  
Tina Elliott  
Yvette Guadalupe  
Percillia Villanida  
Danica E. Elliott

## New Order of St. Michael Knight Recipients



COL David S. Oeschger  
CW4 Drew M. Gaboriault  
Patricia B. Eagerton  
Justin O. Mitchell  
MAJ Paul W. Smith  
GEN Robert W. Cone  
MAJ Lloyd Sanders  
SFC Gregory Givings  
CSM Wilson L. Early

MAJ Khallid M. Shabazz  
CSM Buford E. Noland  
LTC Scott Anderson  
MG Anthony Ierardi  
CH(COL) Dennis R. Newton  
COL James A. Laterza  
Jill E. Redington  
MAJ Matthew L. Brown  
MG Reinhard Wolski  
COL John R. Leaphart  
MG Lynn A. Collyar  
LTC Mark L. Jacques  
MAJ Christopher L. Diedrich  
MAJ Adam T. Soto  
MAJ Louis D. Couly  
MAJ Eloy Martinez

## Soldier of the Month

SFC Richard L. Powell  
July 2014  
Oregon Trail Chapter

SFC David M. Pickett  
August 2014  
Oregon Trail Chapter

SFC Jack E. Ruscoe  
September 2014  
Oregon Trail Chapter

## AAAA Hall of Fame Inductions Now Open For 2016 Nominations



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 deadline for nominations for the 2016 induction is June 1, 2015

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



By COL (Ret.) William H. Morris

AAAA Representative to The Military Coalition (TMC)

*bill.morris@quad-a.org*

## Congress Fall Session heads to Recess

Despite many daunting issues facing Congress, the usually short fall session recessed on Sept. 19th even earlier than usual as the leadership of the House and Senate sent their members home to provide them additional time on the campaign trail. It is interesting to note that since the end of July Congress has been in session a total of 8 days through the November election. This was the earliest that Congress has been released for the campaign trail in 50 years. With pressing tasks for the congressional docket such as how to prosecute and fund the campaign against the Islamic State of Iraq and Syria (ISIS), the Ebola epidemic, the Continuing Resolution through December 11, 2014, the replacement of Attorney General Eric Holder who resigned on September 25th and the ongoing debate over the Veteran Administration, it is simply amazing that these issues have been put on hold until Congress returns on November 14. When Congress returns they will be faced with voting on a \$1 trillion Omnibus which includes \$550M on defense appropriations to include the \$60 billion for Overseas Contingency Operations (OCO) funding. This vote may be punted until after the new 114th Session of Congress is called based on House Speaker John Boehner's current stance on the matter. Instead of a wide sweeping vote during the lame duck session most members anticipate another stop gap measure that would extend the Continuing Resolution past the deadline and into the New Year when Congress resumes on January 3, 2015. If this same logic holds true, the National Defense Authorization Act of 2015 may also be addressed following the beginning of the 114th Session. Another major point of contention to be addressed is the Authorization for the Use of Military Force (AUMF) in Iraq and Syria. Senate Democrats are looking to bring AUMF to a vote prior to the 114th Session while House Republicans maintain that the lame duck Congress should not enact legis-

lation with many members seemingly heading back home after the end of the 113th Session. Currently the Ebola crisis has \$90 million in funding to support the US response in the region. The response also includes Army Aviation units deploying in support of the Operation United Assistance which is a logistics, training and engineering task force supporting the response to the Ebola outbreak with the Joint Force Headquarters in Monrovia, Liberia. With all of this uncertainty and the November election which could produce major shifts within the leadership of the Senate it should be an interesting and entertaining four-week sprint to the end of the 113th Session of Congress.

## Veterans Administration Telehealth Services

One bright spot within the VA over the past year has been the use of the VA Telehealth services by over 690,000 veterans during Fiscal Year 2014. This program was particularly important as its increased use has benefitted many veterans who previously had difficulty accessing the system, particularly those who live in rural area. There are more than 44 clinical specialties offered in this program which uses a wide range of technology to include video conferencing with veterans and health care professional. There are two types of Telehealth offered both synchronous and asynchronous. Synchronous care provides for real time video conferencing. Devices to support this technology are available through the VA. Asynchronous care is a method where images, voice recording and vital signs are transferred to the doctor who can then make and assessment and provide recommended follow-up treatment at a convenient time for the Veteran. VA Telehealth publishes quarterly newsletters which can be found on their web site at [www.telehealth.va.gov](http://www.telehealth.va.gov). Additionally, on October 23, the VA met with numerous Veterans Service Organizations (VSO) in Washington, DC, and conducted a hands-on demonstration of the system and

presentation on the new Telehealth scheduling software which was a direct result of the recent health care scheduling challenges within the VA. This new scheduling program will improve VA employees' ability to meet Veterans scheduling requirements which was one of the direct findings of the VA inspector general report in August.

## Army Officials Talk about the Effects of Sequestration

On October 24th MG Gary Cheek, Assistant Deputy Chief of Staff, G-3/5/7, BG Frank Muth, Director of the Army's Quadrennial Defense Review, and Colonel John Lindsay, Director, Army Aviation, G-3/5/7 met with the press at a media round table to discuss the impact of Sequestration and the budgetary effects at large on the Army. All three pointed out that continuous deployment of 7 of the 10 Army divisions, to include supporting Army Aviation units, for at least the next two years could lead to personnel tempo challenges and may result in having to call on the Army National Guard and Army Reserve to fill in the gap. It was also noted that Army Aviation was susceptible to cuts, as the current restructuring initiative brings the active component combat aviation brigade count from 13 to 10 in order to save up to \$12B over the next 5 years. With the retirement of the OH-58D and the TH-67 from the training fleet, and other measures to move the AH-64D attack reconnaissance battalions from the Army National Guard and Army Reserve, the message was clear that the Army will continue to press forward with the Aviation Restructuring Initiative. The message was clear from this round table that the Army will be stretched with Sequestration and the requisite loss of buying power could have definitive impacts on modernization. It was noted that research and development funding would still be maintained for the Future Vertical Lift program to ensure this critical future modernization initiative remains intact going forward.



## UPCOMING EVENTS

### January 2015

- Jan. 1 Submission Deadline – National Awards and Top Chapter
- Jan. 6 ARMY AVIATION Magazine 2014 Photo Contest Deadline
- Jan. 9-10 AAAA National Awards Committee Selection Meeting, Arlington, VA

### February 2015

- Feb. 3-6 Army Aviation Senior Leaders Conference, Ft. Rucker, AL

### March 2015

- Mar. 2-5 HAI Heli-Expo, Orlando, FL
- Mar. 29-31** **AAAA Army Aviation Mission Solutions Summit, Nashville, TN. [quad-a.org/2015SUMMIT](http://quad-a.org/2015SUMMIT)**

## ARMY AVIATION

### Upcoming Special Focus



#### DECEMBER

- Industry Support and Challenges
- Industry Partners Directory
- Research & Development / Science & Technology



#### JANUARY 2015

- Aviation Maintenance
- Arming the Force
- Aviation Soldier Support

Contact: Bob Lachowski  
[bob@quad-a.org](mailto:bob@quad-a.org) or  
 Erika Burgess [erika@quad-a.org](mailto:erika@quad-a.org)  
 203. 268.2450

## ACHIEVE WITH HONOR

### MASTER THROUGH EDUCATION



## Making a Difference for Army Aviation Soldiers and Their Families

AAAA SCHOLARSHIP FOUNDATION supports the personal development of AAAA members and their families with annual education scholarships and interest-free loans. The FOUNDATION thrives on the generosity of private donors, industry, honorary and memorial donations.

Help us at Army Aviation to continue our mission towards higher education. For more information on donations and scholarship applications call 203.268.2450 or visit [quad-a.org](http://quad-a.org)

*Supporting the U.S. Army Aviation Soldier and Family.*

### AAAA Scholarship Applications

Due May 1.

Scholarships available for AAAA Members, Spouses, Siblings, Children and Grandchildren

### AAAA Scholarship Foundation, Inc.

593 Main Street, Monroe, CT 06468-2806

# Art's Attic

By Mark Albertson

Art's Attic is a look back each month 25 years ago and 50 years ago to see what was going on in ARMY AVIATION Magazine. Art Kesten 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 done back in 1953 by LT Joe Gayhart, a friend of Art's and an Army Aviator, showing the chaos of his apartment-office in New York City where it all began.



"In Memoriam: Captain Art Kesten, United States Army"

## ARMY AVIATION

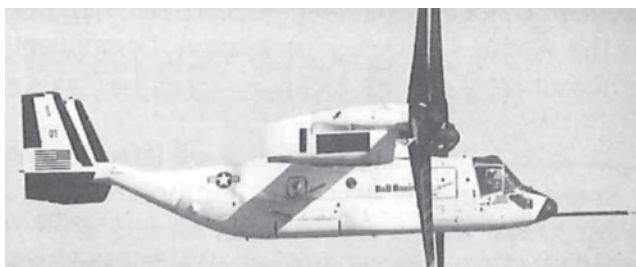


## 25 Years Ago November 30, 1989

### Briefings—V-22 Osprey

The Bell-Boeing aircraft successfully made the transition from helicopter mode to conventional airplane while in flight. The Osprey flew at 6,000 feet while effecting the change. Top speed attained was 155 knots.

prey flew at 6,000 feet while effecting the change. Top speed attained was 155 knots.



### Branch Update—MG Rudolph Ostovich, III



"What a great day to be a soldier... serving the community of Army Aviation... confronted by many challenges, thus we have opportunities. The Soviet Union, War on Drugs... developing nations suffering social unrest, political instability and economic uncertainty. Often these regional dramas affect our own national security interests. So, while we continue to provide capable deterrent forces forward deployed in Europe and elsewhere, there is a growing need for flexible, effective, contingency forces."

*Editor's note: The astute observation rendered by General Ostovich is as relevant today as it was 25 years ago, perhaps even more so; what with Ukraine/Crimea, Iraq, Syria, Iran, Libya, Egypt, Gaza, Afghanistan, Pakistan, North Korea, Africa, Mexico, Central America, South America, Cuba, War on Drugs, War on Terror...*

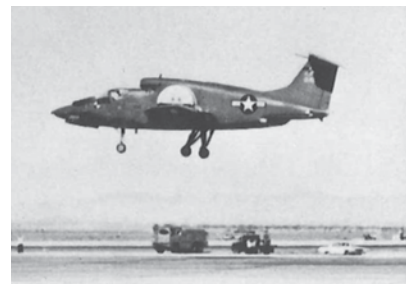


## 50 Years Ago, November 30, 1964

### XV-5A Lift Fan

Captured touching down from its first transition flight at Edwards AFB, is a U.S. Army XV-5A Lift Fan

Fan V/STOL Research Aircraft. This aircraft approaches a runway, slows to a hover and then descends. Note the "Butterfly" doors above the wing fans in the open position during the vertical pattern of the flight. The XV-5A program is being conducted by Ryan and General Electric, under contract with the Transportation Research Command at Fort Eustis, VA.



### Persian Pilots



Second Lieutenants Iraj Yale and Tahmaseh Esmail-Karani, Iranian Army, receive engraved plaques from Colonel Kemeul K. Blacker, Ft. Wolters commander and commandant of the U.S. Army Primary Helicopter School. Left to right, Col.

Blacker, Lt. Yale, Lt. Esmail-Karani and Cpt. Eugene Kelley of USAPHS, who served as the pilots' sponsor.

### Inflatable

A new, inflatable splint made of Allied Chemical's capran film is designed to keep injured legs or arms immobile. The invention is to shield against further injury those limbs that are burned or broken. The "bag" would be a welcome addition to survival kits.





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 2016 induction is June 1, 2015

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

# Army Aviation Hall of Fame

---

## Chief Warrant Officer Three Frederick E. Ferguson

---

Army Aviation Hall of Fame 1983 Induction  
Atlanta, Georgia

---

Chief Warrant Officer (W3) (later Major) Frederick E. Ferguson entered the Army from Arizona as an enlisted man and received his warrant officer commission upon graduation from flight school in May, 1967. He was immediately assigned to Vietnam and served there until May 1968 in Company C, 227th Aviation Battalion, 1st Cavalry Division (Airmobile).

On January 31, 1968, Ferguson was aircraft commander of a Bell UH-1 supply helicopter near the city of Hue, during the Tet Offensive. He heard a distress call from the wounded crew of a helicopter which had been shot down over the enemy-controlled section of the city. Ignoring warnings to stay away from the area because of heavy anti-aircraft fire, he flew along the Perfume River toward the survivors at a low altitude and maximum speed. He stayed on course despite heavy fire from enemy occupied buildings and boats and landed in a confined area near the survivors despite limited visibility. The helicopter was severely damaged by exploding mortar fragments while the wounded soldiers were loaded, but Ferguson ignored the damage and pushed the helicopter back through the heavy enemy fire along the river to safety. His actions saved the lives of the five survivors and rescued them from a hostile area. Ferguson was awarded the Medal of Honor, which was presented to him on May 17, 1969, by President Richard Nixon on the South Lawn of the White House.

In July 1969, after completing the Armor Officer Basic and Advanced Courses, Ferguson was promoted to Captain and remained on active duty serving as commander of an armor company from 1970 to 1971. In 1972, Ferguson entered the Arizona Army National Guard, was promoted to Major in 1975 and assigned to command the 997th Aviation Company of assault helicopters. He became the executive officer of the 997th Aviation Battalion in 1978 and served in that capacity until 1982. He then served as a technician instructor pilot with the Guard until 1997.





U.S. ARMY  
COMMON INFRARED  
COUNTERMEASURES

**THE VALUE OF  
MISSILE  
PROTECTION  
THAT'S BOTH  
ADVANCED AND  
BATTLE TESTED.**

We believe that the mission doesn't end until our warfighters get the job done safely. Northrop Grumman's CIRCM solution defends against emerging missile threats of today and tomorrow. With over a million operating hours in theatre, our dependable, adaptable systems have already been tested and proven in the harshest wartime conditions. *That's why we're the leader in fielding innovative, high performance DIRCM solutions.*

**THE VALUE OF PERFORMANCE.**

**NORTHROP GRUMMAN**